

# Lonc BEAGH chatha 

2023-2024 Catalog
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## 2023-2024 CATALOG

## The Long Beach Community College District

Liberal Arts Campus
4901 East Carson Street
Long Beach, CA 90808
Ph: 562-938-4111
Pacific Coast Campus
1305 East Pacific Coast Highway
Long Beach, CA 90806
Ph: 562-938-4111

## Accuracy Statement

To report errors and omissions, make suggestions for better readability, or offer comments regarding this catalog, please email catalog@lbcc.edu.

## Curriculum Offerings

The College reserves the right to determine which courses listed in the catalog are to be offered each semester. Changes in curriculum or course content may occur after the deadline for submission of information for this catalog. Refer to the catalog addenda (Fall, Spring) for updates and corrections; modified courses and awards will adhere to the rules of catalog rights and continuous enrollment and will be published in the subsequent main LBCC Catalog, which is published annually.

## Schedule of Classes

Before the beginning of each academic term, LBCC publishes a schedule of classes online indicating each course to be offered. Schedules are available on the college website at www.lbcc.edu (https://lbccpublic.courseleaf.com/www.lbcc.edu). Changes in curriculum offerings or fees charged may occur after the schedule is published.

## Rehabilitation Act of 1973

## Materials in Alternative Format

Section 508 of the Rehabilitation Act of 1973, as amended by Congress in 1998, requires agencies receiving federal funds to make their electronic and information technology (EIT) accessible to people with disabilities. In compliance, the Long Beach Community College District provides its catalog, instructional materials, and other college publications in alternative formats. Students who require special assistance and would like materials in an alternative format should contact the Disabled Students Programs and Services Department at 562-938-4558 or 562-353-4217 (Video Phone) in order to register and participate in these specialized services. A Disabled Students Programs \& Services office is located on both the LAC and PCC campuses.

## Members of the 2023-24 College Catalog Work Group

Fabiola Guerrero
Kenna Hillman
Paul Tianpiboonsiri

## ABOUT LBCC

## In This Section:

Welcome (p. 12)
General Information (p. 14)
Academic Calendar (p. 18)
Full-Time Employees (p. 466)

## Welcome

## In This Section:

Mission and Values (p. 12)
President's Message (p. 12)
Academic Senate Message (p. 13)

## Mission, Vision, and Values

## Our Mission Statement

Long Beach City College is committed to empowering our students to become active, ethical participants in their learning, as well as in the democratic structures that give them voice and agency in shaping their society and world. In an environment that is caring, supportive, and inclusive, LBCC promotes equitable learning and educational achievement by delivering innovative, high-quality degree programs, certificate programs, holistic support services, and leading-edge workforce preparation for our diverse communities.

## Our Vision

Long Beach City College creates capacity, builds community, and sparks innovation in support of anti-racism and inclusion to ensure programs and services inspire and prepare learners to thrive as citizens in a diverse democracy and achieve their intellectual, financial, and personal goals. We cultivate a community that fully embraces individuals from all backgrounds, cultures, races, identities, life experiences, perspectives, beliefs, abilities, and values.

## Our Values

- Teaching and Learning
- Academic Excellence: We promote academic excellence by offering outstanding programs that support students' academic, personal, and professional success. We are committed to academic quality and provide relevant, innovative, and equityminded curricula.
- Equitable Student Learning and Success: We are committed to equitable student learning and success by using the guided pathways framework to promote students' achievement of their educational goals in preparation for future success. We are dedicated to identifying and eliminating equity gaps to ensure that each student has the opportunity to succeed at LBCC.
- Connectivity: We are committed to bridging the digital divide by ensuring all students have access to affordable technology, including reliable and secure high-speed Internet access in order to ensure effective participation in our courses, programs, and services.
- Diversity, Equity, Inclusion, and Accessibility
- Anti-racism and Social Justice: We are actively committed to identifying, opposing, and confronting racism, white supremacy, anti-blackness, and other forms of systemic oppression through the intentional interrogation of policies, procedures, resources, and practices in and outside of the classroom to attain social justice and racial equality for our employees, students, and community members.
- Diversity, Equity, Inclusion, and Accessibility: We are dedicated to breaking down existing barriers to equity while recognizing that equity is not the same as equality, creating a welcoming and safe campus environment, encouraging diversity of thought, and ensuring our college's programs, services, academic supports, and activities are accessible for the diverse communities represented at LBCC.
- Culture of Care: We value a culture of care and well-being where employees and students are welcomed, supported, understood, and celebrated.
- Collaboration and Community
- Participatory Governance: We value and encourage responsibility, trust, collaboration, and inclusivity among all constituencies through participation in College decision-making processes.
- Community Partnerships: We are deeply committed to engaging and serving our local community through collaboration with our local school districts, industry, non-profit and civic organizations, and government agencies to meet the needs of the community and local labor market.
- Workforce Development: We value our industry partnerships in supporting upward economic mobility for our students through curricula that are relevant and responsive to local labor trends, internships, and job placement opportunities.
- Creative Leadership and Exploration
- Innovation: We are committed to innovation and creativity and embrace the changes needed to eliminate barriers to our students' and employees' success.
- Sustainability: We are dedicated to environmental sustainability and engage in environmentally conscious practices and processes to meet the needs of our current and future generations.
- Global Citizenship: We are committed to inspiring students to become leaders and responsible global citizens who are dedicated to fostering inclusivity, interconnectivity, and sustainability.


## President's Message

On behalf of our Board of Trustees, faculty, staff, and administrators, it is my great pleasure to welcome you to Long Beach City College.

I am very excited to be serving you, our students, as your SuperintendentPresident. After joining the college in 2018 as Vice President of Student Services, and serving as Interim Superintendent President in 2021, I was named to fill the post beginning January 1, 2022. I couldn't be honored to continue the opportunity to assist you in your journey in achieving your academic goals.

Learning and pursuing education has certainly changed since the Covid-19 pandemic initially closed our campuses in March 2020. But, one thing that didn't change was our excellent programs and courses, taught by the finest faculty of any college, anywhere. The pandemic caused our faculty and staff to think outside the box to meet your needs as students and prepare you to meet the challenges of the 21 st Century economy.

As we move toward re-opening our campuses fully, while continuing to keep you safe by following evolving health and safety guidelines for COVID-19 and its variants, I guarantee that you will enjoy a very active and vibrant Student Life that will enrich your experience here at LBCC whether virtually or in person. And our staff is always available to answer your questions, be they about registration, financial aid, issues of student equity, or other services to smooth and improve your learning pathway.

Whether you are looking to transfer to a university, earn a degree, or earn a certificate, LBCC will help prepare you for success in all your career and life goals. For nearly a century, LBCC has been supporting our community and economy through the success of our graduates and alumni. We are so glad you have chosen to be part of that tradition.

Go Vikings!
Dr. Mike Muñoz
Superintendent-President
Long Beach Community College District

## Academic Senate Message

Welcome to Long Beach City College. The faculty here are committed to support your education and provide you with outstanding opportunities to learn. At LBCC you have a myriad of opportunities to receive the preparation you need to begin, or change, a career by selecting one of our outstanding certificate programs. If you choose to transfer to a fouryear institution, you can complete your general education courses for a Baccalaureate degree and receive a certification for these units. Also, you can develop an area of concentration that will allow you to select a major and enter one of the numerous four-year institutions located in Southern California. Counseling and other student service programs help you in your course selection, career preparation and transfer goals. It is our privilege to share in your education. We look forward to meeting you, talking with you, working with you, and learning with you. LBCC faculty are here to support YOU in the pursuit of your academic and personal goals.

Suman Mudunuri
Academic Senate President

# GENERAL INFORMATION 

In this section:
College History (p. 14)
College Organizational Structure (p. 14)
Accreditations (p. 17)

## College History

For more than 90 years, Long Beach City College (LBCC) has prepared students for success in their future studies and careers. LBCC has grown from a single building into two dynamic campuses on more than 140 acres, with 25,000 students and 1,400 full- and part-time faculty and staff. The College offers state-of-the-art, technology-rich learning environments, a broad range of academic and career technical instructional programs, and economic and workforce development programs. Students can enroll in a diverse array of associate degree and certificate programs for transfer studies, career and technical education, and personal enrichment.

As one of the largest of the 115 community colleges in California, LBCC is governed by the five locally elected members of the Long Beach Community College District Board of Trustees. The district serves the cities of Long Beach, Signal Hill, Lakewood, and Avalon. LBCC was established in 1927 as Long Beach Junior College and founded at the current site of Woodrow Wilson High School. The original LBCC building was destroyed by the 1933 Long Beach earthquake. Classes were held outside and in tents at neighboring Recreation Park until 1935, when the college moved to the site of its present-day Liberal Arts Campus, at Carson Street and Clark Avenue.

From its earliest days, the College has established traditions that are alive today, such as the mascot, Ole, and team name, Vikings. Early athletic honors included championships in wrestling, baseball, men's and women's swimming, and men's basketball. The tradition of athletic excellence continues today: LBCC has earned 93 state championships, making the College one of the top California community colleges in athletics.

LBCC grew rapidly after World War II, adding the Pacific Coast Campus in 1949, which formerly housed Hamilton Junior High. In the 1970s, as a result of a new state law, the College separated from the Long Beach Unified School District and became the independent Long Beach Community College District with its own locally elected Board of Trustees.

In 1987, LBCC acquired Veterans Memorial Stadium from the City of Long Beach. Today the stadium hosts LBCC and local high school football games as well as track meets, graduation ceremonies, concerts, commercial shoots, and the Long Beach Antique Market.

As computing technology grew in the 1980s, LBCC kept pace by acquiring new equipment for nearly every instructional program and revising its programs accordingly. Today, computer labs, multimedia "smart" classrooms, and a host of 21 st century educational technology training programs allow for faculty to connect with students through course Learning Management System, social media, and online learning programs. In addition, LBCC supports faculty to embrace innovative teaching strategies to enhance student engagement and learning (e.g., blended teaching methods, flipped classrooms, self-paced and adaptive
learning software, transformative pedagogy, hybrid and fully online courses, etc.).

Long Beach, Lakewood, Signal Hill, and Avalon voters approved the Measure E Bond in 2002 and its extension in 2008. Because of this overwhelming support, LBCC has been engaged in a 15 -year, \$616-million modernization program to upgrade the Liberal Arts and Pacific Coast campuses. The College has celebrated the completion of dozens of new construction projects and building modernizations. The building program is providing new facilities to support new programs, allowing LBCC to prepare its students to meet the changing demands of today's workplace both globally and locally.

More recently, voters approved Measure LB in 2016, providing an additional $\$ 850$ million to complete the multi-campus Facilities Master Plan. Aiming for completion in 2041, the comprehensive facilities upgrades will provide a contemporary, state-of-the-art learning environment for the region served by LBCC. Meanwhile, the LBCC Foundation continues to provide strong and ongoing support to the college through scholarships and grants, recognizing and celebrating alumni accomplishments through the Alumni Hall of Fame, reunions, anniversary celebrations, and more.

LBCC's nationally recognized economic and workforce development programs help support the local economy through the creation and retention of regional jobs. Economic development initiatives like the regional Small Business Development Center Network and the Goldman Sachs 10,000 Small Businesses program are helping small businesses and our local economy thrive.

In addition, innovative programs like the Long Beach College Promise - a unique partnership with the Long Beach Unified School District, California State University, Long Beach, the City of Long Beach, and the Port of Long Beach - are helping more students succeed in college. The program has become a national model for communities looking to increase student success. LBCC has had many accomplishments to celebrate in its first nine decades and is well positioned to build on this tradition of success in serving its community for generations to come.

## College Organizational Structure

 Board of Trustees| Position | Name |
| :--- | :--- |
| Member Trustee Area 1 | Uduak-Joe Ntuk |
| Member Trustee Area 2 | Vivian Malauulu |
| Member Trustee Area 3 | Sunny Zia |
| Member Trustee Area 4 | Herlinda Chico |
| Member Trustee Area 5 | Virginia Baxter |
| Board Secretary | M'Shelle Reece |
| Superintendent-President | Mike Muñoz |

## Superintendent-President Office

| Position | Name |
| :--- | :--- |
| Superintendent-President | Mike Muñoz |
| Chief Innovation Officer | Tracy Carmichael |
| Interim Executive Director, | Carl Kemp |
| Communications and College <br> Advancement |  |

## Institutional Effectiveness

| Position | Name |
| :--- | :--- |
| Dean, Institutional Effectiveness | Heather Van Volkinburg |
| Director of Planning | Jennifer Holmgren |

## Executive Committee

| Position | Name |
| :--- | :--- |
| Executive Vice President, Student <br> Services | Nohel C. Corral |
| Vice President, Academic Affairs | O. Lee Douglas |
| Vice President, Business Services | Raymond "Chip" West III |
| Vice President, Human Resources | Loy Nashua |
| Interim Vice President, Economic <br> \& Workforce Development, and <br> Government Affairs | Melissa Infusino |
| Associate Vice President, PCC | Alisia Kirkwood |

## Academic Affairs

| Position | Name |
| :--- | :--- |
| Vice President, Academic Affairs | O. Lee Douglas |
| Dean, Academic Affairs | Kenna Hillman |
| Associate Dean, Online Learning, <br> Educational Technology, and <br> Learning Resources (OLETLR) | Hussam Kashou |
| Academic Services |  |
| Position | Name |
| Director | Brent Gilmore |
| Department Head, Library | Dele Ladejobi |

## School of Career Education

| Position | Name |
| :--- | :--- |
| Dean | Gene Carbonaro |

The Career Education departments include:

| Department Heads | Name |
| :--- | :--- |
| Computer and Office Studies | Miriam Valeschini-Lynch |
| Family and Consumer Studies | Koby Moridzadeh |
| Public Services | Michael Biggs |


| School of Applied Technology and Culinary Arts |  |
| :--- | :--- |
| Position | Name |
| Interim Dean | Vacant |
| The Applied Technology and Culinary Arts departments include: |  |
| Department Heads | Name |
| Trades and Industrial Technology | Damon Skinner |
| Culinary Arts | Haley Nguyen |

School of Business, Education, and Health Sciences

The Business, Education, and Health Sciences departments include:

| Department Heads | Name |
| :--- | :--- |
| Allied Health | Jim Steele |
| Business Administration and | Myke McMullen |
| Economics |  |
| Child Development and Educational <br> Studies | Julie Frumkin and Dana Van Sinden |
| Associate Degree Nursing | Maricela Arnaud |
| Vocational Nursing | Julie McGill |

## School of Kinesiology, Public Health, and Athletics

| Position | Name |
| :--- | :--- |
| Dean | Randy Totorp |
| Department Head | Grace Pokorny |

## School of Language Arts and Communication

| Position | Name |
| :--- | :--- |
| Dean | Nicole Glick |

The Language Arts and Communication departments include:

| Department Heads | Name |
| :--- | :--- |
| English | Jason Casem |
| English as a Second Language | Maureen Mason |
| (ESL), American Sign Language |  |
| (ASL), and Linguistics |  |
| Communication Studies | Samira Habash |
| World Languages | Francisca Mejia-Lopez |
| Reading and Teacher Preparation | Megan Kaplinsky |

School of Science, Engineering, and Mathematics

| Position | Name |
| :--- | :--- |
| Dean | Moises Gutierrez |

The Science, Engineering, and Mathematics departments include:

| Department Heads | Name |
| :--- | :--- |
| Life Sciences (Horticulture) | Robyn Arias |
| Math and Engineering | Ladera Barbee and Natalie De Moss |
| Physical Sciences | Otto Figueroa and Joanna Haan |

## School of Social and Behavioral Sciences

| Position | Name |
| :--- | :--- |
| Dean | Elisabeth Orr |

The Social and Behavioral Sciences departments include:

| Department Heads | Name |
| :--- | :--- |
| History and Political Science | Vanessa Crispin-Peralta and Paul <br> Savoie |
| Social Sciences | Chris Carter and Janine Pliska |

## School of Visual, Performing Arts, and Cultural Programs

| Position | Name |
| :--- | :--- |
| Dean | Janét Hund |

The Visual, Performing Arts, and Cultural Programs departments include:

| Department Heads | Name |
| :--- | :--- |
| Performing Arts | Peter Knapp |
| Visual \& Media Arts | Carolyn Castano and Robert Hersh |
| Online Learning, Educational Technology, and Learning |  |
| Resources |  |


| Position | Name |
| :--- | :--- |
| Associate Dean | Hussam Kashou |
| Department Head, Learning and <br> Academic Resources | Shelley Barnes |

## Administrative and Business Services

Position Name

Vice President, Administrative and Raymond "Chip" West III Business Services

## Business Support Services

| Position | Name |
| :--- | :--- |
| Director, Business Support Services | Robert Rapoza |
| Deputy Director, Purchasing and <br> Contracts | Mireille Hernandez |
|  <br> Safety, and Parking Services | Lubert Iglesia |
| Manager, Mail and Reprographic <br> Services | Khantina Malinis |
| Manager, Warehouse Logistics | Christopher Baker |
| Coordinator, Risk Services | Iliana Nkila |

## Fiscal Services

| Position | Name |
| :--- | :--- |
| Director, Fiscal Services | John Thompson |
| Deputy Director, Finance and <br> Accounting | Conrrado Duran |
| Sr. Manager, Budget Operations | Sem Chao |
| Payroll/Benefits Manager | Cindi Nguyen |
| Store Manager, Bookstore | Vacant |
| General Manager, Bookstore at LAC | Reed Figueroa |
| General Manager, Bookstore at PCC | Ruth Ramirez |
| Bursar | Stacey Robinson |

## Facilities

| Position | Name |
| :--- | :--- |
| Senior Director, Facilities Planning, <br> Construction and Operations | Walter Johnson |
| Deputy Director, Operations and <br> Maintenance | Maria Williams-Slaughter |
| Manager, Facilities Maintenance | Sean Michael |
| Manager, Operations | Cheryl Williams |
| Manager, Events and Community <br> Relations | Jay Lopez |
| Grounds and Transportation <br> Supervisor | Vacant |

Instructional and Information Technology Services (IITS)

| Position | Name |
| :--- | :--- |
| Chief Information Systems Officer | Robert Carman |
| Interim Director, Application <br> Development and Support | Jonah Lopez |
| Deputy Director, Network Services <br> and Technical Support | Mark Guidas |
| Deputy Director, Academic <br> Computing and Multimedia Services | Tim Heffern |
| Deputy Director, User Support and <br> Web Development | Scott Voelker |
| Deputy Director, Web and Mobile <br> Services IITS | Vacant |

## Economic Development Division

Position
SBDC Regional Director, CAED/
SBDC
Associate Director, 10,000 Small
Businesses (10KSB)
Alumni Manager, 10,000 Small
Businesses
Human Resources

| Position | Name |
| :--- | :--- |
| Vice President, Human Resources | Loy Nashua |
| Associate Vice President, Human | Kristin Olson |
| Resources |  |
| Executive Director, Human <br> Resources - Classified | Caroline Chretien-Shook |

## Public Affairs and Marketing

| Position | Name |
| :--- | :--- |
| Interim Executive Director, Public | Carl Kemp |
| Affairs and Marketing |  |
| Senior Director, Community | Vacant |
| Relations and Academic Partners |  |
| Associate Director, <br> Communications and Community <br> Engagement |  |

## Student Services

| Position | Name |
| :--- | :--- |
| Executive Vice President | Nohel C. Corral |
| AthleticS |  |
| Position | Name |
| Athletics Director | Kaladon Stewart |
| Athletic Coordinator | Ashley Rippeon |

## Counseling and Student Services

| Position | Name |
| :--- | :--- |
| Interim Dean | Javier Villaseñor |
| Interim Associate Dean | Erainia Freeman |

Director, Disabled Students Program Maria Ek Ewell and Services (DSPS)
Director, EOPS, CARE, and NextUP Edward Henderson Interim Director, Long Beach College Elijah Sims Promise

| Assistant Director, CalWORKs | Christina Barrios |
| :--- | :--- |
| Transfer Center Coordinator | Ruben Page |
| Articulation Officer | Trevor Rodriguez |
| Counseling Department Heads | Sara Blasetti and Phillip Huerta |

## Enrollment Services

| Position | Name |
| :--- | :--- |
| Dean | Yvonne Gutierrez-Sandoval |
| Director, Admissions \& Records | Allison Estrada |
| Director of Financial Aid | Jason Avila |
| Associate Director, Scholarship \& | Shyra Compton |
| Outreach |  |
| Financial Aid Supervisor | Susana Duran |
| Enrollment Services Supervisor | Michele Pope |
| International Student Services | Nina Richardson |

## Student Equity

| Position | Name |
| :--- | :--- |
| Dean | Sonia De La Torre-Iniguez |
| Director, High School Outreach and | Guadalupe Pasillas |
| Educational Partnerships |  |
| Director, Phoenix Scholars | Jose Ibarra |
| Director, Student Equity | Eric Bacerra |
| Director, Title V (DESTINO) and First | Esteban Alfaro |
| Year Experience Programs |  |
| Interim Director, Upward Bound | Wendy Porter-Coste |
| Interim Matriculation Coordinator | Lorraine Blouin |
| Interim Systems Impacted Manager | Sara Rodriguez |

## Student Affairs

| Position | Name |
| :--- | :--- |
| Interim Dean | Deborah Miller-Calvert |
| Director, Basic Needs and CASA Justin Mendez <br> Grant  <br> Director, Student Conduct \& Student Sylvia Garcia  <br> Life  <br> Director, Student Health and Sergio Grimaldi <br> Student Life  <br> Lead Nurse/Nurse Practitioner Marianne Palacios <br> Student Life Coordinator Teila Robertson$\$ \$ \$$ |  |

## Accreditations

## Long Beach City College

Long Beach City College (LBCC) is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC).

ACCJC
428 J Street, Suite 200

Sacramento, CA 95814
415-506-0234
The ACCJC is an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education.

## Human Services Addiction Studies

The Human Services Addiction Studies program at LBCC is accredited by the

California Association of Alcohol \& Drug Educators 5230 Clark Ave.
Lakewood, CA 90702
707-722-2331

## Associate Degree Nursing Program

The Associate Degree Nursing program has held accreditation from the Accreditation Commission for Education in Nursing (ACEN), formerly the NLN-AC, since 1966.

ACEN
3390 Peachtree Road N.E., Ste. 1400
Atlanta, GA 30326
404-975-5000
ACEN is the primary national accreditation body for associate degree nursing programs.

## Licensed Vocational Nurse to Registered Nurse Program

The Licensed Vocational Nurse to Registered Nurse program is fully accredited by the Accreditation Commission for Education in Nursing (ACEN).

ACEN
3390 Peachtree Road N.E., Ste. 1400
Atlanta, GA 30326
404-975-5000

## Vocational Nursing Program

The Vocational Nursing Program is accredited by the Board of Vocational Nursing and Psychiatric Technicians (BVNPT).

BVNPT
2535 Capitol Oaks Dr., Ste. 205,
Sacramento, CA, 95833
916-263-7800

## ACADEMIC CALENDAR

Summer Sessions 2023

| Date | Event |
| :--- | :--- |
| June 12 | First five-week session begins |
| June 12 | Ten-week session begins |
| June 20 | Six and eight-week session begins |
| June 26 | Four-week session begins |
| July 17 | Second five-week session begins |
| Finals | All final exams are the last scheduled day of class |

## Fall Semester 2023

| Date | Event |
| :--- | :--- |
| August 28 | Fall classes begin |
| September 19 | Flex Day - No classes |
| Finals | All final exams are the last scheduled day of class |
| December 16 | Fall Semester ends |
| December 17- | Winter Recess |
| December 31 |  |

## Winter Intersession 2024

| Date | Event |
| :--- | :--- |
| January 2 | Winter Intersession begins |
| Finals | All final exams are the last scheduled day of class |
| February 3 | Winter Intersession ends |

## Spring Semester 2024

| Date | Event |
| :---: | :---: |
| February 5 | Spring classes begin |
| March 14 | Flex Day - No classes |
| April 1-7 | Spring Break - No classes |
| Finals | All final exams are the last scheduled day of class |
| June 5 | Spring Semester ends |
| June 6 | Commencement |
| Holidays (No classes are in session) |  |
| Date | Event |
| June 19, 2023 | Juneteenth |
| July 4, 2023 | Independence Day observed |
| September 4, 2023 | Labor Day |
| November 10, 2023 | Veterans Day |
| November 23-24, $2023$ | Thanksgiving Holiday |
| January 15, 2024 | King's Day observed |
| February 12, 2024 | Lincoln's Day observed |
| February 19, 2024 | Washington's Day observed |
| May 27, 2024 | Memorial Day |

This calendar is subject to change.

The college offers many short-term classes starting at various times throughout the year. The Schedule of Classes contains specific dates, times, and procedures.

## STUDENT RESOURCES

In This Section:
Admissions and Records (p. 19)
Student Support Services (p. 26)
Learning Support Services (p. 39)

## Admissions \& Records

In This Section:
Admissions Requirements (p. 19)
Applying to the College (p. 19)
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Procedures for Application to School of Health and Science Programs (p. 21)

International Students (p. 21)
Matriculation (p. 22)
Fees (p. 23)
Family Educational Rights and Privacy Act (FERPA) (p. 24)
Campus Security (p. 24)

## Admissions Requirements

## Who May Attend:

- High school graduates or
- Persons in possession of a California high school proficiency certificate or GED or
- Persons 18 years of age or older who can benefit from the instruction or
- High school/K-12 students who qualify for dual enrollment or
- International Students with a valid Visa


## Residence Requirements

All students are classified as either a resident of the State of California or a nonresident when applying for admission. A resident is a student who has lived in the state for more than one year before the beginning of a semester or term (EC 68017), based on the "Residency Determination Date" which is the day immediately preceding the opening of instruction. This definition applies to U.S. citizens, permanent residents, and persons holding certain visas that allow for residence.

A nonresident is a student who has not established residence in the State of California for one year as of the residency determination date.

Persons who are 18 years of age or older establish residency in accordance with EC 68017 above. Adult residency begins after the 18th birthday. Persons who are under 18 years of age establish residence in accordance with the above "resident" definition and the following:

A minor child's residence is the home of the parent with whom the minor child lives. When the minor lives with neither parent, the residence is that of the parent with whom the minor last lived. The minor may establish residence of their own when both parents are deceased and a legal guardian has not been appointed.

The residency of unmarried minors who have a living parent cannot be changed by their own acts, appointment of legal guardians, or relinquishment of a parent's right of control (EC 68062). Married minors may establish their own residence.

Exceptions apply under certain conditions to active members of the military and their dependents.

Noncitizen Students: Students with a "permanent resident" visa, refugee status, or amnesty approval may establish residency in accordance with the college's residence requirements. All visas must be examined by the college to determine residency status.

New and returning students who feel they have been incorrectly classified in their resident status or continuing students who now meet the residence requirements must submit a residency appeal to the Admissions \& Records Office. Residency appeals must be filed within 30 calendar days after notification of the applicant's residency status. Continuing students must submit the residency appeal no later than the third week of the semester to meet the resident's requirements.

The above statements on residence are not intended to include all of the laws governing residence. The full text of the laws is presented in the California Education Code, available in the college library at both campuses.

## Applying to the College

All new, returning, and continuing students are encouraged to meet with a counselor each semester in order to review their academic progress before completing registration.

## New and Former Students

New or former students need to apply. A new student is a person who has never attended LBCC. A former student is a person who at one time attended LBCC but has not attended for one year or more and now wishes to return. All applications are completed through www.lbcc.edu (http://www.lbcc.edu). Applications are processed within 24 to 72 business hours. An email will be sent to the email account provided on the application with a Viking Student ID, login instructions, and residency status.

## Continuing Students

A continuing student is a person who has attended LBCC within the previous year.

## Admission and Enrollment of Special Admit Minors

Special Admit Minors are students enrolled in grades $\mathrm{K}-12$, who have not earned high school diplomas, and who may benefit from advanced scholastic or career technical work.

## High School/K-12 Students

Through dual enrollment, LBCC offers high school/K-12 students the opportunity to accelerate their college and career pathways by earning
college credit before completing high school. Dual enrollment provides opportunities for advanced academic or vocational work for high school students and is not intended as remedial or makeup work.

Students must be currently enrolled in a K-12 school and may enroll in up to 11 units each fall and spring semester or 5 units in winter and summer intersessions. Credit for a college course is awarded through a college transcript after the successful completion of a class. If the college course meets a high school graduation requirement, the high school may award high school credit after successful completion of the college course.

There are four different tracks for high school students who wish to enroll at LBCC:

- Individual Dual Enrollment is for high school/K-12 students desiring to enroll at LBCC on their own and outside of a coordinated program between LBCC and the K-12 district/high school. Individual dual enrollment students may enroll in any available course if prerequisite requirements are met. For more information, contact The Early College Initiatives team at 562-938-5272 or earlycollege@lbcc.edu.
- Early College Pathways Partnership (ECPP) dual enrollment program is for high school students desiring to enroll at LBCC as part of a coordinated program between LBCC, Long Beach Unified School District, LearnLearn4Life Long Beach, and Lynwood Unified School District. ECPP students participate in specially-selected courses and student support services designed for college and career preparation. For more information, visit the LBCC Early College website at https:// www.lbcc.edu/earlycollege (https://www.lbcc.edu/earlycollege/) or contact the Early College Initiatives team at 562-938-5272, earlycollege@lbcc.edu, or visit room AA-109 (PCC)


## - Early College at Browning

Provides Browning students the opportunity to earn high school and college credit for classes in the Culinary Arts and Hospitality pathways. Students who finish the entire program will earn a high school diploma while also completing an Associate Degree for Transfer in Hospitality. For more information, visit the LBCC Early College website at https:// www.lbcc.edu/earlycollege (https://www.lbcc.edu/earlycollege/) or contact the Early College Initiatives team at 562-938-5272, earlycollege@lbcc.edu, or visit room AA-109 (PCC).

## - High School Articulation Agreements

Students from LBUSD, Bellflower Unified, and Centinela Valley Union High School may receive college credit by taking an articulated high school course and passing the credit by the examination process. For more information, visit the LBCC Early College website at https:// www.lbcc.edu/earlycollege (https://www.lbcc.edu/earlycollege/) or contact the Early College Initiatives team at 562-938-5272, earlycollege@lbcc.edu, or visit room AA-109 (PCC).

## Registration Procedures

## Registration Procedures

Students are responsible for officially enrolling in classes. Students may not attend any class unless they are properly registered in that class. Registration is completed online in the Viking Student Portal. See the Schedule of Classes for the appropriate semester for dates, times, and instructions for registration. Students must be officially enrolled prior to the census date. Students are responsible for officially dropping classes by the posted deadlines even if the student never attended the class. Please refer to the online student center for drop deadlines.

## Knowing Your Responsibilities

LBCC provides students with a wide variety of academic assistance and personal support, but it is up to each student to know when they need help and to seek it out. It is the student's responsibility for staying informed and obeying campus rules, regulations, and policies that affect his or her academic standing as an LBCC student. Meeting deadlines, completing prerequisites, and satisfying the degree and certificate requirements, as found in the curriculum guides and in this catalog, are all part of the student's responsibility. Students should consult this catalog, the college and school announcements, email, and the schedule of classes for the information they need and should watch for official announcements in the Viking Newspaper and on-campus bulletin boards.

## Enrollment Priorities

## Enrollment Priorities and the California College Promise Grant (formerly the Board of Governors Fee Waiver or BOGW)

The purpose of establishing enrollment priorities is to support students endeavoring to reach their educational goals by providing priority enrollment to groups of students with special needs or who are in continuing student status, if satisfactory academic progress is maintained.

Beginning in Fall 2018, the California College Promise Grant (formerly BOGW), will require satisfactory academic progress. All grades will be used to determine eligibility. Any combination of two consecutive fall and spring semesters of cumulative GPA below 2.0 or cumulative course completion of less than $50 \%$ may result in loss of the California College Promise Grant.

## Priority and Enrollment Criteria and Conditions

All new and returning students not otherwise exempt, including those in any state-provided priority enrollment groups, must complete assessment and orientation and have an Electronic Student Educational Plan in order to receive a priority enrollment.

Students, including those in any state-provided priority enrollment groups except eligible current and former foster youth, are subject to loss of enrollment priority and loss of the California College Promise Grant if they are on any combination of progress or academic probation for two consecutive semesters.

Students, including those in any state-provided priority enrollment groups except eligible current and former foster youth, are subject to loss of enrollment priority for which they would ordinarily be eligible if they have earned 100 degree-applicable units.

## Appeal for Enrollment Priority and Loss of California College Promise Grant (formerly BOGW)

Students may submit an appeal for loss of enrollment priority and loss of the California College Promise Grant to Enrollment Services at either campus. Appeal forms can be picked up in the Enrollment Services Offices or at www.lbcc.edu/admissions-and-records-forms (http:// www.lbcc.edu/admissions-and-records-forms/).

## Procedures for Application to School of Health and Science Programs

Health care programs may have limited enrollments due to the limited availability of clinical sites. These programs have separate admissions processes to ensure that students are selected in a fair and equitable manner. Admission to LBCC does not ensure acceptance into these programs. To be considered, students must complete stated prerequisites, submit an official application form, and provide required documentation. After the stated deadlines, applications are evaluated and students will be notified if they have been selected. Nursing students have the opportunity to reapply for a subsequent term if they are not accepted. For information about applying to Allied Health Programs visit www.lbcc.edu/alliedhealth (http://www.lbcc.edu/alliedhealth/).

For information about applying to the Vocational or Associate Degree Nursing Programs visit www.lbcc.edu/department-nursing (http:// www.lbcc.edu/department-nursing/).

## International Students

Students who are not U.S. citizens must verify their immigration status at the time of registration. If classified as nonresident, these individuals must pay nonresident tuition. Foreign students who plan to enroll with a student visa ( $\mathrm{F}-1, \mathrm{M}-1$ ) must have the international admission application files completed through the International Student Programs Department. No l-20 will be issued until all requirements are met. Contact the International Student Programs Department for more information at 562-938-4745 or visit www.lbcc.edu/internationalstudents (http:// www.lbcc.edu/internationalstudents/).

Students must submit the appropriate admissions applications and enrollment forms for each term they wish to attend. Documents submitted to the college, such as applications and transcripts, become the property of LBCC, will not be returned, and may not be duplicated.

## International Student Programs

## Admission Procedures

The International Student Programs offer specialized support and immigration advising to F1 and M1 status students on campus, as well as assistance to prospective students from the moment of their initial application and throughout their study at LBCC until their graduation. All international student applications are accepted and processed by International Student Programs.

## International Student Admission to LBCC Academic or Certificate Programs

LBCC offers a wide range of university transfer programs, associate degrees, and technical education certificates. The International Academic Counselor will help students plan for, and reach, their educational goals. LBCC welcomes all international students who desire to grow, serve, and succeed in their academic and professional pursuits.

How to become an International Student at LBCC:

1. Apply online at apps.lbcc.edu/internationalsecure/ (http:// apps.lbcc.edu/internationalsecure/) (International application for admission)
2. Application fee of $\$ 40$ can be paid online at http://www.lbcc.edu/ post/international-student-application-fee (http://www.lbcc.edu/ post/international-student-application-fee/) (non-refundable)

Applicants must adhere to application deadlines and submit all required documentation:

1. Proof of English Proficiency within two years. Accepted test scores include the following:
a. iTEP International English Test (Level 3.5)
b. PTE Pearson test of English Academic (44 score)
c. TOEFL - 57 (iBT)/490 (PBT)/163 (CBT) or higher
d. ALI at CSULB - Level 104
e. ALI at SDSU-Level 106
f. IELTS - (Level 5.5)
g. $\mathrm{LSI}-($ Level 6$)$
h. TOEIC - (550 or higher)
i. ELS - (Level 109)
j. STEP Eiken - (Level 2A)
k. UCI-DCE - (Level 5)
2. Proof of Financial Support: A current original PDF signed and stamped bank statement or letter of financial sponsorship showing minimum amount required to cover academic and living expenses for at least one year of study at LBCC.
3. Academic Credentials and Transcripts:
a. Proof of High School Graduation (seniors under 18 years of age)
b. Official Sealed College/University transcripts (Must be in English)
4. Tuberculosis Test: Original PDF test result within a year from a hospital or doctor is required
5. Personal Essay: Personal one-page essay explaining why the student wants to study at LBCC, discussing academic goals
6. Copy of Passport: PDF copy of the information page from the passport showing full legal name in English and a picture. LBCC will use this version of the student's name to issue the l-20
7. Upload each required document through the online international application in PDF format with Certified English Translation

## Tuition and Fees

- International Student Tuition fee (Nonresident Enrollment fee).
- Other fees and expenses include student ID, health insurance, parking, housing, food, books, school supplies, and personal necessities.

Upon receiving a completed application, an international admissions advisor will review the file and inform the prospective student of the admission decision. Students are required to attend the mandatory orientation for international students. Once students have registered they are required to pay their registration fees immediately.

1. As per immigration regulations and college policy, all international students are required to enroll in and complete 12 units each semester, except for summer and winter sessions.
2. All international students must purchase and maintain valid student health insurance from the authorized LBCC group vendor throughout their enrollment at LBCC. This insurance may not be waived.
3. International students are encouraged to be actively involved in campus life and activities.

Contact ISP at 562-938-4745 or email international@lbcc.edu for questions regarding international student status.

## Matriculation

Matriculation supports the transition of students into college by facilitating the completion of entry services such as guided placement and alternative placement into English, math, reading, and English as a Second Language (ESL), orientation, counseling for educational planning, and referrals to specialized student support services that assist students in making informed decisions about their educational goal and course of study.

## College's Responsibility

In accordance with the Student Equity and Achievement Program, the college shall take steps to ensure that information regarding the matriculation requirements is accessible and available to all students during or prior to enrollment.

## Student's Responsibility

All new non-exempt students must complete matriculation core services before enrolling. Students must identify a specific educational goal or major. Students must also demonstrate maintenance of progress toward an educational goal.

## Components of Matriculation Orientation, Placement, and Counseling

The following components are required in order to be fully matriculated into the college:

- Application to the College,
- Placement in English, math, reading, and English as a Second Language, as applicable,
- Orientation to the college's programs and services,
- Counseling for assistance with course selection and educational planning.

New students are required to complete the following core services in order to receive priority registration: completion of placements or proof of courses completed in English, math, reading, and/or ESL, orientation, and educational planning. Deadlines apply for priority registration appointments.

## Assessment and Placement

With the passing of AB 705 (see below), LBCC no longer administers course assessments. Rather, the college uses information that is gathered at the time of application, or through a high school transcript, to create placements for a student in English, reading, math, and ESL. High school data is valid for up to 10 years following the student's date of graduation from high school. In cases where high school information cannot be used to determine placements, the college will use other information provided by the student to create an informed placement.

## Assembly Bill AB 705

$A B 705$ is a law that requires California Community Colleges to maximize the probability that students will enter and complete transfer-level coursework in English and math within a one-year timeframe. This law changes how students are placed in English and math college courses. California Community Colleges are required to use multiple measures, which include high school grades, coursework, and grade point average.

As a result of Assembly Bill 705, community colleges are no longer administering assessment testing to place students into English, ESL, reading and math courses. See College Assessment and Placement information at https://www.lbcc.edu/assessment (https://www.lbcc.edu/ assessment/).

## Orientation

Students complete orientation by logging into their Student Viking account and clicking on the "Student Services" box.

## Counseling

Counselors will create an abbreviated education plan informed by the student's chosen program of study (i.e. major). Students may complete this requirement by attending an educational planning workshop or scheduling an appointment with a counselor. Subsequently, students should meet with a counselor to create a comprehensive educational plan that includes all requirements necessary to achieve their educational goal at the college.

A request form to be exempt from completing one or more core services is available on the matriculation website at https://www.lbcc.edu/ assessment-exemption (https://www.lbcc.edu/assessment-exemption/). Exemption approval may also require that students provide justification for their requests.

## Matriculation Exemptions

All students must participate in these components; unless granted an exemption. (See Component Exemptions section below)

A student who believes they are exempt from any of these components may appeal by filing an exemption form which is available at https:// www.lbcc.edu/assessment-exemption (https://www.lbcc.edu/ assessment-exemption/).

The waiver will be reviewed by the Matriculation Office, and the student will be notified of the decision by email.

Students who receive a temporary waiver of a matriculation component will be required to complete the component in a future term. A hold may be placed on a student's record until the matriculation requirement is completed.

## Component Exemptions

Students are exempt from components if they meet any of the following criteria:

1. Students who hold an associate or higher degree,
2. Students who indicate they are taking courses only for personal enrichment,
3. Students who are co-enrolled at a four-year college or university,
4. Students who are enrolled only in the following:
a. Performance or activity classes,
b. Classes for advancement in their current job/career update job skills,
c. Community and Contract Education classes.

Receiving a Matriculation Exemption is not the same as a prerequisite course clearance. The Matriculation Exemption is not clearance to enroll in specific English, math, reading, and/or ESL courses. Information on prerequisite clearances are found at https://www.lbcc.edu/prerequisitescorequisites (https://www.lbcc.edu/prerequisites-corequisites/).

## Appeals of Initial Placement Recommendation

A student may appeal an initial placement recommendation in English, math, reading, or ESL by completing a Placement Appeal form in the Matriculation Department/Welcome Center. The student may be required to provide justification for the appeal and will be notified of the appeal decision by email.

## Student Rights and Matriculation

A student may initiate a complaint about LBCC matriculation practices by filing a complaint form, which is available at the Matriculation Office or online at https://www.lbcc.edu/assessment (https://www.lbcc.edu/ assessment/). Complaints will be directed to the Dean of Student Equity, who is responsible for the investigation and resolution of such complaints. The dean will maintain a file on all formal complaints.

## Fees

## Enrollment Fees and Other Expenses

Students must pay all fees and tuition at the time of registration unless otherwise indicated. All students are required to purchase their own books and regular supplies. All fees are subject to change after the printing of the schedule of classes.

A $\$ 15$ fee will be charged for all returned checks. Under Assembly Bill 1226, any person who writes a check dishonored for lack of funds is civilly liable for three times the amount of the check, plus the face value of the check.

## Resident Enrollment Fees

A student classified as a California resident (see residence section) shall be required to pay an in-state enrollment fee of $\$ 46$ per unit. This rate is subject to change without notice as determined by the California legislature.

## Nonresident Enrollment Fees

Students who have been classified as nonresidents (see residence section) shall be required to pay nonresident tuition at the rate of $\$ 278.00$ per unit plus the normal enrollment fee of $\$ 46.00$ per unit and a capital outlay surcharge of $\$ 43.00$ per unit, for a total of $\$ 367.00$ per unit. This rate is subject to change without notice.

## Books, Supplies and Course Materials Fees

Visit our website: Ibcc.bncollege.com or call 563-938-4223. The LAC bookstore is located in Building I. Students must purchase all books and the supplies required by instructors of the classes in which they enroll. If a class has a materials fee, this fee will be listed in the schedule of classes and must be paid during registration. The on-campus bookstores will sell new and used textbooks, in addition to other cost-saving options such as textbook rentals and digital e-textbooks when available and appropriate. Other required course materials and supplies will also be available for purchase at the campus stores.

## College Services Card Fee

The College Services Card (CSC) is the official student identification card utilized by both LAC and PCC campuses at LBCC. The CSC is validated each semester by a current CSC sticker. While the CSC is optional, it is required to use the Viking Voyager shuttle. Revenue from this CSC Card supports the intellectual, physical, social, and cultural goals of students through the sponsorship of educational and co-curricular programs. It underwrites the Associated Student Body student government, campus shuttle service, athletics, grants and scholarships, music and theater arts programs, the Viking Newspaper, intramural and recreational activities,
clubs and organizations, KLCB/KCTY radio, accident insurance, and a number of other programs and activities supporting the students' extracurricular experience. The CSC sticker is issued by the Cashier's Office at LAC and PCC each semester for \$20 for fall and spring and \$13 for summer sessions. No fee is charged for winter session.

## Student Health Fee

A health fee of $\$ 20$ for fall and spring and $\$ 17$ for summer and winter sessions will be charged upon registration, unless students meet one of the following exemptions:

1. Any student who depends exclusively on prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization. Documentary evidence of such an affiliation is required.
2. Students attending college under approved apprenticeship training programs under Section 76355(c)(2).

## Parking Fee

Students must purchase a parking permit to park on campus. The parking fee for automobiles or motorcycles is $\$ 30$ during the fall or spring semester. The fee for all students during summer and winter intersessions is $\$ 20$. Day permits are $\$ 2$.

## Required Instructional and Other Materials Fees

Students may be required to purchase instructional and other materials required for a credit or noncredit course. Such materials shall be of continuing value to a student outside of the classroom setting and shall not be solely or exclusively available from the District. These fees are not covered by the California College Promise Grant (CCPG) Fee Waiver (Title 5 Cal. Admin. Code Sec. 59400).

## Printing Fee

A printing fee will be charged for each page printed in the Academic Computing Centers and Library on campus. Students are welcome to save information to email or a flash drive to print at home or take to another source for printing.

## Indebtedness

The College cannot extend deadlines for paying fees. In the event that a student becomes indebted to the College due to library fines, damage to or loss of books or athletic equipment, student loan defaults, breakage of equipment, checks returned for insufficient funds, failure to meet attendance regulations for financial aid, or for any other reason, the college will deny further enrollment, and refuse to release information to potential employers or other agencies until all indebtedness has been cleared.

## Refunds

Students are eligible for a refund of fees only if they withdraw from classes prior to the last date to drop without a grade (course census date). See the Viking student system for refund deadlines for enrolled courses. LBCC will determine the amount of federal financial aid that a student has earned in accordance with federal law. Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they received. Students who withdraw from all classes prior to completing more than $60 \%$ of the semester will have their financial aid eligibility recalculated based on the percentage of the semester completed and will be required to repay any unearned financial aid they received.

A student's withdrawal date is as follows:

1. The date the student officially dropped/withdrew from their course(s) online, or
2. The student's last date of attendance at a documented academically related activity.

LBCC does not offer leaves of absence.

## Interdepartmental Class Transfer Rules and Refunds

Students may transfer from one class to another within the same academic discipline upon the approval of the instructors involved. Transfers shall not be considered withdrawals.

## Definition of a Class Transfer

After the refund or transfer period, transfers may only be made between classes in the same academic discipline. Furthermore, transfers will only be allowed under the following conditions:

1. Each class is of equal length and start in the same week; or
2. The class from which the transfer is being made is shorter than the new class and both start in the same week; or
3. The class from which the transfer is being made is longer than the new class and both end in the same week.

## Fee Refund or Transfer Period

In order to receive a refund students must drop the course prior to the last date to drop without a grade (course census date). To transfer enrollment fees or nonresident tuition from one class to another, students must officially withdraw after the last date to drop without a grade (course census date) and transfer within the same academic department provided that permission is granted by both instructors.

Enrollment fees, nonresident tuition, health fees, and materials fees will be automatically refunded to students who officially withdraw during the refund period. After this period, these fees will not be refunded. In the case of a verified military withdrawal, enrollment fees will be refunded with no service charge.
College Services Card and parking fees will be refunded within the refund or transfer period defined above. After this period, no refunds will be issued. All requests for refunds must be accompanied by the College Services Card or parking permit. No refunds will be granted without the appropriate documentation.
College Services Cards stickers and parking permits must be surrendered to the Cashier's Office in order for a refund to be issued. Parking fees will be refunded by check from the Cashier's Office via U.S. mail.

Appeal for Extenuating Circumstances Refund of Enrollment Fees

1. The Admissions \& Records Team shall consider all appeals for refunds of tuition and enrollment fees due to extenuating circumstances. Administrative Procedures 4230: Extenuating circumstances shall be defined as reasons for absence beyond the control of the student. Typical examples of such circumstances would be extended illness, hospitalization, court appearances, or death in the immediate family.
2. The Vice President of Student Support Services, or designee, shall consider all appeals for refund of College Services Card and parking fees.

## Change of Address and/or Name

Change of address and/or name may be completed via the online student self-service portal, or in the Admissions and Records Office. If in person, a photo ID is required for all transactions. Change of address for payroll
purposes is made in the Payroll Office to ensure correct delivery of paychecks and W-2 Forms.

## Family Educational Rights and Privacy Act (FERPA)

All student records of LBCC are maintained in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974. Copies of the complete text of this act are available in the college library. FERPA provides the student with the right to review and challenge their record and to control the release of this academic record.

1. Students may request access to challenge the correctness or appropriateness of any part of the record. Grades, though a part of the record, are considered final as assigned by the instructor. See the change of grade section for further information.
2. Student information, except for directory information as defined below, cannot be released by the college to any outside agency, except for those entitled to access under FERPA, without signed permission of the student. The student may restrict the release of directory information by completing the appropriate form in the Admissions Office located in Enrollment Services. If the student has not filed this form, the college may release directory information.

- Directory information includes: Student's name, current enrollment status, dates of attendance, major field of study, degrees, certificates or awards received, verification of student participation in officially recognized school activities and sports, and weight and height of members of athletic teams, and the most recent public or private school attended by the student.

By law, all student records must be released under court order and other federally mandated requirements. The student will be notified by mail to the last address on file in the event of a subpoena. Students shall have the right to request a copy of any information released in this manner.

Any questions regarding the student's rights under this act should be directed to the Executive Dean of Enrollment Services or the dean's designee.

## Campus Security

## Drug-Free College Statement

The Long Beach Community College District is committed to providing an appropriate environment free from illicit drugs and alcohol. As a preventive measure, appropriate information regarding the health risks associated with the use of illicit drugs and abuse of alcohol will be provided to students. This information may be obtained from Student Health Services at 562-938-4210 (LAC) or 562-938-3992 (PCC). In addition, information may be obtained regarding counseling, treatment, and rehabilitation. LBCC offers forums and other educational programs regarding the harmful effects of drugs and alcohol. Information regarding programs may be obtained from the Office of Student Affairs at 562-938-4370. All inquiries will be held in the strictest confidence. In compliance with federal legislation, the Long Beach Community College District maintains a drug-free environment and supports a drug prevention program for student use. The unlawful manufacture, distribution, dispensation, possession, and use or sale of illicit drugs or alcohol is prohibited to all individuals in all buildings, property, facilities, service areas, and satellite centers of the district or as part of any district
activities. Any student violating this policy will be subject to appropriate disciplinary action.

## Campus Security and Crime Awareness

The Long Beach Community College District maintains a safe and secure environment for its students, staff, and visitors. Campus security requires that everyone on campus be alert, aware, and responsible. The Long Beach Police Department provides police services to the Long Beach Community College District through its City College Unit. The City College Unit is comprised of an assigned lieutenant, four police officers, and 16 security officers who are assigned to both the Liberal Arts Campus and the Pacific Coast Campus.

## Student Right-To-Know and Campus Security Act

The Long Beach Community College District is committed to making the campuses of LBCC as safe as possible for students, employees, and visitors. The Long Beach Police Department College Unit exists to inform, educate, and make individuals aware of personal safety as well as the safety of others. Students are encouraged to promptly and accurately report all criminal and emergency actions to the Long Beach Police Department College Unit on either campus. Those actions requiring further reporting should also be reported to the appropriate law enforcement agency. The college will provide assistance as needed to accomplish this task.

Long Beach Community College District policies identify the college as a secure facility. Access to all facilities outside of class hours requires prior approval from the Office of Administrative \& Business Services.

Under the auspices of the Long Beach Police Department College Unit, monthly crime statistics are compiled and available for both students and employees on the LBCC website under Police \& Campus Safety page. These reports are intended to inform individuals about current criminal experience as well as educate individuals regarding crime prevention.

The police department also recommends and conducts programs designed to inform students and employees about campus security procedures and practices that encourage individuals to be responsible for their own security as well as the security of others. In addition, pamphlets are prepared and distributed by the Long Beach Police Department College Unit on a regular basis to new students and employees regarding campus safety and crime prevention.

Public information regarding sex offenders in California may be obtained by viewing the Megan's Law website at the Long Beach Police Department or the Los Angeles County Sheriff's Department.

Long Beach Police Officers assigned to the College Unit have the authority and responsibility to enforce all policies, rules, and regulations of the District as well as local, state, and federal laws.

In compliance with the Student Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the Long Beach Community College District to make available its campus crime statistics and Annual Security Report. A link to the report containing the statistics can be found at https://www.lbcc.edu/sites/main/files/file-attachments/ annual-security-report.pdf.

## Emergency Services - 911

The Long Beach Police Department should be contacted without delay by calling or texting 911 regarding any emergencies such as crimes in progress, medical aid, or any incident requiring immediate police or security response.

## Non-Emergency Police Dispatch -562-938-4910 or 562-435-6711

The Long Beach Police Department College Unit should be contacted regarding questions or problems regarding security, lost and found items, thefts, or other crimes. The LAC office is located in Building $X$ on Lew Davis. Business hours are Monday through Friday, 8:00 a.m. to 5:00 p.m. After business hours, calls can be directed to the General Service number.

## STUDENT SUPPORT SERVICES

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## Enrollment Services Offices <br> Welcome Center

Liberal Arts Campus<br>A-1001<br>562-938-4049

For more information, visit https://www.lbcc.edu/get-started (https:// www.lbcc.edu/get-started/).

## Admissions \& Records

## Liberal Arts Campus

A-1075

## Pacific Coast Campus

GG-102
For more information, call 562-938-4485 or visit https://www.lbcc.edu/ contact/admissions-records (https://www.lbcc.edu/contact/admissionsrecords/).

## Financial Aid

Liberal Arts Campus
A-1075
Pacific Coast Campus
GG-102
For more information, call 562-938-4485 or visit https://www.lbcc.edu/ financial-aid (https://www.lbcc.edu/financial-aid/). Learn more about Financial Aid works at https://longbeachcc.financialaidtv.com (https:// longbeachcc.financialaidtv.com/).

## Cashier's Office

Liberal Arts Campus
A-1081

## Pacific Coast Campus

GG-101
562-938-3906

## Counseling

## Counseling and Student Development

The Counseling Department assists students in the selection of career and educational goals consistent with their interests and aptitudes. The mission of Counseling and Student Support Services is to provide and foster a nurturing and supportive environment that empowers students to persist in developing and achieving their full and unique academic, career, personal, and education life goals. Counseling services are readily available to all students and tailored to meet each individual's needs.

Comprehensive counseling assistance is available during a scheduled 60 -minute counseling appointment. Additionally, First Come First Serve counseling sessions are available in 10 -minute segments, no appointment necessary. Career counseling services will assist students through the career exploration and decision-making process.

Students may schedule an appointment online at https://www.lbcc.edu/ counseling (https://www.lbcc.edu/counseling/) or in person at A-1111 (LAC) or GG-202 (PCC) and by phone at 562-938-4561 (LAC) or 562-938-3920 (PCC).

Online counseling services are also available as a flexible alternative to meeting with a counselor in person. Students may meet with a counselor via online, phone, or chat modalities. For counseling hours at either campus, check the LBCC website counseling website at https:// www.lbcc.edu/contact/counseling-office (https://www.lbcc.edu/contact/ counseling-office/).

## Transfer and Career Centers Transfer Center

The Transfer Center assists students with their goal of attending a university after taking courses at LBCC. A variety of services such as university representative appointments, transfer fairs, admissions workshops, and university tours are available. The Transfer Center also assists students with the evaluation of transcripts from other colleges and universities.

The Transfer Center is located in A-1097 (LAC) and EE-105 (PCC). Visit www.lbcc.edu/transfer-center (http://www.lbcc.edu/transfercenter/) for useful university links, regular transfer updates, valuable transfer resources, and current hours of operation.

To contact the Transfer Center remotely, call 562-938-4670/3916 or email transferacademy@lbcc.edu.

## Career Center

The Career Center offers students services designed to guide them in their career development process. Through the following activities, students are given information about career awareness, exploration, career planning, career readiness, and current economic trends to better inform their decisions about their educational and career goals.

The following are offered through the Career Center.

- Career Assessments
- Career Counseling
- Career Workshops
- Classroom Presentations
- Employment Search Database
- Resume Writing and Review
- Career Resource Lab equipped with computers and internet access
- Specialized Employment Readiness Workshops

Career Center services offer the opportunity to explore career options and be successful in entering the 21 st-century workforce. Counselors and staff are available to assist students. The Career Center is located in A-1097, 562-938-5195 (LAC) and LL-206, 562-938-3248 (PCC). For important career resources, access to an employment database, an explanation of services, and current hours of operation, please visit https://www.lbcc.edu/career-center (https://www.lbcc.edu/ career-center/). Students can also join the Career Center Canvas by logging in to: https://lbcc.instructure.com/enroll/P3AH47 (https:// lbcc.instructure.com/enroll/P3AH47/) for updated information and announcements on current Career Center events.

## Student Life

## Student Life and the Student Unions

The mission of the Office of Student Life is to create, encourage, and support a positive and collegial learning environment whereby the college is enhanced, and students can better pursue their educational goals. Numerous activities and programs give students the opportunity to connect to LBCC. These programs present opportunities for leadership development, personal growth, shared governance, healthy competition, volunteerism, and developing a sense of community. Student Life Offices are housed in the Student Union at both campuses: Building E (LAC) and Building EE (PCC).

## Clubs and Organizations

Joining a club or organization provides the perfect opportunity for students to make new friends, develop leadership skills, and contribute to the college and community. Utilizing contacts and experiences can help students build their resumes and plan for their futures. To join a club, visit the Viking Engagement system at https://lbcc.campuslabs.com/engage (https://lbcc.campuslabs.com/engage/).

## Student Government

The Associated Student Body (ASB) is the student voice for all students of LBCC. The ASB supports the intellectual, physical, social, and cultural goals for students through its sponsorship of educational and cocurricular programs. Students interested in participating in student government, including the Associated Student Body Cabinet, may wish to consider one of the many elected or appointed positions. The ASB is funded by the College Services Card. To contact ASB, please email asbpresident@lbcc.edu.

## Intramurals and Recreation

Intramurals and recreation strive to promote better health by offering a variety of activities for participants of all abilities. Intramurals and recreational sports offer a wide range of programming and play an integral role in student life. For more information, call 562-938-4978 (LAC) or 562-938-3088 (PCC) or email studentlife@lbc.edu.

## Viking Volunteer

The mission of the Viking Volunteer program is to provide students with opportunities to serve their campus and community and become lifelong civic leaders. Volunteering helps connect students, clubs, and organizations to the community through service. Viking Volunteers receive an official transcript record of their volunteer service, which has helped many LBCC students in transferring to four-year colleges and universities. For more information, call 562-938-4978 (LAC) or 562-938-3088 (PCC) or email studentlife@lbc.edu.

## John Fylpaa Leadership Institute

The John Fylpaa Leadership Institute is a "FREE" seven-month, sevensession program that includes a mandatory orientation and a twonight weekend retreat. The goal of the institute is to create civic leaders through monthly workshops that will include field trips, guest speakers, and community projects. For more information, call 562-938-3088 or email studentlife@lbc.edu.

At the end of each cohort, two scholarships are awarded and the students that complete the program will receive a certificate of completion and transcript notation stating that the student completed the program. For more information, call 562-938-3088 or email studentlife@lbcc.edu.

## Viking Activities Council

The LBCC Viking Activities Council is the official student programming and a coordinating group of the Associated Student Body. The aim of the group is to have fun and make life-long friends through leadership, team building, and event planning at the college.

The Viking Activities Council is a new leadership group that will facilitate programming and activities for traditional and cultural events collegewide. The council will also support programming throughout the college and the community. For more information, call 562-938-4055 (LAC) or 562-938-3088 (PCC) or email studentlife@lbc.edu.

## Student Life Workforce Development

The Office of Student Life participates in the Federal Work Study Program through Financial Aid and hires 20-25 Student Assistants each semester at both the Pacific Coast and Liberal Arts campuses. Student Assistants provide, assist, and implement events, activities and workshops in support of the Student Affairs Department.

Student Life programming stewarded by Student Assistants includes ASB, Viking Activities Council, all Student Life activities on campus, Information Desk, support of the Student Unions, John Fylpaa Leadership Institute, and support of clubs and organizations. They also participate in professional development workshops, orientations and trainings. For more information, call 562-938-4978 or email studentlife@lbc.edu.

## LBCC Student Unions

The Student Unions are a one-stop location for getting involved in student clubs and organizations, buying the College Services Card, applying for the Viking Volunteer program, signing up for Intramural activities, and getting connected to resources in Long Beach. On both campuses, the Student Union includes a safe and quiet space for studying or socializing with other students. The unions are located in Building E (LAC) and Building EE (PCC). For more information, call 562-938-4978 (LAC) or 562-938-3088 (PCC) or email studentlife@lbc.edu.

## Student Health Services Student Health Services

Student Health Services (SHS) provides quality and accessible medical care and mental health services and education for students. SHS partners with the City of Long Beach and the surrounding community to provide comprehensive clinical services and no-cost or low-cost care. SHS engages students in making informed decisions about their health care, empowering them to be self-directed health care consumers.

All students who have paid the Student Health Center fee may utilize medical and mental health services at no additional charge. Regardless of insurance coverage, students are eligible for basic health services and mental health support at the Student Health Center.

## Medical Care Services

SHS provides medical care through the services of nurse practitioners, registered nurses, and health service technicians. SHS embraces a holistic and collaborative approach to the wellbeing of students by offering wellness education, preventative services, and other medical care services. SHS is attentive to the diverse health needs of all students and confidentiality is always respected. Below are some services provided through the health care fee.

Medical Care Services Offered

- Acute Illness
- UTI Testing
- Pregnancy Tests
- STI Referrals \& Testing (LB Dept. of Public Health)
- Birth Control Counseling
- Nutrition and Disease Consults
- Health Education
- Physicals
- Immunizations
- Flu
- TB Screens
- Hepatitis B
- Tdap vaccines
- Health Care Referrals


## Workshops and Events

- The Body under Stress
- Eating Intuitively
- Nutrition 101
- Freedom from Smoking
- Healthy Heart
- STI Prevention and Protection
- Nutrition Budget and Snacks
- Vaping and Hookah Dangers
- Walking Wednesdays
- Wellness Fest


## Mental Health Services

Mental Health Services (MHS) is committed to promoting student mental health and wellbeing, and strives to help students achieve their academic, professional, and personal goals. Social and Emotional Health Services are provided by Licensed Clinicians or Graduate Interns. Confidentiality is
always respected with services. For more information or to schedule an appointment, call 562-938-4210 (LAC) or 562-938-3992 (PCC).

## Social and Emotional Health Services Offered

- Short Term Therapy
- Anxiety and Panic Disorders
- Depression
- Eating Disorders
- Relationship Issues
- Academic Stress
- Stress Management/Anger Management
- Substance Abuse
- Suicide Prevention
- Same Day Appointments Available for Students


## Workshops and Events

- Mindfulness: Finding Peace
- Self Esteem
- Substance Misused Awareness
- Stress Management
- Holiday Blues
- Art of Wellness
- Laughter
- Healthy Relationships
- Depression
- Anxiety
- Mental Health Awareness Month
- Movies for Mental Health


## Financial Resources

## Student Financial Aid

LBCC administers a comprehensive student financial aid program to assist students in meeting college costs. The amount of financial aid awarded varies from student to student depending on the individual's need and resources. Financial Aid is intended to help students who might not otherwise be able to attend college. Although the primary responsibility for meeting college costs rests with the student and their family, the college recognizes that many families have limited resources and are unable to meet the cost of a college education. Federal and state financial aid programs have been established to provide assistance to students with documented financial need.

Awards are initially offered based on full-time enrollment. The number of units in which students actually enroll may impact the amount of financial aid received for the various aid programs. Please note that the number of units enrolled do not include courses for which students are waitlisted.

## Enrollment Status

| In Primary Terms | Number of Units |
| :--- | :--- |
| Full-time | 12 or more units |
| Three-quarter-time | $9-11.5$ units |
| Half-time | $6-8.5$ units |
| Less than half-time | $1-5.5$ units |

The application process for financial aid begins with completion of the Free Application for Federal Student Aid (FAFSA) or California Dream Act Application (CADAA), which is available on October 1 for the following fall semester. Students may apply online at www.fafsa.gov (http:// www.fafsa.gov/) or dream.csac.ca.gov (https://dream.csac.ca.gov/).

In addition to having financial need, students must meet the following conditions:

- Be enrolled in an eligible program of study leading to completion of an A.A. or A.S. degree, transfer requirements, or a certificate program
- Maintain satisfactory academic progress
- Be a U.S. citizen or eligible noncitizen, or, for the CADAA, be classified as AB 540 eligible
- Not be in default on any student loan or owe a refund on any grant made under any Title IV program
- Have a social security number and have a high school diploma, or GED

Student budgets include educational expenses, such as tuition, fees, books, supplies, housing, food, transportation, child-care, and personal expenses. Financial aid recipients must adhere to the standards of progress of the financial aid programs. Financial aid recipients must adhere to the standards of progress of the financial aid programs posted at www.lbcc.edu/financial-aid-policies.

## Federal Financial Aid Programs

## Federal Pell Grants

Pell grants are a federally funded program designed to be the foundation of financial aid for undergraduates who demonstrate need. The amount of the Pell Grant is based on the cost of attendance minus the expected calculated family contribution and the student's enrollment status at the time of payment. Award amounts vary according to eligibility and enrollment. For more information, visit www.lbcc.edu/post/grants (http:// www.lbcc.edu/post/grants/). Pell Grants are limited to 6 years or 12 fulltime semester enrollments.

## Federal Supplemental Educational Opportunity Grants (FSEOG)

This federally funded grant is available to undergraduate students who demonstrate exceptional financial need. The awarding of FSEOG funds is limited ${ }^{1}$ and must be given to maximum Pell Grant recipients.

## The Federal Work Study Program (FWS)

This federally funded program provides employment opportunities ${ }^{1}$ to students with financial need. Students awarded FWS receive an allocation of funds earned through part-time jobs on campus. FWS provides an excellent learning process through on-the-job training. Students are employed a maximum of sixteen hours per week while school is in session.

## The William D. Ford Direct Loan Program

This program provides loans to students to be used for educational expenses. Freshman students may borrow up to $\$ 3,500$ per year, and sophomores who have completed at least thirty units may borrow up to $\$ 4,500$ per year in subsidized loans. Based on need, additional unsubsidized loans are also available.
${ }^{1}$ FSEOG and FWS funds are limited and early application is strongly advised.

## California State Financial Aid Programs

## California College Promise Waiver

Students can qualify for the California College Promise Waiver in several ways: The student demonstrates financial need according to federal methodology based on completion of the Free Application for Federal Student Aid (FAFSA), or The student or the student's family is receiving CalWORKs, formerly TANF/AFDC, Supplemental Security Income (SSI), or General Assistance/General Relief, or the student is a disabled veteran or a dependent of a deceased or disabled veteran as certified by the California Department of Veterans Affairs, or the student is a recipient or the child of a recipient of the Congressional Medal of Honor, or the student is a dependent of a victim of the 9/11/01 terrorist attack, or the student is a dependent of deceased law enforcement or fire suppression personnel killed in the line of duty, or the student meets specific income criteria based on family size as set by the State of California.

The California College Promise Waiver will require satisfactory academic progress. All grades will be used to determine eligibility. Any combination of two consecutive fall and spring semesters of cumulative GPA below 2.0 or cumulative course completion of less than $50 \%$ may result in loss of the California College Promise Waiver. For more information, visit www.lbcc.edu/post/board-governors-bog-fee-waiver (http:// www.lbcc.edu/post/board-governors-bog-fee-waiver/).

## Cal Grants

Cal Grant Programs are available to California Residents who qualify. United States citizens, permanent residents, or eligible noncitizens may apply for Cal Grants via the Federal Application for Student Aid (FAFSA). Beginning January 15, 2013 AB-540 students may apply via the California Dream Act Application. The maximum opportunity deadline to apply is March 2nd each year for all California college students. If a student misses the March 2nd deadline and plans to attend a community college in the fall, the student has until September 2nd to apply for limited remaining grants. Cal Grants also involve a GPA submission requirement. The college electronically transmits GPA verifications for certain students. For detailed information, go to https://www.csac.ca.gov/. Students must be actively enrolled in at least six units to receive Cal Grant benefits.

Cal Grant A assists low and middle-income students with tuition and fee costs at four-year colleges and universities. Grant recipients are selected based on financial need and grade point average.

Cal Grant B provides a living allowance and tuition and fee assistance for low-income students. Cal Grant B may be used at community colleges as well as at four-year schools.

Cal Grant C helps vocational students with tuition and training costs. Recipients must be enrolled in a vocational program at a community college, independent college, or vocational school in a program of study from four months to two years in length.

## Student Success Completion Grant

The purpose of the SSCG grant award is to provide the student with additional financial aid to help offset the total cost of community college
attendance, and to encourage full-time attendance and successful ontime completion.

## To qualify for the SSCG:

- Be eligible for a Cal Grant B or C award
- Meet federal satisfactory academic progress (SAP)
- Have unmet need to receive the SSCG
- Maintain full-time attendance

A maximum of \$2,596 annually at one thousand two hundred ninety-eight dollars $(\$ 1,298)$ per semester for eligible students who enroll and attend 12 through 14.99 units per term.

A maximum of $\$ 8,000$ annually at four thousand dollars $(\$ 4,000)$ per semester for eligible students who enroll and attend at least 15 units per term.

Funds for this program are limited and awarded on a first-come, firstserved basis. Early application is strongly advised.

## Chafee Grant Program

This program is available to former foster youth. Awards are $\$ 5,000$ per year. Students may apply using the FAFSA and the separate Chafee Grant application. For more information, visit https://chafee.csac.ca.gov/.

## Dream Act/AB540 Eligibility

Several types of state and institutional aid are available to AB 540 students as a result of the California Dream Act, such as the California College Promise Waiver or Cal Grants. Visit www.lbcc.edu/california-dream-act (http://www.lbcc.edu/california-dream-act/) to read more about these awards.

## Refunds and Withdrawals

## Return of Title IV Funds Policy

The Financial Aid Office is required by federal statute to calculate/ recalculate federal financial aid eligibility for students who:

- Completely withdraws, and/or;
- Stops attending before the end of the semester/payment period, and/ or;
- Does not complete all modules (courses which are not scheduled for the entire semester or payment period for which they registered at the time those modules began.) Does not provide written confirmation to LBCC at the time of ceasing attendance of future attendance of a module during the same payment period.
- Dismissed

Prior to completing $60 \%$ of a payment period or term, the federal Title IV financial aid programs must be recalculated in these situations. LBCC will use the date of complete withdrawal or drop to determine the amount of federal aid that is "earned" based on the amount of time the student was enrolled.

If a student leaves the institution prior to completing $60 \%$ of a payment period or term, the financial aid office recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula: Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or term. (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid. After
the $60.02 \%$ point in the payment period, a student has earned $100 \%$ of the Title IV funds they were scheduled to receive during the period, and will not have a payment obligation to return any funds.

## Withdrawals

The date of complete withdrawal or drop is used to determine the amount of federal aid that is "earned" based on the amount of time the student was enrolled. If a student does not officially withdraw from all classes but fails to earn a passing grade in at least one course, federal aid regulations require that the college assumes the student has "Unofficially Withdrawn," unless it can be documented that the student completed the enrollment period. Unofficial withdrawals require a Title IV refund calculation at the midpoint of the enrollment period. The reduction of federal aid may create a balance due to LBCC that must be repaid.

## Title IV Refund Process

Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula: Aid to be returned= $(100 \%$ of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or term.

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to them, the institution would owe the student a "Post-Withdrawal Disbursement" (PWD) which must be paid within 180 days of the student's withdrawal. The institution must return the amount of Title IV funds for which it is responsible no later than 45 days after the date of the determination of the date of the student's withdrawal.

Refunds are allocated in the following order:

- Unsubsidized Direct Stafford Loans
- Subsidized Direct Stafford Loans
- Direct PLUS Loans
- Federal Pell Grants for which a Return of funds is required
- All other Federal Grants for which a Return of funds is required


## Decrease of Units or Change of Enrollment

When a student decreases/reduces their course load, the decrease represents a change in enrollment status, not a complete withdrawal. Therefore, an R2T4 calculation is not required. However, the student's Federal grants are subject to recalculation.

## Title IV Refund Repayment Policy

1. A bill will be sent with the amount due. The student will not be eligible for further financial aid funds until the overpayment is paid in full. In addition, school records will be placed on "hold." The student will not be able to register for classes or request academic transcripts until this bill has been paid in full.
2. If the student does not pay this bill or make payment arrangements, the overpayment will be reported to the National Student Loan Data System (NSLDS). NSLDS notifies all other colleges and universities that the student now owes money. The student will be ineligible to receive further financial aid at any college. The NSLDS notification will be removed when the bill is paid in full.
3. If the student continues to ignore this bill, and a final notice is sent to the student, the account will be turned over to the Department of Education for all future collection. The Department of Education has the ability to garnish wages, withhold tax refunds, send the student account to a collection agency, and take the student to court to recover the money owed.
4. The student must pay this bill in full within 30 days.

## Financial Aid Office

## Liberal Arts Campus

Room A-1075
562-938-4485
Pacific Coast Campus
Room GG-201
562-938-4485

## Veterans Service Office (VSO) and GI Bill

The VSO provides an office of support for active military, veterans, and their dependents by offering assistance with processing VA Educational Benefits, Priority Registration, Educational Counseling, Financial Aid, and Enrollment at LBCC. Additionally, the VSO has partnered with multiple national, state, and community resources to offer additional noneducational or VA assistance to student veterans with their transition and success at LBCC.

## Veteran Services Office

Liberal Arts Campus
A-1029
562-938-4162

## VSO Outpost*

Pacific Coast Campus
GG-102
*General information service only at the PCC campus.

## G.I. Bill

Qualification for a G.I. Bill(8) is determined by the Department of Veteran Affairs. Students and prospective students may go to the VSO for assistance in completing the Application for VA Education Benefits.

After a student has applied for a G.I. Bill® they must start a file in the Veteran Service Office, meet with a VSO counselor, and enroll in appropriate courses. They also must complete a Request for Certification of Benefits at www.lbcc.edu/overview/veteran-student-services (http://www.lbcc.edu/overview/veteran-student-services/) per federal regulations, only required courses for a declared major can be certified by the institution. For additional information/clarification please contact the VSO. The G.I. Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA).

## Scholarship Office/LBCC Foundation Scholarships

The college administers more than 1,000 scholarships each year. These scholarships are funded by campus and community organizations, local businesses, and private donors. The Scholarship Office is located in A-1041 (LAC). For more information on scholarships visit www.lbcc.edu/ scholarships (https://www.lbcc.edu/scholarships/).

## Rotary Club Honors Scholarships

Each year the Long Beach Rotary Scholarship Foundation awards Rotary Honor Scholarships to students who attended a Long Beach Unified High School. Recipients must maintain a 3.0 GPA or higher and be enrolled in the LBCC Honors Program. Rotary Club Honors Scholarship applications are available in September at www.lbcc.edu/scholarships (https:// www.lbcc.edu/scholarships/).

## Basic Needs Resources

## Basic Needs Program

Long Beach City College has implemented a Basic Needs program to address hunger and housing insecurity among students. The program is supported by the Healthy Viking Initiative and will provide increased access to food, direct referrals to appropriate housing agencies, and information regarding transportation resources for LBCC students.

LBCC's goal is to make sure every LBCC students' Basic Needs are taken care of, so students can focus on their studies and achieve their academic and career goals without having to worry about how they are going to access food, or a safe place to sleep. LBCC is dedicated to helping connect students with resources on-campus and in the community. For more information, visit the Basic Needs website at https://www.lbcc.edu/basic-needs-program (https://www.lbcc.edu/ basic-needs-program/) or contact Basic Needs at 562-938-4756 or email basicneeds@lbcc.edu.

## Viking Vault Food Resources

Food resources are provided to students through the Viking Vault. The Viking Vault is the LBCC food pantry and is located at the Liberal Arts Campus (LAC) in E-131, and Pacific Coast Campus (PCC) in QQ-107. As an LBCC student you are able to visit the Viking Vault and get free groceries and snacks to help nourish a healthy body and mind. There are no limits to how many times you visit the Viking Vault.

## Housing Resources <br> Emergency Housing Programs

If you are currently unhoused, please contact our team
at basicneeds@lbcc.edu or (562) 938-5045. The Basic Needs Program has a network of housing agencies that we can refer you to based on your current situation and your needs. All emergency housing programs are for students that are currently, or at risk of being unhoused.

## Emergency Rental \& Utility Assistance

The purpose of this support is to prevent homelessness and reduce financial burden so you can have your basic needs met and focus on achieving your academic goals. LBCC Basic Needs Program can pay direct housing costs only such as rent or utilities. Expenses that are not approved include Wifi, phone bills, medical bills, and car payments.

## Transportation

LAC/PCC Campus Shuttle
Have classes on both campuses, or just need to get from one campus to the other? No problem. The Viking Voyager runs regularly between the Liberal Arts Campus (LAC) and the Pacific Coast Campus (PCC). You can take the shuttle for free for the first two weeks of the semester and then can ride for free after that with your College Services Card.

## LB Transit Tap Student Bus Pass

The LBCC Strong Beach Bus Pass Pilot Program offers all currently enrolled students the opportunity to receive a free LA Metro GoPass.

- Eligibility: The only criteria are that a student is enrolled in the current term (including for example full-time, part-time, in-person, online, credit/non-credit, and dual-enrollment students). For more information go to https://www.lbcc.edu/post/transportation (https:// www.lbcc.edu/post/transportation/)


## Strong Beach Bus Pass Pilot Program

LBCC is partnering with Long Beach Transit to provide free TAP passes for all currently enrolled LBCC students. For more information, please go to https://www.lbcc.edu/post/transportation (https://www.lbcc.edu/ post/transportation/) and be sure to review the Strong Beach Bus Pass Pilot Program FAQs for more information about how you can receive your bus pass. If you have any additional questions you can email basicneeds@lbcc.edu with your full name, student ID, and best contact information to reach you.

## Support Programs <br> Extended Opportunity Program \& Services (EOPS)

Extended Opportunity Programs and Services is a retention program that provides educational counseling and educational planning, along with a network of benefits and supportive services, to economically and educationally disadvantaged students. Through this assistance, EOPS improves students' opportunities to successfully complete their educational goals and to do so with a higher level of achievement and in a timelier fashion.

Benefits and services provided by EOPS include priority registration, academic and personal counseling, grants, school supplies, basic needs, and supplemental book assistance based on available funding. Students who wish to apply for the program must first complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov (http:// www.fafsa.ed.gov) or the California Dream Act financial aid application available at www.csac.ca.gov (http://www.csac.ca.gov).

EOPS Eligibility: Students must be California residents, have not completed more than 55 degree-applicable units, be enrolled full-time (unless enrolled in DSPS or qualify for a waiver to enroll in 9-11.5 units as a new student), be eligible for the California College Promise Grant, and meet the educationally disadvantaged criteria. Students who attended another college must submit their transcripts.

Cooperative Agencies Resources for Education (CARE) is a program within EOPS that provides additional benefits and supportive services to EOPS students who are single parents, heads of household, participating in the county CalWORKs/TANF, have at least one child, and are receiving cash aid for the child. The objective of the program is to provide linked resources that enable eligible students to complete college-level training and educational programs. Some of the services provided include educational childcare grants, meal cards, and personal development workshops.

NextUP is a program within EOPS that provides additional benefits and services to support the success, health, and well-being of current and former foster youth enrolled at LBCC. To participate, students must be
active within the system after the age of 13 , be under 26 years of age, and be enrolled in .5 units or more, with plans to work towards (9) units.

Foster \& Kinship Care Education Program is a statewide program funded by the California Community College Chancellor's Office, providing a variety of training programs for foster parents (parent education), and specialized training for relative caregivers, including D-Rate (Severely Emotionally Disturbed), F-Rate (Medically Fragile), Basic, and Inservice training. KEPS Orientation is offered to support relative care providers with their involvement with child protective services. For more information, call 562-938-3114 or visit the UU Building (PCC).

## CalWORKs

CalWORKs funds assist parents who are receiving Temporary Assistance for Needy Families (TANF) and those in transition off welfare to achieve long-term self-sufficiency through coordinated student services. CalWORKs participants can also take advantage of the college's workstudy program, which employs students in professional companies that provide them with job training.

Services available for eligible students can include career, academic, and individual advisement and counseling, book and supplies voucher assistance, employment assistance-including work-study assignments, resume writing, job search skills, and interview preparation, childcare assistance, support and services referrals, job placement referrals and assistance, on-site GAIN workers and advocacy, coordination with the Department of Social Services (DPSS), completing SIP/VOC Referral forms, progress reports, educational plans, training verifications, monthly attendance reports, and book and supply material request forms. Please note: Students must submit a class printout with all documentation turned in for completion.

Eligibility requirements include the following: parent and child must be recipients of CalWORKs/GAIN (TANF), program participants are required to sign a contract with the college and GAIN program, and students must be enrolled in Credit and/or noncredit courses at LBCC.

CalWORKs students have the responsibility of complying with a combination of 20 to 30 hours per week, or 35 hours for two parent households, of academic coursework, work activity, laboratory time, structured internships, or other activities which will lead to proper preparation for their careers, and students must meet with their CalWORKs counselors at least once per semester. For more information about CaIWORKs services, office hours, and location, call 562-938-3116 or visit www.lbcc.edu/calworks (http://www.lbcc.edu/calworks/).

## Disabled Student Programs and Services (DSPS)

The college offers support services to provide students with an equal educational experience. DSPS provides many services that empower students with disability-related limitations to participate in the college's educational programs and activities related to their coursework. These services include the following but are not limited to:

Specialized counseling services - Academic, career, and disability management counseling services with certified staff who understand the educational limitations presented by a disability.

Learning disabilities assessment - Diagnostic assessment services for the presence of a specific Learning Disability (LD) and Intellectual

Disability (ID) using the Learning Disability Eligibility and Services Model (LDESM) of the California Community Colleges.

Registration assistance - Assistance for students who have difficulty navigating the online, telephone, or in-person registration system.

Financial Aid liaison - Information and liaison assistance for students needing help accessing information or completing financial aid requirements.

Referrals to resources on and off campus - A wealth of campus and community resources are available to support students in the pursuit of their educational, vocational, and personal goals.

Assistive computer technology - Access and training in the use of assistive computer technology. Students can learn how to access print in alternate formats and gain greater independence and access to computer technology.

Sign language interpreters - Sign language interpreters, real-time captioning, and other services for students who are deaf or hard of hearing are available to eligible students.

Test-taking assistance - Alternative test-taking services may include extra time, materials in alternate formats, the use of readers/scribes, or other appropriate forms of assistance.

Both Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 require accessibility of technology and access to programs and courses. Section 508 is a federal law that requires agencies to provide individuals with disabilities equal access to electronic information and data comparable to those who do not have disabilities unless an undue burden would be imposed on the agency. LBCC is committed to making its electronic and information technologies accessible to individuals with disabilities. However, DSPS can only provide alternate media support for students who elect to participate in DSPS as an accommodation.

DSPS is committed to assisting students with disabilities and ensuring that students are able to participate in college programs and activities in the most integrated setting possible. For information or appointments, please call 562-938-4558 (LAC), 562-938-3921 (PCC), or 562-353-4217 (video phone).

## Americans with Disabilities Act of 1990

Americans with Disabilities Act of 1990 prohibits discrimination against people with disabilities. This prohibition applies to employment, and public services including public and private transportation, public accommodations, and telecommunications services.

The ADA Amendments Act (ADAAA) was enacted on September 25, 2008, and became effective on January 1, 2009. The law made a number of significant changes to the definition of "disability" under the ADA. It also directed the U.S. Equal Employment Opportunity Commission (EEOC) to amend its ADA regulations to reflect the changes made by the ADAAA.

Support services for students with disabilities are provided through the Disabled Students Programs and Services Program. Individuals needing information about services for students with disabilities should contact the office at 562-938-4558 (LAC) or 562-938-3921 (PCC). A student can register with the 504 compliance officer and does not need to register with DSPS to receive certain services and accommodations for confidentiality purposes.

Questions or complaints of unlawful discrimination should be directed to the district compliance officer at 562-938-4095.

## Section 504, The Rehabilitation Act of 1973

In compliance with Section 504 of the Rehabilitation Act of 1973, the college has developed a Disabled Students Programs and Services program. Offices are located on both campuses in rooms A-1134 (LAC) and GG-107 (PCC). Individuals needing information about programs for students with disabilities should contact this office at 562-938-4558 (voice) or 562-938-4833 (TDD).

Questions or complaints of unlawful discrimination should be directed to the District Compliance Officer, 4901 E. Carson St., Long Beach, CA 90808, 562-938-4095.

## Student Special Programs Adult Education Program

The adult education and noncredit courses and programs prepare basic skills learners, English as a Second Language learners, economically disadvantaged, and other non-traditional college students to attain the essential knowledge, skills, and abilities to successfully acquire and retain employment, transition to college, and/or effectively explore, plan, and establish career pathways leading to growth opportunities in high demand occupations. The courses are offered free (except for any applicable materials fees) and do not provide credit toward a degree.

## DESTINO Program

Developing Engaging Science Through Innovative New Opportunities
Science, Technology, Engineering, and Mathematics (STEM) fields have become increasingly central to U.S. economic competitiveness and growth. Yet, industries in science and technology have twice as many job openings as there are sufficiently prepared U.S. workers ready to step into these jobs.

The DESTINO program is designed to assist STEM students with an array of student support services and academic support to reach educational goals of earning a degree and transferring to a 4 -year university. The DESTINO program supports all students in STEM fields and all activities are free to program participants. For more information call (562) 938-3071 or email rolmos@lbcc.edu.

The DESTINO program provides students with the following:

- A dedicated STEM counselor
- STEM-focused Career Panels
- University Field Trips and a Northern California University Tour
- Financial Literacy and Scholarship workshops
- Tutoring in STEM courses
- Use of the DESTINO Science Center
- Academic Success workshops
- Participation in the Viking Summer Voyage-STEM option
- Mentoring through STEM faculty and Success Coaches


## DREAM Services

LBCC is proud to support undocumented students and those with mix-status families. DREAM Services is dedicated to serving students
through education, empowerment, and advocacy. The program's mission is to support the advancement of undocumented students within higher education and promote pathways for engaged scholarship. LBCC DREAM services are free to undocumented students. For more information, call (562) 938-4151 or email dreamservices@lbcc.edu

DREAM Services provides undocumented students with:

- Dedicated counselors
- Assistance with applying for financial aid
- Referrals to free legal consultations
- Textbook and laptop assistance
- Scholarship application support
- Mentoring and community-building activities
- Transfer support to private, UC, and CSU campuses


## First-Year Experience Programs

The First-Year Experience (FYE) program houses Viking Advantage, Long Beach College Promise, and Promise 2.0. These three college programs provide transitional and first year student support through a case management approach, as well as access to Viking Summer Voyage, Welcome Day, First Year Success Workshops, and the Career Academy. Program participants have access to a dedicated success team network of Counselors, Student Success Coaches, and the Welcome Center team. To augment the student's experience, the FYE program has tailored support programs such as the Male Success Initiative (MSI) and collaborates with Developing Engaging STEM Through Innovative New Opportunities (DESTINO). Students are admitted to these programs in the fall semester only.

For more information visit the website at:https://www.lbcc.edu/matric-first-year-experience.

## Viking Advantage

Viking Advantage is a First-Year Experience (FYE) program for any firsttime college students enrolled in 12 or more units per semester. The program aims to increase college access and remove barriers to student success while increasing degree attainment and transfer.

## The benefits of the program include:

- First year tuition (primary terms only) at LBCC
- Priority registration
- Second year programming focused on career development and mentoring


## Requirements to participate in Viking Advantage:

- Be a California resident (or AB540/Dreamer)
- Be a first-time college student
- Enroll in a minimum of 12 units at LBCC per semester
- Apply to FAFSA or CA Dream Act
- Complete the program agreement by the published deadline.
- Meet with an FYE Counselor to complete a comprehensive educational plan.


## Long Beach College Promise

The Long Beach College Promise (LBCP) extends the promise of a college education to every student in the Long Beach Unified School District to create a more vibrant community. The LBCP aims to fulfill the academic potential of all youth by offering guidance and continuous support along
every step of the student experience, from pre-K through college and onto career and life. The LBCP creates a culture of academic expectations, increases college readiness, improves graduation rates among Long Beach students, and raises the educational attainment rates of the entire Southern California region.

Fueling The LBCP is a dynamic partnership between Long Beach Unified School District, Long Beach City College, California State University, Long Beach, the City of Long Beach, and the Port of Long Beach.

The Long Beach College Promise is a First-Year Experience (FYE) program for direct high school matriculants from Long Beach Unified School District. LBCP also extends to Mayfair, St. Anthony and St. Joseph high schools.

## The benefits of the Long Beach College Promise include:

- Two years of tuition for primary terms at LBCC
- Priority Registration
- Second year programming focused on career development and award completion

In order to be eligible for the second year of funding, Long Beach College students must complete 24 units and be in good academic standing at the end of the summer of their first year at LBCC.

## Requirements to participate in the Long Beach College Promise:

- Must be a LBUSD, Mayfair, St. Anthony or St. Joseph high school graduate
- Must enroll at LBCC directly following graduation from high school
- Must be a first-time college student
- Enroll in 12 units or more at LBCC per primary semester
- Apply to FAFSA or CA Dream Act
- Complete the participation agreement by the published deadline
- Be a California resident (or AB540/Dreamer)
- Meet with an FYE Counselor to complete a comprehensive educational plan.


## Long Beach Promise 2.0

Promise 2.0 is an enhancement to the Long Beach College Promise offering an optional program for Long Beach Unified School District graduates who pledge to follow an admission pathway to California State University, Long Beach (CSULB) in one of ten pre-approved majors. For more information about the ten majors visit the website at: https:// www.lbcc.edu/post/promise-2-info.

Promise 2.0 participants receive these additional benefits:

- Specialized advising from CSULB Advisors and LBCC Counselors.
- Specialized programming at LBCC and CSULB
- A "Future Student" CSULB ID Card
- Participate in select CSULB campus events by special invitation

Requirements to participate in Promise 2.0:

- Must meet eligibility for Long Beach College Promise
- Must attend a mandatory orientation at CSULB
- Complete the Promise 2.0 student agreement by the published deadline
- Meet with a Promise 2.0 Counselor to complete a comprehensive educational plan.
- Take a prescriptive set of courses to transfer to CSULB
- Meet all eligibility requirements for transfer to CSULB


## Foster Youth (NextUp and Guardian Scholars)

Foster Youth Support Services helps to provide a smooth transition to college for current and former foster youth students at Long Beach City College. The goal of the program is to create an engaging, inclusive and equitable community in which current and former foster youth can attain their educational, career, and personal goals. Provided is a "One-StopShop" that offers personalized assistance with educational goals with academic counseling, personal support, book grants, and referrals to community resources. Two programs are offered to serve foster youth:

NextUp is a supplemental program as part of the Extended Opportunity Programs and Services (https://www.lbcc.edu/extended-opportunity-programs-and-services/) (EOPS). NextUp assists current or former foster youth whose dependency was established or continued by the court on or after the student's 16th birthday and who are younger than 26 years of age at the beginning of the academic school year.

Guardian Scholars serves any current and former foster youth whose dependency was established or continued by the court.

## Justice Scholars Program

The Justice Scholars Program (JSP) is a student support program housed within Student Equity at Long Beach City College.

The mission of the program is to create an inclusive, equitable, and just campus environment for formerly incarcerated and system impacted students. Through building community, the team is dedicated to promoting awareness and identifying the challenges students face. The program provides educational, social, and professional tools needed to reduce recidivism and increase persistence. The goal is to support students from reentry to graduation and/or transfer. JSP is part of the California Community College's Chancellor's Office Rising Scholars Network (https://risingscholarsnetwork.org/).

## MANA Program

MANA is a program dedicated to building cultural, educational, and community experiences for Asian Pacific Islander Desi students. The Mana community helps ground students to build a strong foundation within their own communities to reach academic success. The goal is to enhance students' experiences and make connections between courses, instructors, and classmates through learning communities, social events, conferences, college hours, and student support programming. For more information visit the website at https://www.lbcc.edu/mana-program (https://www.lbcc.edu/mana-program/)

MANA provides the following services:

- Academic support for Asian Pacific Island Desi students
- Tutoring
- Transfer information
- Cultural workshops
- Financial Aid/Literacy workshops
- Mentoring
- Job opportunities


## Male Success Initiative

The Male Success Initiative (MSI) is designed to address the unique needs and challenges of men of color (MOC) by connecting them to existing services, bolstering a sense of belonging and identity, structured mentoring opportunities, and direct student aid. The mission is to inspire MOC to dream while empowering them to act so that demography (race, socio-economic status, zip code) is no longer destiny.

## Requirements to Participate (all apply):

- Be a College Promise (https://www.lbcc.edu/post/long-beach-college-promise/) Student
- Be a first-time college student
- Be enrolled in 12+ units
- Applied for the FAFSA or California Dream Act (https://www.lbcc.edu/ financial-aid/)
- Completed the Participation Agreement for the First-Year Experience (https://www.lbcc.edu/matric-first-year-experience/)
- Self-identify as a male student of color
- Maintain a 2.0 GPA
- Consistently strive to be the best version of self


## Puente

The mission of the Puente program is to increase the number of educationally underrepresented students who enroll in four-year colleges and universities, earn college degrees, and return to their communities as leaders and mentors. Puente students receive intensive writing instruction, academic counseling, and mentoring from positive role models. In addition, they participate in the Transfer Motivational Conference, UC/CSU field trips, and cultural events such as Noche De Familia and attending a Latino play. Puente is open to all students. For more information, email counselor Vidal Vargas at vvargas@lbcc.edu or call 562-938-3016.

## Senior Studies Program

The Senior Studies Program provides fee-based programs for adults. Classes are offered in world affairs, music, brain enhancement, and other areas, all designed for the active adult. Mini tours to museums and galleries are also sponsored by the center. The Senior Center is located at the Pacific Coast Campus in room QQ-122. For further information, call 562-938-3047.

## Trio Program - GO Project

LBCC Growth and Opportunities (GO) Project is a federally funded Student Support Service program designed to increase the number of students with disabilities who transfer to four-year colleges and universities. The GO Project is a comprehensive program of academic support and personal development services for low-income, first-generation college, and disabled students to achieve retention and graduation rates that exceed that of the general student body. A major advantage of GO Project participation is services and activities that are tailored to meet the specific individual needs of each student.

GO Project offers specialized tutoring, cultural enrichment and field trips, career and life counseling, financial education, and academic and transfer counseling services. GO Project is located in GG-217, 562-938-3233
(PCC). For more information, visit www.lbcc.edu/trio-go-project (http:// www.lbcc.edu/trio-go-project/).

## Trio Program - Upward Bound

The Upward Bound Program provides comprehensive academic, social, and emotional support services to approximately 70 participants in their preparation for college entrance. The program serves three target high schools in the Long Beach Unified School District with the overall goal of assisting participants to successfully enroll in and complete a post-secondary education. The program accomplishes this objective by enhancing participants' academic skills, personal motivation, and confidence needed to succeed in college. Upward Bound recruits students who are from low-income families, are potential first-generation college graduates and have a high academic need for services. Foster youth and students who have complex barriers impeding their academic success are a high priority in the recruitment process. Programming is structured to enhance participants' academic skills, personal motivation, effective communication and leadership skills, creative and critical thinking skills, a positive attitude toward learning, and tolerance toward others. Participants attend the program on a year-round basis and receive high school elective credit for completing an intensive six-week summer program. As of March 2020, all services have been replicated and students have available services six days a week.

The program offers two specific components:

1. Academic Year Programming (Sept. - June)

Saturday Academy includes but is not limited to: assistance in choosing a college; tutoring; personal and financial counseling; career counseling; assistance in applying to college; special instruction in reading, writing, study skills, and mathematics; assistance in applying for financial aid; SAT preparation; leadership development workshops; college tours; and exposure to enrichment engagement. Annual academic activities/events also include afterschool tutoring, academic advisement, socio-emotional and social justice workshops, and STEM opportunities.
2. Six-Week Summer Programming (June - Aug.) Students participate in an authentic "college-going experience" by residing on a local college campus and taking college-level courses. The intensity of the summer program is designed to enhance each student's abilities inside and outside of the classroom and to prepare students for how to successfully navigate the rigors of college. Students have the opportunity to take part in a variety of academic classes such as English Composition \& Literature \& Composition, Foreign Language, Math, and Laboratory Science as well as innovative STEM programming. Following the completion of the summer component, an annual excursion to visit colleges in Northern California punctuates the six weeks.

## Umoja Scholars Program

Umoja, (a Kiswahili word meaning unity) is a Learning Community and critical resource dedicated to enhancing the cultural and educational experiences of African American and other students. Umoja believes that when the voices and histories of students are deliberately and intentionally recognized, the opportunity for self-efficacy emerges and a foundation is formed for academic success. Umoja actively serves and promotes student success for all students through a curriculum and pedagogy responsive to the legacy of the African and African American Diasporas.

Umoja Scholars Program students may enroll in general education courses that are culturally relevant through the Learning Community. They also receive academic, personal, transfer counseling, career exploration guidance, and participate in professional development conferences and cultural events. Umoja Scholars may also attend tours and field trips to UC/CSU and Historically Black Colleges and Universities based on space and availability. For more information, call 562-938-5052 or email the counselor at umoja@lbcc.edu.

## Campus Child Development Center and Learning Lab

Childcare and preschool services make attending classes more convenient for many students. Quality care is available for children between 2 and 5 years of age, before kindergarten entrance. Both LBCC campuses have childcare facilities. Financial assistance may be available for income and need-qualifying families. The facility used is not dependent on the location of classes. The centers are open Monday-Friday from 7:00 a.m. to 5:30 p.m. and partial and full-day options are available. For information about fees, space availability, and parent responsibilities, call 562-938-3079 or 562-938-3082 (PCC), 562-938-4253 (LAC), or visit www.lbcc.edu/child-development-center (http://www.lbcc.edu/child-development-center/).

## Parking Regulations <br> Evening Safety Escorts

Safety escorts are available to students at both LAC and PCC. Students should call the Office of Police \& Campus Safety through the nonemergency police dispatch number to arrange for an escort to meet them on campus. Call 562-938-4910 or 562-435-6711.

## Parking and Traffic Regulations

A current semester student parking permit or a daily parking permit is required for all LBCC lots. Student permits and daily permits do not authorize parking in staff areas, metered parking, or other reserved areas except where posted otherwise. LAC offers additional parking in the Veterans Stadium Parking Lot. Parking permits can be purchased each semester during registration at the time the College Services Card is purchased or may be obtained later at the Cashier's Office.

The following rules are enforced to ensure the rights of permit holders, as well as to provide for the safety of people and property:

- Parking permits are required at all times in LAC and PCC parking lots. For students who do not wish to purchase a semester parking permit, daily parking permits are available at both campuses. Parking permit machines at LAC are located in lots E, F, G, M, O, P, and Veterans Stadium. Two machines are located on each level of the parking structure. The PCC machines are located in Lots 1, 2, and 10 with two machines located on each level of the parking structure.
- Metered parking is available in Lots F, G, and H and on Lew Davis Street at LAC, and in Lot 2 at PCC. Thirty-minute visitor parking zones are also located along the north curb of Carson Street for LAC.
- Semester parking permits must be affixed to the lower-left corner of the inside windshield so it is visible from the front of the vehicle.
- Student permits and Daily permits do not authorize parking in staff spaces, metered stalls/parking, or other reserved parking spaces except where posted otherwise.
- Parking is available on a first-come, first-served basis.
- In LAC Lots G and H , after 4:00 p.m., students are allowed to park on a staff stall using a student permit. Any other staff stalls will require a staff permit at all times. At PCC, vehicles are required to display a staff permit when parking on a staff stall at all times.
- All vehicles must be parked between the lines of a designated parking space only. Backing into parking stalls is not permitted on diagonal stalls. Motorcycles and mopeds are to be parked only in areas specifically posted for their use (LAC campus lot C, F, H, and parking structure; PCC campus lot 2 and parking structure). Operators must purchase a current semester parking permit and keep it in their possession. Motorcycles and mopeds may not be driven on campus or parked on sidewalks. Violators will be cited.
- A permit does not guarantee a parking space in the parking lot of choice. Students are advised to allow ample time to find parking. At LAC, additional parking is available in the Veterans Stadium parking lot.
- Citations are issued by the Long Beach Police Department to automobiles, motorcycles, and mopeds that do not display a properly placed, current parking permit. Students parked in staff areas or other specially designated areas will also be cited.
- No adjustments will be made for parking citations at the Long Beach Police Department College Unit. Individuals wishing to contest citations must do so by following the instructions on the citation and by calling 562-570-6822 or www.citationprocessingcenter.com (http://www.citationprocessingcenter.com).
- Students, staff, or faculty with state-issued disabled placards are to park in marked handicapped spaces. If a handicapped space is not available, parking is allowed in any other student or staff space. Disabled permits are not valid in carpool spaces or other reserved spaces.
- Regulations pertaining to parking can vary from lot to lot. Each driver is responsible for reading the parking regulations that are posted at the entrance of each parking lot.
- Parking is free in the Veterans Stadium Lot at LAC and Lot 10 at PCC the week prior to and the first week of the semester only. Permits are required during intersessions at all times.


## Electric Vehicle Charging

- EVCS (Electric Vehicle Charging Station) stalls are available at LAC Campus Parking Structure (First Floor), Lot M Vets Stadium, Lot P, and at PCC Campus Parking Structure (first floor) and Lot 10.
- Vehicles parked on EVCS (Electric Vehicle Charging Station) stalls MUST display LBCC Parking Permit (i.e. Staff Permit, Student Permit, or Day Permit). Vehicles MUST also be charging while parked on EVCS stalls. Failure to do one or both of the above requirements will result in the issuance of a parking citation.
- Vehicles parked on CAV (Clean Air Vehicle) stalls MUST display LBCC Parking Permit (i.e. Staff Permit, Student Permit, or Day Permit). Vehicles MUST also have CAV decal displayed that is issued from DMV visible on the vehicle. Failure to do one or both of the above requirements will result in the issuance of a parking citation.
- All LBCC parking rules apply such as no overnight parking within the hours of 11:30 pm to 5:00 am.
- At the discretion of the Parking Services Department, EVCS or CAV stalls may turn into regular staff or student stalls if not being used. Covers will be placed on the chargers if they are not in service. Those stalls can also be reserved for special event parking. Signage will be posted if the stalls are reserved. Removal of any signage will result in
the issuance of a citation. ChargePoint users will be notified of these instances using the ChargePoint App.

For comments and/or concerns regarding the EVCS or CAV stalls, please contact the Parking Services Department at 562-938-4534 or 562-938-5085.

## Federal and State Compliance Civil Rights Compliance Statement

The Long Beach Community College District does not discriminate in its admissions, educational programs, activities, or employment policies on any basis, including but not limited to race, religious creed, color, national origin, ancestry, gender, sexual orientation, age, disability, marital status, medical condition, mental or physical disability including HIV and AIDS, and other protected classes, status as a Vietnam-era veteran, or obligations to the National Guard or reserve forces of the United States.

The District is subject to Title VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments Act of 1972, the Rehabilitation Act of 1973 sections 503 and 504, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990.

The lack of English language skills will not be a barrier to admission and participation in the District's programs. Questions or complaints of unlawful discrimination should be directed to the District compliance officer at 562-938-4095.

## Title IX. Prohibiting Sex Discrimination in Education

The Long Beach Community College District is committed to supporting all regulations under Title IX. "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance." Questions or discrimination complaints should be directed to the Title IX Coordinator at 562-938-4095 or email titleix@lbcc.edu.

## Mandatory Orientation: Sexual Violence Prevention

The Long Beach Community College District provides sexual violence prevention information to students during on-campus orientations and posts this information on the campus website at www.lbcc.edu/post/ sexual-assault (http://www.lbcc.edu/post/sexual-assault/). This site contains valuable information about ways to avoid rape and sexual assault, what to do in a risky situation, and what to do in case of rape or sexual assault. Victims of sexual assault on campus should immediately call the Long Beach Police Department College Unit; call 911 from a cell phone for an officer to respond. Victims may also choose to go directly to a hospital emergency room for medical care. LBCC health services are available on both campuses during business hours in building A-1010, 562-938-4210 (LAC), or room GG-117, 562-938-3992 (PCC).

## Sexual Harassment Policy Statement

The Long Beach Community College District provides an educational, employment, and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct or communications constituting sexual harassment, as defined and otherwise prohibited by state and federal statutes. This policy
includes a prohibition against, but not limited to, the following: sexual harassment, gender harassment, and harassment based on pregnancy, childbirth, or related medical conditions. Sexual harassment is a violation of an individual's civil rights and will not be tolerated.

Questions and sexual harassment complaints should be directed to the district compliance officer at 562-938-4095.

## LEARNING SUPPORT SERVICES

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## Library

## Liberal Arts Campus

L Building 1st Floor
562-938-4232/4231
Pacific Coast Campus
LL Building, 1st Floor
562-938-3028/3029
Libraries at each of the two main campuses serve as vital information centers and provide access to resources from all over the world. The library collections include printed books, electronic books, periodicals, DVDs, CDs, and other video and audio recordings carefully selected to support the curriculum and information needs of the community of learners.

Students can:

- Borrow DVDs, CDs, textbooks for their classes or books for research or leisure reading
- Study in the group study rooms or in the quiet study areas
- Read magazines, journals, and newspapers
- Borrow books from other libraries worldwide via Interlibrary Loan (ILL)

The library website provides access to reliable websites for research and other valuable resources such as the electronic article databases for articles in magazines, journals, newspapers and trade publications; and the online catalog.

During all hours the libraries are open, librarians are available to assist students with their research needs in person and via e-mail and instant messaging. To help students develop information competency, the library faculty at both campuses offer instruction in the form of courses, orientations, and workshops on a variety of topics. For more information, visit www.lbcc.edu/library (http://www.lbcc.edu/library/).

## Success Centers and Tutoring <br> Multidisciplinary Success Centers

## Liberal Arts Campus

L-212
562-938-4699

## Pacific Coast Campus

EE-206

For more information, visit www.lbcc.edu/mdsc (https://www.lbcc.edu/ mdsc/)

The Multidisciplinary Success Centers provide:

- Supplemental Learning Assistance
- Workshops on a variety of topics
- Tutoring
- Calculator Checkout
- Test preparation
- TEAS preparation
- Foundational Skills Development
- GED/HiSET Preparation
- Financial Literacy Courses


## Tutoring Centers

Liberal Arts Campus
L-203
562-938-4474
Pacific Coast Campus
EE-206
562-938-3991
Free tutoring is available in a variety of subjects, including accounting, biology, chemistry, physics, foreign languages, and math. Students may work individually or in small groups. For more information, visit www.lbcc.edu/tutoring (http://www.lbcc.edu/tutoring/).

## Math Success Center

Liberal Arts Campus
V-163
562-938-4228
The Math Success Center provides supplemental learning assistance, tutoring, course material, and computer access, all for free, in an open, inviting learning environment. Many math courses have additional class specific support or resources available via the Match Success Center at LAC or online via the MSC Canvas page This includes tutorials on math and statistics topics, math study skills workshops, and homework help sessions facilitated by math faculty.

Additionally, the Center provides free peer tutoring to students registered in any math course offered at LBCC. Students can arrange to meet others enrolled in the same course for informal group study.

The Center houses state-of-the-art computers to provide students with a broad range of educational tools. With PC workstations, students can access online content for their courses and a variety of software to cover general college computing needs as well as math, stats, \& engineering specific software such as Mathematica, StatDisk, AutoCAD/Solidworks, \& CATIA.

Students may use the Center facilities on a walk-in basis throughout the semester. They must register for MATH 650 Math Learning Center, a free noncredit course, and be concurrently enrolled in any math course.

## Writing and Reading Success Center

Liberal Arts Campus

M-115
562-938-4520
The Writing and Reading Success Center (WRSC) offers free tutoring for any subject requiring writing or reading assistance and Supplemental Learning Assistance (SLA) activities for English and reading classes. Tutoring is available in 30 -minute appointments and 15 -minute walk-ins. SLA activities are available in a Directed Learning Activity (DLA) format, in which the student first works alone on the activity and then an instructor or tutor reviews the students' work. Instructor-led workshops on a variety of useful writing-related topics occur daily.

The WRSC also features a computer lab, group study rooms, pay-for-print services, and a wide range of written, online, and audiovisual materials for student use. For more information, visit www.lbcc.edu/wrsc (https:// www.lbcc.edu/wrsc/).

## Academic Computing Centers

Liberal Arts Campus
L-251
562-938-4854
Pacific Coast Campus
LL-122
562-938-3049
Macintosh and PC computers, the Microsoft Suite, specialized software, black/white and color printers, scanners, and Internet access are available to students in large open-access computer labs at both campuses.

## Supplemental Instruction

Supplemental Instruction (SI) offers organized group discussion sessions designed to help students master course concepts and improve relevant study skills in historically difficult courses. Regularly scheduled SI sessions are conducted by trained SI Leaders in selected course sections. For more information, call 562-938-4699.

## Presentation Practice Room

A presentation practice room is available at the LAC campus in room L-212 by appointment for students wanting to practice, view, and record their classroom presentations. For more information, call 562-938-4699.

## Skills Labs

## Nursing and Allied Health Learning Center and Skills Lab

Liberal Arts Campus
C-304 and C-211
562-938-4299
The Nursing and Allied Health Learning Center and Skills Lab provide supplementary material and skills practice for students enrolled in a nursing or allied health program. Various self-paced print media and multimedia programs and skills equipment resources are available.

The Learning Center is located in Room C-304 and is open during posted hours. The Skills Lab is located in Room C-209, 210, and 211 and is open during posted hours.

A simulated hospital room in room C -204 is available to expose students to technology that simulates healthcare scenarios in a controlled setting. Many nursing courses utilize simulation to facilitate learning.

## Computer and Office Studies (COS) Study Centers

Liberal Arts Campus
M-109
Pacific Coast Campus
AA-206
The COS Study Centers offer students attending a COS course additional support by giving access to different applications used by the instructors. Each computer has the ability to access software such as MyITLab, VMware, Dreamweaver, Microsoft Office, and other software applications. For information, please visit https://www.lbcc.edu/post/cos-study-center (https://www.lbcc.edu/post/cos-study-center/).

## Language Labs

## World Language Lab

Liberal Arts Campus<br>M-327

The World Language Lab offers linguistic support for students enrolled in world language classes. Lab assistants are available to assist students with online resources that come with the textbook program, as well as to assist with accessing resources on world language websites.

The Lab has open lab hours during which time students can work on their world language online assignments or access additional online resources. Email worldlanglab@lbcc.edu or visit https://www.lbcc.edu/ world-languages (https://www.lbcc.edu/world-languages/) for more information.

## English as a Second Language Learning Center

## Pacific Coast Campus <br> LL-216 <br> 562-938-3255

ESL Tutoring and Support: The English as a Second Language Learning Center is available to all students in need of additional support with the English language. The Center provides students with tutoring assistance from ESL professors and instructors, assistance with coursework, homework, technical help with essays, research papers, and class projects. The Center also presents free workshops on a wide range of English language skills.

The Center is dedicated to helping all students overcome challenges with English grammar, speaking, listening, reading, and writing. To use the ESL Learning Center, students must enroll in ESLLC 699, a free noncredit class called Basic Skills for ESL Students. Students may enroll through the LBCC Portal, or in person at the ESL Learning Center or the ESL office next door in room LL-211.

## Student Technology Help Desk (STHD)

The Student Technology Help Desk (STHD) supports all students in accessing and successfully using LBCC technology. The STHD is staffed with knowledgeable and friendly student team members to provide peer guidance to all students. The STHD is available to support students via phone, email, chat, and in person.

Phone: 562-938-4250
Email: sthd@lbcc.edu
Student Resources website: www.lbcc.edu/sthd (http://www.lbcc.edu/ sthd/)
Student Technology Microsite: https://www.lbcc.edu/sthd-technology-support-guides-videos (https://www.lbcc.edu/sthd-technology-support-guides-videos/)

## Liberal Arts Campus

L Building - 2nd Floor Landing
Pacific Coast Campus
EE-102 (Student Union)

## ACADEMIC POLICIES AND SUPPORT

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## Academic Policies

## In This Section:

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## Academic Policies and Procedures LBCCD Policies and Procedures

Board policies are the voice of the Long Beach City College Board of Trustees and define the general goals and acceptable practices for the operation of the District. It implements federal and state laws and regulations. The Board of Trustees, through policy, delegates authority to and through the Superintendent-President to administer the District. The Superintendent-President and District employees are responsible to reasonably interpret Board policy as well as other relevant laws and regulations that govern the District.

Board procedures adhere to current laws and regulations. They address how the general goals of the District are achieved and define the operations of the District. They can include details of policy implementation, responsibility, accountability, and standards of practice. LBCCD policies and procedures are located at https://www.lbcc.edu/pod/ lbccd-board-policies-procedures (https://www.lbcc.edu/pod/lbccd-board-policies-procedures/).

## Academic Affairs

Board Policies and Procedures pertaining to Academic Affairs are found in the 4000 band.

## Student Services

Board Policies and Procedures pertaining to Student Services are found in the 5000 band.

## Faculty Office Hours and Syllabi Faculty Office Hours

All instructional faculty who are teaching full-time hold five regularly scheduled office hours per week. Students may ask instructors for their hours and office locations.

## Course Syllabus

All faculty members are required to publish and keep on file in their division offices a course information sheet, or syllabus, for each course each semester and to distribute them at the first class meeting or no later than the end of the second week of class. The syllabus must align to the content of the course as indicated in the official course outline and must contain grading standards for the class, a description of the means by which the course is to be taught such as lecture, laboratory, and outside assignments, attendance requirements, and office location and office hours. Other recommended items to include in syllabi are examination dates, text assignments, an outline of topics to be covered in the course.

The institution identifies and regularly assesses learning outcomes for courses, programs, certificates and degrees using established institutional procedures. The institution has officially approved current course outlines that include student learning outcomes. In every class section students receive a course syllabus that includes learning outcomes from the institution's officially approved course outline.

## Course Numbering System Curriculum Offerings

The courses listed in this catalog may not be offered every term or every year. Check the Schedule of Classes for current term offerings. The college reserves the right to determine which of the courses listed in the catalog are to be offered in each semester. Changes in curriculum or course content may occur after the printing of this catalog.

Course numbers relate to the design of the class and applicability to degree and transfer programs.

| Number | Description |
| :--- | :--- |
| 1-599 | Applicable to associate degree. |
| 100-199 | Transferable for at least elective credit to any college having <br> similar courses in its lower-division curriculum. <br> number of requirements for the A.A./A.S. Degrees. |
| 200-299 | Occupational courses intended to prepare students for <br> immediate job entry. |
| 300-399 | Short term or short unit courses which parallel other 1-400 <br> level courses. |
| $400-499$ | Continuing education courses in occupational fields. |
| $500-599$ | Vocational courses for apprentices. |
| $600-699$ | Self-enrichment or basic skills courses which do not carry <br> credit and for which no grade is awarded. |
| $800-899$ | Courses in basic skills which have credit value that is not <br> applicable to transfer or an associate degree. |

Students should see a counselor if they have questions about course credit applicability.

## Student Scholarship

## Outstanding Student Scholarship

LBCC acknowledges outstanding student scholarship in three ways: on the Dean's Honors List, in graduation ceremonies, and through a scholarship honor society. Outstanding Scholarship is classified in the following ways:

- Scholarship with Honors: 3.500-3.749 GPA
- Scholarship with Distinction: 3.750-3.999 GPA
- Scholarship with Great Distinction: 4.000 GPA


## Dean's Honors List

To be eligible for the Dean's Honors List, a student must meet the following requirements: Attempt 12 or more units ${ }^{1}$ in the specific semester with a 75 percent or higher overall completion ratio and maintain the necessary semester GPA to qualify for outstanding scholarship described above.
${ }^{1}$ Units attempted are classes with grades of A, B, C, D, or F. A class taken for a grade of P or NP does not count in computing the number of units attempted.

## Alpha Gamma Sigma Scholarship Society

LBCC has two chapters of Alpha Gamma Sigma, the California community college honor scholarship society. Students eligible for the Dean's Honors List are encouraged to apply for membership. Students with a 3.1 overall cumulative GPA in 12 or more units completed are also eligible for membership. The Kappa Chapter is located at the Liberal Arts Campus and the Delta Chi Chapter is located at the Pacific Coast Campus. Information and applications for both chapters are available in the Student Affairs Office, E-206 (LAC), 562-938-4552.

## Entrance to LBCC with Scholarship Honors

High school graduates are accorded "honors at entrance" as a form of recognition for outstanding scholarship. To be eligible, the graduate must have earned a 3.5 GPA or better in high school and must have matriculated to LBCC.

## Graduation with Scholarship Honors

Students graduating with outstanding scholarship are recognized during the graduation ceremony and in the commencement program. To be eligible for honors at graduation, a student must have a cumulative overall GPA based on all college work applied to the degree, no matter where completed, that qualifies for "outstanding scholarship" as described above.

## Honors Program

The Honors Program is an academic program that serves motivated, high-achieving students who plan to transfer to competitive colleges and universities. Honors students enroll in Honors courses, which satisfy general education requirements in more than a dozen disciplines. Students who complete the Honors Program have proven records of success in their applications to competitive baccalaureate programs and many go on to professional and graduate schools.

## Admission to the Honors Program

To apply for admission to the Honors Program, a student must complete an online application and obtain two recommendations. To be eligible for the Honors Program, students must have a GPA of at least 3.25. For detailed information about the LBCC Honors Program and the application process, call the Honors Program office at 562-938-4354, visit room L-162 in the LAC Library, or visit www.lbcc.edu/honors (http://www.lbcc.edu/ honors/).

## Honors Courses

Honors courses generally have fewer students and offer more intensive study than is normally possible in regular sections of the same courses. All Honors courses satisfy general education degree and transfer requirements. Please see the schedule of classes for current offerings.

## Honors Certification

To earn Honors Certification, a student must complete each of the following requirements by the spring before transfer.

- Complete at least five Honors courses
- Maintain a cumulative GPA of at least 3.25 in transfer-level courses
- Maintain a GPA of at least 3.25 in all Honors courses taken
- Obtain Honors counselor certification of completion of lower division requirements for transfer


## Student Attendance and Auditing Student Attendance

Attendance is the responsibility of the student. Students who do not attend the first class session may be dropped from the class at the discretion of the instructor. In the event of excessive absences, the instructor may drop a student from a course or may lower a student's grade. An instructor who drops a student for non-attendance shall do so in accordance with Administrative Procedure 4230. Such students may be reinstated only at the discretion of the instructor for extenuating circumstances. Extenuating circumstances shall be defined as reasons for absence beyond the control of the student. Typical examples of such circumstances would be extended illness, hospitalization, court appearances, or death in the immediate family. Official documentation may be required by the instructor for requests to be considered.

## Auditing of Classes

An "auditor" shall mean a person who attends a course but is not regularly enrolled and does not receive credit or a grade for the course. To be eligible to audit, a person must be currently enrolled in at least one other course. Students may enroll as an auditor by permission of the instructor only. Participation in an audited class is subject to the discretion of the instructor. Students may audit a specific course only once and shall be limited to auditing two courses per term. Audited units shall be included in determining student unit load maximums. However, audited units shall be excluded in determining student status of credit unit load for financial aid, scholarships, and athletic eligibility. All official restrictions to enrollment shall apply to auditors, including placement and prerequisite requirements. Priority in class enrollment shall be given to students taking the course for credit.

Auditors may enroll only after the conclusion of the open enrollment period and before the end of the fourth week of class for a 16 -week course or an equal percentage of the course length for shorter term courses. The fee for auditing a class shall be in accordance with the

California State Education Code and any materials fees that are ordinarily required for the course. Students enrolled in classes to receive credit for ten or more units shall not be charged a fee to audit three or fewer units per semester. Fees are to be paid before auditing the course, and fees are non-refundable.

Auditors shall not be permitted to change their enrollment status in order to receive credit for a course. Regularly enrolled students may not change to audit status. Auditors shall not be permitted to earn credit by examination for an audited course.

## Course Requirements

Course Prerequisites, Corequisites, and Recommended Preparation

Prerequisites, corequisites, and recommended preparation advisories are listed with some courses in this catalog and the schedule of classes.

A prerequisite is a course or assessment that must be completed before enrolling in a specific course. Satisfactory completion of an assessment requires successful completion of the assessment process. Satisfactory completion of a prerequisite course requires a grade of P or a " C " or better.

If a student has completed a prerequisite at another college or in high school, the student must bring a copy of their official transcript to the Admissions and Records Office and ask for an equivalency evaluation before registering. The student may challenge the prerequisite if the student believes he or she has the knowledge and the ability to succeed in the course, particularly if the student is drawing upon his or her work experience and wishes to take a vocational course. Information regarding prerequisite challenges can be found at www.lbcc.edu/admissions (http://www.lbcc.edu/admissions/).

A corequisite is a course in which the student must be enrolled at the same time as a companion course. Corequisites are often used in science classes that include a lab. In some cases, a student may be allowed to complete the corequisite course in a prior semester.

A recommended preparation statement is a set of skills or a course that will significantly increase a student's probability of success in a course but is not necessarily required for success.

## Challenging Course Requisites and Limitations

Challenging course requisites or limitations requires written documentation that explains the alternative course work, background, or abilities that adequately prepare the student for the course. Students may obtain a Prerequisite Challenge Form from the Admissions and Records Office. Reasons for challenging requisites or limitations must include one or more of the following:

1. A requisite course is not reasonably available over a period of several semesters
2. The student believes the requisite or limitation was established in violation of a regulation or district-approved process for establishing requisites and limitations
3. The student believes the requisite or limitation is discriminatory or is being applied in a discriminatory manner, or
4. The student believes he or she has the documented knowledge or ability to succeed in the course.

Students may file the Prerequisite Challenge Form with the school office or department head responsible for the course he or she wants to enter. If space is available in the class at the time the student files the challenge, the student may register for the challenged course and the District will resolve the challenge in a timely manner. If the challenge is denied, the student will be dropped from the challenged class.

If no space is available in the challenged class at the time that the Prerequisite Challenge Form is filed, the District will resolve the challenge prior to the beginning of registration for the next term. The student may register in the challenged class during the normal registration period if the challenge is approved.

## Grading Procedures Grading System

Final grades are issued after the end of the term in which the student was enrolled. Grades are accessible through the online self-service system. The significance of grades is as follows: $A$, excellent; $B$, good; C, satisfactory; D, passing but less than satisfactory; F, failing; W, withdrawal; MW, military withdrawal; EW, excused withdrawal; P, pass (at least satisfactory-units awarded not counted in the grade point average - GPA); NP, no pass (less than satisfactory-units not counted in GPA). RD, report delayed, means a grade has not been submitted by the instructor. Courses numbered in the 600-band do not award a grade.

## Make-Up Grades for Incomplete Work

Permission for making up incomplete work may be granted when unforeseeable emergencies and justifiable reasons cause students to be unable to complete the academic work by the end of the course. Students are responsible for initiating a request for an incomplete, but the I grade is assigned at the instructor's discretion. An instructor may give a grade of I and indicate the grade to be assigned in the event that the student does not complete the required work within the timeline given on the incomplete grade contract. The grade must be A, B, C, D, or F except that $P$ and NP grades may be assigned where the course provides for grading on this basis and the student has elected to be graded on the P/ NP basis by the appropriate deadline. This grade shall be based on the total requirements for the course and a grade of W may not be assigned. Once an incomplete is assigned by an instructor, a student is not eligible to enroll in the same class until the incomplete is resolved. Petitions to change an I grade or to exceed the one-year make-up period must first be approved by the instructor and then submitted to the Grade Review Committee for final disposition. See LBCC's Administrative Policy and Procedure 4230 regarding all requirements for incompletes located at https://www.lbcc.edu/pod/lbccd-board-policies-procedures (https:// www.lbcc.edu/pod/lbccd-board-policies-procedures/).

## Withdrawal

A grade of W shall be assigned for withdrawal from a class or classes in accordance with the schedule below for both a student-initiated withdrawal and an instructor-initiated drop. One exception is for military withdrawal or excused withdrawal, in which an MW or EW is assigned.

1. Students withdrawing or being dropped after the final deadline for a W must be assigned a grade of $A, B, C, D, F, M W, E W, P$, or NP. The grade assigned shall be based on the total semester requirements for the course.
2. Full semester-length classes: The official transcript will not reflect drops made before the census date. Withdrawals on or after the census date will be recorded as a withdrawal. After 75 percent of a class has taken place, students must be issued a grade.
3. Students may petition for a W grade after the final deadline for a withdrawal only for extenuating circumstances beyond the control of the student, such as a verified accident or illness. Students may elect to request an EW grade in these circumstances, please refer to the Excused Withdrawal section for more information.

## Military Withdrawal

A grade of MW may be assigned to students who are members of an active or reserve military service and who receive orders compelling a withdrawal from classes. Upon verification of such orders, the grade of MW may be assigned at any time from the beginning of the period that a W may normally be assigned through the end of the course. The MW grade shall in no way adversely affect a student's academic record. The MW grade shall not be counted in the completion ratio or GPA calculations. The grade of MW may be applied as appropriate retroactively to January 1990.

## Excused Withdrawal

The purpose of the EW non-evaluative symbol is to permit a student to withdraw from a course due to extenuating circumstances at any time, upon petition of the student or their representative. A student may request to use an EW for one or all courses in a term depending on the reason for the request. EW is acceptable when a student withdraws from a course(s) due to reasons beyond their control, which include but are not limited to, the following:

- Accidents
- Illnesses
- Unlawful discrimination or retaliation
- Emergency or extraordinary condition as defined in Title 5, section 58146
- Or, any other circumstances beyond the control of the student.

Documentation by the student is not required.

## Grade Points

A system of grade points is used to determine a student's standing for graduation or transfer. Grade points are assigned to the respective grades as follows: for each unit of credit, the grade of $A$ is assigned 4 points; $B, 3$ points; $C, 2$ points; D, 1 point; F, 0 points. $P$ (pass) and NP (no pass) units are not counted in a student's GPA.

## Grade Point Average Calculation

Grade Point Average (GPA) is the numeric measure of a student's average performance in all completed letter-graded courses. LBCC transcripts show two different grade point averages:

- Term GPA is the point average of your grades over one semester
- Cumulative GPA is the point average of your grades over all the academic courses you have taken at LBCC, University or Community College in which units are counted toward degrees or utilized to satisfy major and/or elective requirements.

Other schools and agencies may calculate GPAs differently from LBCC when evaluating records for admission to graduate and professional
school programs. Students should contact them directly regarding their policies.

## Step One: Determine Criteria and Courses to be Used in Factoring the GPA

Determine what type of GPA is desired, e.g., major, overall, or term. LBCC reviews all coursework to identify which courses should be used to factor in the GPA.

## Include courses that are:

- Letter-graded taken at LBCC, and
- Letter-graded taken at any regionally accredited university or community college in which units are counted toward the degree or utilized to satisfy major and/or elective requirements.


## Exclude courses that are:

- Graded P, NP, W, MW, RD, or I.
- Exclude repeat units
- Illegal repeat units.


## Step Two: Calculate Grade Points for Each Course Being Used in the GPA

The official GPA is calculated by dividing the total number of grade points by the total number of attempted units. These figures can be found on the official transcript. Attempted units are found in the attempted column; Grade Points are found in the points column.

## Example:

- A student has 116.40 Grade Points and 40.00 Attempted Units.
- 116.40 Grade Points / 40.00 Attempted Units = 2.91 GPA.

The GPA is calculated by converting each letter grade into Grade Points and then multiplying each grade by the course unit value.

Here is an example:

| Course | Course Unit <br> Value | Letter Grade | Grade Points | Course Unit <br> Value $\mathbf{x}$ Grade <br> Points |
| :--- | :--- | :--- | :--- | :--- |
| C1 | 3 | A | 4 | $3 \times 4=12$ |
| C2 | 3 | D | 1 | $3 \times 1=3$ |
| C3 | 4 | C | 2 | $4 \times 2=8$ |
| C4 | 2 | A | 4 | $2 \times 4=8$ |
| C5 | 3 | P | 0 | $3 \times 0=0$ |
| Total | 12 |  |  | 31 |

GPA is $=($ GPA*Credit $) /$ Total Credits. In this example, your GPA would be $31 / 12$ or 2.58 GPA.

## Change of Grades

All grades are final in the absence of mistake, fraud, bad faith, or incompetence. A student who believes a final grade to be incorrect may file a Request for Change of Grade form, which may be obtained on the Admissions and Records website at www.lbcc.edu/admissionsrecords (http://www.lbcc.edu/admissions-records/). All requests for grade changes should be made by the student, in writing, within two years after the end of the semester in which the grade was earned. In the absence of the instructor, the request shall be referred to the Grade Review Committee.

## Open Entry/Open Exit Credit Courses

For students completing 0-29 percent of the work or time required in an open entry/open exit course, a grade will not be recorded. Students completing 30-74 percent of the work or time required will be assigned a W grade. The W will be included in the completion ratio calculations. Students completing 75 percent or more of the work or time required will be assigned the grade earned ( $A, B, C, D, F, P$, or NP). The exception to this policy is the grade of MW.

## Repetition of Courses

State regulations restrict the number of times a student may enroll in a course within a community college district. Most courses are designated as non-repeatable, which means that a student may only repeat the course under the following circumstances:

To alleviate substandard work: When a mark of D, F, NP, or W has been previously recorded in a course, a student may enroll to repeat the course. The student is limited to a maximum of three attempts in any one course to earn a passing grade. The grade from the most recent time the course was repeated will be used for determining the GPA regardless of whether the last grade is higher or lower than the grade earned on previous attempts. The grades for all earlier and most recent attempts shall be recorded on the student's permanent record, ensuring a true and complete academic history.

Significant Lapse of Time: When a mark of A, B, C, or P has been previously recorded in a course, a student may only repeat the course if 36 months have passed since the grade was awarded and the student is required to have taken the course within a recent amount of time as required by another course or program at the college or at another college or university to which the student seeks to transfer. For courses in which a grade of $A, B, C$, or $P$ has been recorded, the grade of the repeated course shall be counted in calculating a student's GPA. The grades of all earlier and most recent attempts shall be recorded on the student's permanent record, ensuring a true and complete academic history. Courses repeated under this criterion will not be used for determining financial aid, scholarships, or athletic eligibility. Unit credit is allowed only once. Neither credit nor grades shall be allowed for unauthorized repeated courses.

Mandated Training: A student will be allowed to repeat a course in which a previously earned grade of $A, B, C$, or $P$ is recorded providing repetition of the course is necessary in order to meet legally mandated training requirements or conditions of continued paid or volunteer employment. Enrollment under this provision is limited. Documentation supporting the mandated training is required and must be submitted to the Enrollment Services office. A student may repeat a course any number of times where it is required for the student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment, regardless of whether the student recorded substandard work. The student must fill out the required form and submit the required documentation.

Change of Industry Standard or Licensure: A student may be allowed to repeat a course in which a previously earned grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}$, or P is recorded providing repetition of the course is necessary in order to maintain licensure or if an industry-standard has changed significantly since the course was taken and the student needs the skills in order to gain or keep employment. Documentation supporting the licensure or change in industry standard is required and must be submitted to the Enrollment Services office.

Students with disabilities: Students with disabilities may repeat a special class for students with disabilities any number of times when an individualized determination verifies that such repetition is required as a disability-related accommodation for the student for one of the reasons specified in Title 5 Section 56029. When a student with a disability repeats a class, the previous grade and credit may be disregarded in the computation of grade point averages. A student with a documented disability may therefore enroll multiple times in a credit course specifically designed for students with disabilities. Such repetitions are considered to be disability-related accommodations, subject to appropriate documentation.

Students may not enroll in a course more than three times, except in the limited circumstances, described below. Enrollments include any combination of withdrawals and repetitions.

Students may repeat a cooperative work experience course pursuant to District policy any number of times as long as they do not exceed the limits on the number of units of cooperative work experience set forth in Title 5 Section 55253 subdivision (a).

Courses that are repeated shall be recorded on the student's permanent academic record using the appropriate symbol. Annotating the permanent academic record shall be done in a manner that all work remains legible, ensuring a true and complete academic history. Nothing shall conflict with Education Code Section 76224 pertaining to the finality of grades assigned by instructors, or with Title 5 or District procedures relating to the retention and destruction of records.

The student is responsible for ensuring that the repetition of a course is authorized by these Procedures. Any student who is determined to be repeating a course when not authorized to do so shall be administratively removed from the class. Credit by examination and courses in the 600number noncredit band are not subject to the course repetition rules.

## Academic Renewal

The purpose of academic renewal is to disregard a portion of a student's prior substandard academic work. Students wishing to disregard prior work must complete the Academic Renewal Petition and submit it to the Enrollment Services office. Academic renewal is subject to the following conditions:

- A student must have completed at least 24 units of lower division credit coursework at a regionally accredited community college with at least a 2.0 cumulative GPA prior to the petition.
- At least 12 months must have elapsed since the substandard credit coursework was recorded.
- A student may request that up to 30 units of substandard credit coursework be annotated and disregarded in the computation of the student's cumulative grade point average or requirements for degree. Only those requested courses with substandard credit grades (D or F) will be disregarded.
- All coursework, including substandard coursework, shall remain on the official record. The transcript shall be appropriately annotated to indicate that academic renewal has been applied. Academic renewal actions are irreversible. When academic renewal procedures permit previously recorded substandard coursework to be disregarded in the computation of a student's grade point average, the student's permanent academic record should contain an accurate record of all coursework to ensure a complete academic history.
- A student may be granted Academic Renewal only once.
- Academic Renewal by LBCC does not guarantee that other institutions will honor this action. It is the student's responsibility to ensure that the transfer institution will approve of Academic Renewal from LBCC.
- Once a certificate or degree is posted on the official transcript at LBCC, Academic Renewal will not be available.
- Academic renewal procedures may not conflict with the District's obligation to retain and destroy records or with the instructor's ability to determine a student's final grade.


## Academic and Progress Probation

A student shall be placed on probation whenever the student's academic record indicates any of the following conditions:

Academic probation: The student's GPA falls below 2.0 in all units graded according to the 4.0 grading scale after the student has attempted 12 units or more at LBCC.

Progress probation: After enrolling in a minimum of 12 units at LBCC, the student has completed less than one-half of all units in which the student has enrolled as reflected in the student's academic record.

For the purposes of the above, the entries of W, NP, and I are counted as non-complete of a course while entries of $A, B, C, D, F$, and $P$ are counted as complete (listed as "Earned" on the transcript).

A student on academic and/or progress probation shall receive targeted intervention which may include, but is not limited to, the following:

- Completion of an individual counseling appointment;
- Completion or revision of an Educational Plan;
- Limitation of enrollment to a maximum of 12 units each semester until the student is off probation; and
- Participation in academic and/or student support services.

A student who is on academic probation and earns a semester grade point average of 2.0 or better shall not be dismissed as long as this minimum semester grade point average requirement is maintained.

A student who is on progress probation and earns a semester completion ratio of .75 for 12 units and above or .50 for 11.5 units and below, shall not be dismissed as long as the minimum semester completion ratio requirement is maintained.

At the end of the second semester on which the student is on academic or progress probation, a notice that the student is subject to dismissal will be sent to the student informing him/her/them that he/she/they is subject to dismissal.

Any student on probation shall be reclassified as "satisfactory" whenever the cumulative GPA reaches or exceeds 2.0 and the ratio of units completed to units enrolled is one-half or better based on the number of units indicated above.

## Academic and Progress Dismissal

A student who is on Academic Probation 2 shall be subject to dismissal if the student has earned a grade point average of less than 2.0 in all units attempted for a letter grade for that term. A student who has been placed on Progress Probation 2 shall be subject to dismissal if the percentage of units in which the student has been enrolled for that term for which entries of "W," "I," and "NP" are recorded reaches or is below fifty percent (50\%) for 12 units or $80 \%$ for 3-6 units.

## Dismissal Letter

The letter notifying the student that he/she/they are being dismissed will cover, at a minimum, a reference to AP 4255, an explanation of what dismissal means, the procedure for reinstatement, and the procedure to appeal the dismissal.

## Appeal of Dismissal

The student has the right to appeal their dismissal status if the student feels that facts exist that warrant an exception to the dismissal action. The student must file the written petition of appeal with the Admissions and Records office after the dismissal letter was mailed or emailed. It is the student's responsibility to indicate on the petition a clear statement of the grounds on which continued enrollment should be granted and to provide evidence supporting the reasons. Petitions will be reviewed by the Readmission Committee.

## Standards for Evaluating Appeals

Dismissal appeals may be granted if the student participates in Academic and Student Support services designed to assist him/her/them in improving academic skills, receiving academic counseling, and/or limiting course load.

## Readmission After Dismissal

In considering whether or not students may be re-admitted after dismissal and one-semester absence, the following criteria should be considered:

- Documented extenuating circumstances (considered during appeal);
- Demonstration of completing courses with a "C" or better, and/or without a W, NP, or I;
- Semesters on which academic performance was atypical of other semesters.


## Student Conduct

A proper campus environment is of great importance to assure academic and individual success. The Board of Trustees has established campuswide standards of student conduct and simple campus rules which are enforced at all times. These rules are particularly important in large common areas such as the cafeteria, bookstore, vending, campus offices, College Center, Student Center, Activities Center, campus quads, athletic areas and other highly frequented areas. All students must conform to the Standards of Student Conduct, which are detailed in the Administrative Procedure on Student Conduct, AP 5500. This procedure is strictly enforced by the Office of Student Affairs. To read the full procedure, visit https://www.lbcc.edu/pod/lbccd-board-policies-procedures (https://www.lbcc.edu/pod/lbccd-board-policiesprocedures/).

## Creating a Collegiate Environment in the Classroom

Creating an environment that is conducive to learning is the cornerstone of offering a good education. Every person at LBCC is responsible for helping to maintain this environment, including students. Simple rules of courtesy and civility apply.

Respect for the Instructor: This concept means arriving for class on time, not leaving early, bringing appropriate materials, not speaking with other
students while the instructor is speaking, not bringing food or drink to the classroom, and not being loud, boisterous, or argumentative.

Respect for Other Students: This concept means not interfering with the rights of others to listen and participate, not being disrespectful, and not using inappropriate language or harassing others in any way.

Academic Honesty: Lack of honesty in the classroom is a very serious offense. Any form of cheating on tests, turning in work which is not one's own, talking during tests, furnishing false information to instructors, or knowingly misrepresenting oneself to the college is grounds for disciplinary action. The consequences of cheating are severe and may include the possibility of expulsion.

Instructor's Rights: An instructor has the right to remove a student from class at any time the instructor considers the student's actions to be interfering with a proper collegiate environment. The instructor may also refer the incident to the Director of Student Conduct and Student Life for disciplinary action as warranted.

Student's Rights: All students have the right to due process. If a classroom conflict occurs, students should discuss the issues with the course instructor during the instructor's office hours. Additional resources for resolving conflicts include the department head, school dean, and Vice President of Student Support Services or designee.

## Policy on Academic Honesty

The Long Beach Community College District establishes an academic environment in which inquiry is nurtured, individual responsibility is rewarded, and academic dishonesty, cheating, and plagiarism are not tolerated.

For further information, refer to the Administrative Procedure on Academic Honesty, AP 4035, located at https://www.lbcc.edu/pod/lbccd-board-policies-procedures (https://www.lbcc.edu/pod/lbccd-board-policies-procedures/).

## Academic Freedom

In the spirit of academic inquiry and in keeping with the code of ethics adopted by the Academic Senate of LBCC, the policy of the Board of Trustees ensures that the professional staff shall be free to define and discuss relevant information and concepts in the classroom or any other appropriate forum and shall be free to select materials and methods of presentation.

For further information, refer to the Administrative Procedure on Statement of Academic Freedom, AP 4030, located at https:// www.lbcc.edu/pod/lbccd-board-policies-procedures (https:// www.lbcc.edu/pod/lbccd-board-policies-procedures/).

## Campus Rules

The following campus rules must be adhered to at all times. Violations subject students to disciplinary action.

- Smoking of any kind, including the use of electronic devices, and all uses of tobacco are prohibited on all District property including all indoor and outdoor spaces, and in all District-owned vehicles. Smoking and vaping in private vehicles that are parked in LBCC lots are also prohibited.

Eating and drinking are prohibited in all buildings except where food is sold, or is allowed, or as part of an approved and scheduled activity

Gambling on campus is prohibited. Gaming is restricted to the PCC Student Lounge, in the LAC Activities Room, and when allowed in the Library.
Animals are not allowed on campus. Exceptions shall be made for certified companion animals and those animals previously approved by college officials for specific educational purposes.

- Literature to be distributed must be approved by the Office of Student Life.
- Children are allowed on campus when under the supervision of a parent or guardian or when they are officially enrolled in an approved college program. Children may not attend classes with a parent or guardian unless the course is specifically designed to include children. Children must be supervised so that educational activities are not interrupted and may not be left unattended in common areas such as the library, computer labs, cafeterias, quads, or lounges.
Vehicles without a parking permit must park in visitor parking, or their drivers may purchase a one-day parking permit
- Students are required to be fully attired, including shirts or blouses and footgear.
- Skateboarding, skating, and bike riding are prohibited on campus grounds. Officers will cite any violators.
- The use of electronic devices without headphones is prohibited on campus except in connection with approved campus or classroom activities.
- Electronic recording devices may not be used in any classroom without the approval and permission of the instructor.


## Student Grievance

## Complaints

LBCC is committed to resolving problems students may encounter while working within the guidelines and policies established by the state of California and the Board of Trustees. Students with complaints, including but not limited to curriculum, class scheduling, faculty, non-instructional faculty, staff, or employees should attempt to resolve the issue informally and are encouraged to submit a Public Incident Report found on the web at https://www.lbcc.edu/student-affairs (https://www.lbcc.edu/studentaffairs/). The informal process consists of speaking with the faculty member first, unless the complaint is about staff or employees, then speaking with the area department chair or manager and, if necessary, Human Resources. If the complaint is one of abuse, it should be referred directly to Human Resources.

## Student Grievance Policy

For specific information on both policy and process for student grievances, go to https://www.lbcc.edu/post/5000-procedures (https:// www.lbcc.edu/post/5000-procedures/) to access AP 5530. To formally initiate the grievance process, submit a Public Incident Report found on the web at https://www.lbcc.edu/student-affairs (https://www.lbcc.edu/ student-affairs/). If the grievance is one of abuse, it should be referred directly to Human Resources.

## Academic Support In This Section:

Child Development Learning Lab (p. 49)
Workforce Development (p. 49)

## Child Development Centers and Lab Schools

## Philosophy Statement

The philosophy of the Long Beach City College Child Development and Educational Studies Department is reflected appropriately in each program throughout the Department.

We believe:

- There is interconnectedness between children, family, and the community.
- Children, families, and communities are greatly enhanced by positive interpersonal relationships and high quality environments throughout life.
- Each adult and child is valuable as an individual, capable of reaching his or her potential, when supported and encouraged by best practices.
- Learning occurs through active participation, which honors the process as well as the product in a developmentally appropriate environment.


## Vision Statement

The vision of the Child Development and Educational Studies Department at Long Beach City College is that all programs and services enhance the quality of life for children, families, and students throughout the community while supporting and embracing diversity, self-esteem, individual potential, and community partnerships.

## Mission Statement

As part of the Child Development and Educational Studies Department at Long Beach City College, the Child Development Centers and Learning Labs are committed to enhancing the quality of life for students, children, and families throughout the life span. Embracing the diversity each student brings, the Department strives to empower individual learners through personal and professional growth. To fulfill this mission we will:

- Model best practices based on current research, technology, and theory in the early childhood education field.
- Provide students with opportunities for life-long learning.
- Provide training for individuals seeking careers working with children and families.
- Provide appropriate and effective models of communication and interaction amid the diverse populations we serve.
- Promote effective parenting practices through education.
- Provide high quality early childhood classroom experiences for young children based on developmentally appropriate practices.


## Workforce Development

## Workforce and Economic Development Programs

LBCC is a leader in creating and retaining regional jobs and advancing the region's economic growth and California's global competitiveness. This charge is a core part of the mission of the California Community Colleges, as essential as academic programs, vocational training and student services.

Economic and workforce development programs help businesses grow and create jobs and help people develop the skills they need to succeed in the workplace. The college focuses on the following core business activities vital to the region's economy: small business development, global trade, supply chain management and logistics, advanced transportation (alternative fuels and electric vehicles) and energy technologies, health care, and emerging technologies and innovations.

Programs and initiatives include:
Center for Community and Industry Partnerships: Connecting community and industry partners with students and faculty through work-based learning engagements like classroom speakers, industry workshops, and advisory committees.

Internship and Job Placement: Customized internship and job search tools and support for students.

Customized Training for Industry: Creating partnerships with industry to develop customized training and professional development for individuals and businesses to help meet the needs of regional employers.

Community Education: Providing professional development.
Small Business Development Center Network: Facilitating millions of dollars in capital for small businesses, creating and retaining thousands of jobs, and supporting start-ups from launch to growth, and established businesses through advising and workshops.

Goldman Sachs 10,000 Small Businesses Program: Accelerating small business growth and job creation in the Southern California Region with a world-class business and management education program and business support services.

Global Trade: Workshops and consulting services for small businesses to enter new global markets, expand existing global sales, and a specialized eCommerce program that provides strategies for growth through the Center for International Trade Development.

## ACADEMIC REQUIREMENTS

## In This Section:

General Education, Transfer and Degree/Certificate Requirements (p. 50)

Course Credit and Class Preparation (p. 71)

# General Education, Transfer and Degree/Certificate Requirements In This Section: 

General Information (p. 50)
General Education Patterns (p. 52)
General Education Plans (p. 54)
Admission Requirements for Transfer (p. 70)
General Education Philosophy (p. 71)
Institutional Student Learning Outcomes (ISLOs) (p. 71)

## General Information

LBCC degrees and certificates are proposed, developed, and implemented for the primary purpose of providing opportunities for students to reach their desired educational goals. Awards include associate degrees, certificates of achievement and accomplishment in many career and technical education areas, and certificates in the noncredit program for students seeking short-term vocational training, workforce preparation, and adults seeking to finish basic education or learn English as a second language.

LBCC offers the following degrees:

- Associate in Arts (A.A.)
- Associate in Science (A.S.)
- Associate in Arts for Transfer (A.A.-T)
- Associate in Science for Transfer (A.S.-T)

Associate Degrees include three components: major or field of study requirements, General Education (GE) requirements, and competency or admission requirements. Depending on the educational goal of the student, three options are offered for fulfilling GE requirements. These options are listed later in this section as Plan A, which may be used for an Associate in Arts and Associate in Science Degrees, Plan B for CSU transfer and Associate Degrees for Transfer, and Plan C for CSU or UC Transfer and Associate Degrees for Transfer. Students should see a counselor early in their educational planning so that they are certain to choose the appropriate GE pattern for their specific goals.

The awarding of an associate degree at LBCC represents more than an accumulation of units. The associate degree is designed to prepare students either for transfer to a four-year college or university or for immediate employment.

## Associate Degrees

## Associate in Arts (A.A.) and Associate in Science (A.S.) Requirements

Students may be granted an A.A. or A.S. degree as well as be certified for GE based on the requirements in effect at any time between their initial enrollment at LBCC and the present time provided continuous enrollment is maintained. If continuous enrollment is not maintained, students may only use requirements in effect beginning with such time as continuous enrollment was established and maintained to the present.

## Units

The associate degree (A.A. or A.S.) requires a minimum of 60 units passed, including the field of concentration, required GE courses, and free electives if applicable, as defined in the college catalog.

## Scholarship

Students must achieve an overall grade point average of 2.0 based on all accredited college work that is applied to the degree, no matter where completed.

## Residence

At least 12 semester units must be completed in residence at LBCC in order for the college to grant an Associate in Arts or an Associate in Science degree.

## Field of concentration

50 percent or more of the requirements for the chosen field of concentration, as defined in the program of study, must be completed in residence. Credit earned by exam, where applicable, may be counted as in residence. The field of concentration, the GE pattern, and the proficiency requirements must be those in effect for the same year. Per Title 5, section 55063 (a) (2) and effective as of Fall 2009, students must complete each course counted toward the major or area of emphasis with a grade of " C " or better or P if the course is taken on a "Pass/No Pass" basis. Students who enrolled prior to Fall 2009 and who maintain continuous enrollment are not subject to this standard, but they must meet any minimum grade standards already established by the program as published in the catalog.

## General Education and proficiency requirements

Students may use any General Education Plan (A, B, C) to fulfill the GE requirements for a local degree; students who opt to use Plan B or Plan C are not required to fulfill the proficiency requirements included on Plan A. Students must use Plan B or C for the Associate Degree for Transfer (please see Associate in Arts/Science for Transfer information below.) Students who follow Plan A need to complete the proficiency in reading, writing, mathematics, and information competency. Students who follow Plan B or C need to complete only the requirements that are listed on Plan B or C. The field of concentration, the GE pattern, and the proficiency requirements when required (Plan A) must be those in effect for the same year. A student may use a course to fulfill a GE requirement in effect at the time the course was completed, even though the course may have been subsequently removed from the list of approved GE courses.

## Matriculation

Matriculation materials must be submitted to the Admissions and Records Office prior to the application for graduation.

## Dual Associate Degrees

An additional associate degree may be awarded to students who have met all requirements, including residence requirements, for a second field of concentration. Degrees may be earned concurrently. For an additional
degree, students may use any LBCC catalog rights for which they are eligible.

## Associate in Arts for Transfer (A.A.-T), and Associate in Science for Transfer (A.S.-T): Student Transfer Achievement Reform Act

LBCC offers associate degrees for transfer to the CSU, including Associate in Arts (A.A.-T) and Associate in Science (A.S.-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. LBCC students must complete 60 semester units, have a minimum overall GPA of 2.0, obtain a minimum grade of " C " or " P " for each course in the major, and complete either Plan B (CSU GE-Breadth) or Plan C (IGETC.) Students who are awarded an A.A.-T or A.S.-T degree are guaranteed admission with upper-division standing to the CSU system and given priority admission consideration to their local CSU campus in a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an A.A.-T or A.S.$T$ do not change their major at the CSU and do not add a minor or second major are able to complete their remaining requirements for the 120 -unit baccalaureate degree at the CSU within 60 semester units.

For the Associate Degrees for Transfer, completion of either Plan B (the California State University GE Breadth pattern) or Plan C (Intersegmental GE Transfer Curriculum pattern) is required. Completion and posting of an Associate Degree for Transfer on the LBCC transcript serves as a student's GE certification.

Interested students should consult with a counselor for more information about the GE/IGETC certification process.

## Associate in Arts for Transfer (A.A.-T), and Associate in Science for Transfer (A.S.-T) Degree Requirements

Minimum unit requirements: A minimum of 60 transferable units including a minimum of 18 units in a major or field of study. Students are permitted to double-count major requirements towards CSU-GE Breadth or IGETC GE patterns.

Minimum grade and GPA requirements: An overall grade point average of 2.0 in all CSU transferable coursework for the major. Students must complete each course with a grade of $C$ or better, or P if the course is graded on a P/NP basis.

Residence for the degree: At least 12 LBCC degree applicable units (courses numbered 1-599) must be completed in residence at LBCC.

Degree application: Students will apply for their degree through their Viking Portal. Directions for applying for degrees can be found at https:// www.lbcc.edu/sites/main/files/file-attachments/how to apply for award.pdf (https://www.lbcc.edu/sites/main/files/file-attachments/ how_to_apply_for_award.pdf?1598288801). Students should refer to https://www.lbcc.edu/pod/registration-dates (https://www.lbcc.edu/pod/ registration-dates/) to view the actual degree deadline for each semester. Students can receive further assistance with applying for their degrees at the Completions Counseling Program at completions@lbcc.edu or 562-938-5180.

Local graduation requirements: For the Transfer degree, no additional local (LBCC) graduation requirements must be fulfilled for the transfer degree.

## Certificates

LBCC offers four types of certificates:
A Certificate of Achievement ${ }^{1}$ is awarded for successful completion of a course of study that consists of at least 16 units and is indicated on a transcript. In some cases, approved certificates may have a range of 8-15.5 units.

A Certificate of Accomplishment ${ }^{1}$ is awarded for successful completion of a course of study that consists of less than 16 units and is not noted on a student's transcript.

A Certificate of Competency is a noncredit certificate intended for students who do not need credit for transfer or for employment but wish to improve their basic skills, learn English as a second language, or obtain short-term vocational skills needed for immediate employment.

A Certificate of Completion is a noncredit certificate intended for students who do not need credit for transfer but who wish to obtain the knowledge and preparation of skills needed for entry level positions in the workforce.
${ }^{1}$ Certificates of Achievement and Accomplishment are offered in specific occupational areas. All CTE certificates of Achievement and Accomplishment are reviewed by advisory committees comprised of representatives of the appropriate industry, students, and faculty. This process assures that programs meet current and future industry needs.

## Certificate Requirements

LBCC provides many opportunities for students to gain marketable skills. Critical thinking experiences are included as part of the training. Changing technologies have placed greater demands on workers, and critical thinking skills are necessary for success in most occupations.

Occupational programs, or career technical education, teach the theory and the practical applications of a career. The goal of an occupational program is gainful employment. The course of study for such a program will enable students to become familiar with the requirements and methods of an occupation necessary to progress beyond an entry-level position. One of the college's goals is to help students make informed career decisions.

To earn a certificate at LBCC, a student must do the following:

1. Each of the required courses listed on the program of study must be completed with a grade of "C" or better. A certificate of completion or competency will require a minimum number of hours, mastery of content, or both.
2. Required courses for a noncredit certificate must be completed based on the required number of student contact hours and mastery of skills in the course outline.
3. Fifty percent or more of the requirements for the field of concentration must be completed in residence. Credit earned by exam, where applicable, may be included.
4. The certificate application form must be completed and submitted to the Admissions and Records Office during the final semester of coursework. This form is available in the Admissions and Records Office or online at www.lbcc.edu/admissions-records (http:// www.lbcc.edu/admissions-records/). Students should refer to the schedule of classes and click the "Important Dates" link to view the actual deadline for each semester.
5. Some divisions and departments may award certificates of accomplishment or completion at the division or department office. Interested students should consult the appropriate department head for details.

## Catalog Rights

## Catalog Rights

Each year, the LBCC Catalog is updated with the most current information including graduation and course requirements for degrees and certificates. Catalog Rights protect students from being held to additional requirements that may be added to a subsequent catalog.

## Selecting a Catalog Year

Students are required to select a major within their first year at LBCC. If a student is undeclared or undecided on their major, LBCC Career Services and career counselors are available to help the student.

A student may follow the catalog requirements that were in effect at the time they begin taking classes at LBCC or follow the catalog requirements in effect for subsequent years, providing that they maintain continuous enrollment. When a student selects an academic year (fall through summer), the corresponding requirements contained within that catalog, or catalog addenda, must be followed.

## Application of Catalog Rights

As soon as the student selects a catalog year to follow, it is in their best interest to inform the college. Catalog Rights are maintained by receiving a letter grade of A, B, C, D, F, P, NP, W, MW, EW, or I on the official transcript for at least one course in the primary terms of fall or spring per academic year. Documented military withdrawal (MW) and excused withdrawal (EW) are not considered an interruption of enrollment.

Catalog Rights are not in effect when a program requires that a student complete specific courses within an established time frame or when career and technical education requirements change due to industry standards. Catalog Rights do not apply to the certification of general education (GE) requirements for transfer; courses used for GE Certification must be on an approved GE Plan at the time they are taken. General Education Plans may be found at https://www.lbcc.edu/ post/general-education-patterns (https://www.lbcc.edu/post/general-education-patterns/).

## Continuous Enrollment

Continuous enrollment is used to determine a student's Catalog Rights. Continuous enrollment is defined as enrollment at census in at least fall or spring of the academic year at LBCC, or any other regionally accredited higher education institution, after having initially enrolled at LBCC. Any of the following academic symbols entered on an LBCC transcript constitutes continuous enrollment: A, B, C, D, F, P, NP, W, EW, MW, RD, or I. Students should consult with their counselor for current information or the degree appeal process for extenuating circumstances.

If transferring to a California State University (CSU) or University of California (UC), continuous enrollment rules will be defined by the receiving institution.

## Academic Renewal

If a student is granted academic renewal for a primary term, that term will be counted as meeting continuous enrollment.

## Inactivated or Discontinued Programs

If a student decides to change their major, a previously inactivated or discontinued program cannot be selected as a major regardless of Catalog Rights.

In the event that a student has declared a major and the corresponding program is to be inactivated or discontinued, the student will be notified each year by the Counseling Department of the following:

1. There will be a teach-out period of no longer than 5 years;
2. Course substitutions may be provided by the department to satisfy the requirements, or
3. The student will be assisted to help select a major that contains the highest percentage of courses that have been completed, or
4. The student will be redirected to other community colleges in the area that provide the award, and
5. The college cannot award a degree or certificate when a program has been inactivated at the Chancellor's Office.

## Continuous Attendance

"Continuous Attendance" is defined by the CSU as enrollment in a California community college, such as LBCC, or a CSU campus for at least one semester, or two quarters, of consecutive calendar years and is applicable to students interested in transferring to the CSU system. This concept is important for transfer students because continuous attendance affects the requirements for graduation from a CSU campus; therefore, students must be careful to combine "continuous enrollment" for LBCC requirements with "continuous attendance" for CSU requirements. The difference between these two definitions rests on how a school defines a "year." LBCC must use the academic year (fall and spring semesters) and the CSU system must use the calendar year (January to December). When students combine continuous enrollment and attendance definitions, they need to attend at least one class every semester (fall/spring) until they transfer. Only this way can they secure their Catalog Rights. Because of the confusion these two definitions might create, LBCC strongly recommends that all students see a counselor.

## General Education Patterns General Education Patterns \& General Education Certification

The conditions that define LBCC's GE philosophy include the Mission Statement as found in this catalog, Title 5 and the Chancellor's Office specific requirements as interpreted by the Office of Academic Services, Executive Order 1100 from the California State University (CSU) System, and the Intersegmental GE Transfer Curriculum (IGETC) requirements, and yearly updated notes, that define the University of California (UC) and CSU common core curriculum for GE. These six sources have limited and shaped GE at LBCC using a strategy known as the A, B, C GE Plan.

The A, B, and C Plans define and distribute GE courses to meet associate degree requirements while Plans $B$ and $C$ prepare students for transfer to the UC or CSU systems.

The strategy behind the A, B, and C Plans is to introduce students to the various disciplines identified in the definition of GE as cited above, such as the arts, literature, the physical and natural sciences, history, the social sciences, health, and wellness, while also complying with those regulations that allow us to certify our students before they transfer.

The GE certification process lies at the heart of Plan $B$ and $C$ of the $A, B$, and $C$ Plans.

GE certification is defined as a process by which LBCC verifies that a student has completed all the lower-division GE courses that are required by the CSU or UC system. The CSU certification process identifies 39 units prescribed by Executive Order 1100, which are distributed by discipline into broad areas defined as English Composition, Analytical Thinking, Communication Skills, Mathematics, Natural Science, Physical Science, Humanities, Arts, Social Science, and Lifelong Understanding and Self-Development, and Ethnic Studies. Following a similar category pattern, the IGETC allows LBCC to certify 34 units for the UC, but requires nine (9) extra units: three (3) of Oral Communications and six (6) of US History and Government to meet the CSU graduation requirements. When GE certification occurs, LBCC is in compliance with Executive Order 1100 and the list of instructions found in the IGETC Notes. In both cases, once GE certification has occurred, LBCC transfer students know that their lower-division GE requirements have been met, and that the receiving CSU or UC schools will not review/require these units.

The associate degree is comprised of two major components: a GE pattern and a major field of preparation.

A transfer program is comprised of three major components: admission requirements, a GE pattern, and a major field of preparation.

Students have three GE patterns (Plan A, B, and C) from which to choose but are strongly encouraged to consult with a counselor for assistance in selecting the GE pattern that is most appropriate for their educational goals.

Under Plan A, students can complete the GE requirements for an associate degree and may combine that degree with one of LBCC's certificate programs or in some cases prepare for transfer. If a student wants to complete an associate degree and transfer to a B.A. or B.S. program, then the student should follow GE patterns Plan B or Plan C.

Plan B will prepare students for transfer to the California State University System.

Plan C will prepare students for transfer to either the University of California or the California State University Systems.

Although an associate degree for transfer recognizes the completion of lower-division course requirements, it does not guarantee admission eligibility to a four-year college or university. Students are encouraged to see a counselor early in their academic career to establish an educational plan that will meet the student's educational goals.

While a single course might satisfy more than one GE requirement, no course may be counted in more than one GE area. However, courses may be used to satisfy both a GE requirement and a major requirement.

Students should be aware that starting one GE plan does not preclude students from changing to another at a later date. Changing plans is possible with proper counseling.

## Plan A: Completion of LBCC GE Requirements

Plan A sets the GE requirements for the associate of arts (A.A.) and associate of science (A.S.) degrees. The minimum GE requirement for the A.A. degree is 25 units, while the minimum GE requirement for the A.S. Degree is 19 units. The unit requirements for these two degrees vary because the associate of science degree accompanies programs that may require higher units in core major requirements. Accordingly, the
associate of science is the degree most commonly earned in higher unit academic and career technical education programs.

Students who complete an associate degree and who later choose to transfer must make up the difference in units between Plan $A$ and Plan B or C when they transfer to four-year institutions. However, Plan A is designed so that a student may select courses to meet the associate degree requirements while at the same time completing as many units as possible that are also located on Plan B and Plan C. Hence, all three plans are designed to complement each other and minimize the total unit load for students.

## Plan B: Completion and Certification of California State University GE Breadth

Plan $B$ is designed for students who plan to transfer to a CSU. Some private colleges also accept Plan B General Education, see a counselor for requirements if planning to transfer to private or out-of-state institutions.

1. To obtain a baccalaureate degree from any of the California State University campuses, students are required to complete a minimum of 48 semester units of GE courses in the following areas: Area A (9 units), Area B (12 units), Area C (12 units), Area D (9 units), Area E (3 units), and Area F (3 units).
2. Up to 39 lower-division units may be completed at and certified by California community colleges. The college recommends the pattern of 39 lower-division units as listed in GE Plan B. After the student has transferred, the CSU campus will then specify a minimum of nine more upper-division units to be taken primarily in areas B, C, and D. Courses that fulfill these CSU requirements do not necessarily meet the requirements for the University of California System.

## Plan C: Completion and Certification of University of California and California State University Intersegmental GE Transfer Curriculum

Plan C, the Intersegmental GE Transfer Curriculum (IGETC) is designed for transfer to the UC/CSU systems and the associate degree. Courses acceptable at the University of California are identified as such at the end of each catalog description in the "Courses of Instruction" section of this catalog. A student may transfer up to 70 CSU or UC transferable semester units from LBCC. The Intersegmental Committee of Academic Senates for the combined public university and community college systems in the state of California approves the IGETC, which was first implemented Summer 1991.

1. The IGETC is a series of courses that community college students can use to satisfy lower-division GE requirements at any CSU or UC campus.
2. The IGETC provides an option to satisfy the California State University lower-division GE requirements and replaces the University of California lower-division transfer core curriculum.
3. Completion of the IGETC is not a requirement for transfer to a CSU or UC, nor is it the only way to fulfill the lower-division GE requirements of the CSU or UC prior to transfer. In some cases, students may find advantages in taking other courses at the community college to fulfill CSU's GE requirements or those of a particular UC campus.
4. To achieve a non-transfer associate degree with this program, a student must complete a field of concentration and the associate degree GE and proficiency requirements.
5. Students must maintain continuous attendance.

## General Education Plans

Students have three GE patterns (Plan A, B, and C) from which to choose but are strongly encouraged to consult with a counselor for assistance in selecting the GE pattern that is most appropriate for their educational goals.

The General Education review and final approval of courses to be added to CSUGE-B (Plan B) and IGETC (Plan C) will occur after the publication of this catalog. In order to provide accurate information to all our general education plans, the LBCC native GE plan (Plan A) will be posted at the same time as Plan B and Plan C. Updated information regarding the general education plans will be made available as soon as possible on the web at https://www.lbcc.edu/general-education-patterns (https:// www.lbcc.edu/general-education-patterns/) and will be published in the Fall Addenda of the LBCC catalog. Please refer to these resources for the most current information.

Under Plan A, a student can complete the GE requirements for an associate degree and may combine that degree with one of LBCC's certificate programs or in some cases prepare for transfer. If a student wants to complete an associate degree and transfer to a B.A. or B.S. program, then the student should follow GE patterns Plan B or Plan C.

Plan B will prepare students for transfer to the California State University System.

Plan C will prepare students for transfer to either the University of California or the California State University Systems.

## LBCC General Education (Plan A)

All information contained herein is subject to change without notice. ${ }^{1}$
Since individual plans and circumstances vary, students should consult with a counselor before beginning a program of study to ensure the appropriate General Education pattern is followed.

This general education plan is designed for students planning to obtain an Associate Degree. The general education requirements are only one component of the Associate Degree. Use this sheet in conjunction with the curriculum guide (located at https://www.lbcc.edu/curriculum-guides (https://www.lbcc.edu/curriculum-guides/)) for your choice of major, and in consultation with a counselor.

Please note that completion of an A.A./A.S. degree does not automatically qualify a student to transfer. Students planning to transfer to a CSU or UC school should refer to the CSUGE-B or IGETC General Education Course Patterns (Plan B or Plan C at https://www.lbcc.edu/ general-education-patterns (https://www.lbcc.edu/general-educationpatterns/)) and consult with a counselor to determine the best general education pattern.

1 2021-2022 Plan A Checklist: Published July 2021. Long Beach City College Office of School and College Articulation.

## Cross-Listed Courses

A cross-listed course is interdisciplinary and is the same course as its cross-listed counterparts. A cross-listed course CANNOT be used in more than one subject area: ECON 5 = GEOG 5: The Global Economy; HUMAN 1/1H= SOCSC 1/1H: Comparative World Cultures/Honors CWC; HUMAN 7= SOCSC 7: American Pluralism and Identity; HLED 10
= PSYCH 10: Human Sexuality; ETHST 6 = EDUC 6 Ethnic Studies for Education/Educators

## Graduation Proficiency Requirements

## Mathematics

Successful completion with a grade of "C" or higher in a college math course at the level of MATH 120 or MATH 130 or MATH 130A or MATH 140 or MATH 115 or higher OR transcript verified completion with a grade of " C " or higher in a high school Math class at the level of Intermediate Algebra.

## Reading

Proficiency may be achieved by satisfying one of the following:

- A qualifying placement through LBCC multiple assessment measures.
- A passing grade of a "C", "P", or higher in READ 82 or READ 83 at LBCC (Courses taken at other colleges may be individually reviewed for equivalency by the Reading Department Chair.
- A passing grade of a "C" or higher in any course in the CSU GE (A3) Critical Thinking category OR IGETC (1B) Critical Thinking and Composition category.
- An A.A., A.S., or a Bachelor's Degree from a regionally accredited college or university.
- Complete the Expository Reading and Writing Course in grade 12 with a "C" or higher for both semesters.


## Writing

Complete ENGL 1, ENGL 1H, ENGL 1S orESL 1S with a grade of "C", "P" or higher.

## Information Competency

Information Competency is the ability to find, evaluate, use and communicate information in all its various formats. It combines aspects of library literacy, research methods and technology proficiency. Students must complete ONE course from INFORMATION and ONE course from TECHNOLOGY (courses MUST be completed with a grade of " $C$ ", " $P$ " or higher).

## Information Component

Code Number Course Title Units
Complete one of the following:

| COMM 60 | Elements of Argumentation and Debate (3) |
| :--- | :--- |
| ENGL 1 | Reading and Composition (4) |
| ENGL 1H | Honors Reading and Composition (4) |
| ENGL 15 | Intro to Latino/Latina/Latinx Literature (3) |
| ENGL 3 | Argumentative and Critical Writing (4) |
| ENGL 3H | Honors Argumentative \& Critical Writing (4) |
| LIB 1 | Introduction to Information (2) |

## Technology Component

| Code Number | Course Title |
| :--- | :--- |
| Complete one of the following: | Units |
| COSA 1 | Computer Information Competency (1) |
| COSA 5 | Microsoft Windows Operating System (3) |
| COSA 20 | Microsoft PowerPoint for Windows (3) |
| COSA 25 | Microsoft Access for Windows (3) |
| COSA 30 | Introduction to Computers (3) |


| COSA 35 | Microsoft Office (3) |
| :--- | :--- |
| COSA 50 | Intro to IT Concepts and Applications (4) |
| COSK 200 | Keyboarding and Document Production (3) |

## Area Requirements

Double-counting of courses listed in more than one area of the general education pattern is NOT allowed. For example, HIST 25 is listed in both the American History and Social Sciences requirement areas, but it may be used to satisfy only one of these requirements. However, courses listed in a requirement area may be used to satisfy graduation proficiencies (see above section).

## English Composition

One Class Required (3 units minimum).

## Code Number Course Title

Complete one of the following:

| ENGL 1/1H | Reading and Composition (4) |
| :--- | :--- |
| ENGL 1S | Reading and Composition with Support (5) |
| ESL 1S | College Writing for Non-Native Speakers (5) |

## Communication and Analytical Thinking

One Class Required ( 3 units minimum).

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| Complete one of the following: |  |  |
| BCOM 15 | Business Communications (3) |  |
| COMM 10/10H | Elements of Public Speaking (3) |  |
| COMM 20 | Elements of Interpersonal Communication (3) |  |
| COMM 30 | Elements of Group Communication (3) |  |
| COMM 45 | Elements of Persuasion (3) |  |
| COMM 60 | Elements of Argumentation and Debate (3) |  |
| COSA 2 | Critical Thinking Using Computers (3) |  |
| COSP 8 | Visual Basic Programming (4) |  |
| COSP 10 | Introduction to C\# Programming (4) |  |
| CS 11 | Introduction to Computer Science- C++ (3) |  |
| CS 21 | Introduction to Computer Science-Java (3) |  |
| COUNS 2 | Making a Difference with Mentoring (3) |  |
| ELECT 225 | Algebra and Trigonometry for Technicians (4) |  |
| ENGL 3/3H | Argumentative and Critical Writing (4) |  |
| ENGL 4/4H | Critical Analysis of Literature (4) |  |
| HIST 47 | Facts, Evidence, and Explanation (3) |  |
| MATH 27 | Probability and Statistics for Elementary Teachers (3) |  |
| MATH 28 | Mathematics for Elementary Teaching I (3) |  |
| MATH 37 | Finite Mathematics (3) |  |
| MATH 40 | Trigonometry (3) |  |
| MATH 45 | College Algebra (4) |  |
| MATH 47 | Calculus for Business (3) |  |
| MATH 50 | Precalculus Math (5) |  |
| MATH 60/60H | First Calculus Course (5) |  |
| MATH 70/70H | Second Calculus Course (5) |  |


| MATH 80 | Third Calculus Course (5) |
| :--- | :--- |
| MATH 84 | Intro Differential Eqns and Linear Alg (5) |
| MATH 120 | Geometry (4) |
| MATH 130 | Intermediate Algebra (5) |
| MATH 130A | Intermediate Algebra, Part A (3) |
| MATH 130B | Intermediate Algebra, Part B (3) |
| PHIL 11 | Critical Thinking (3) |
| PHIL 12 | Introduction to Logic (3) |
| PHIL 22 | Symbolic Logic (3) |
| READ 82 | Proficient Reading (4) |
| READ 83 | Power Reading (3) |
| READ 84 | Analytical Reading (3) |
| STAT 1/1H | Elementary Statistics (4) |

## Units Natural Sciences

One class required (3 units minimum) from either physical sciences or natural sciences.

Note: Some classes include a laboratory component.

## Physical Sciences

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| ASTR 1/1H | Elementary Astronomy (3) |  |
| ASTR 1L | Astronomy Laboratory (2) |  |
| CHEM 1A | General Chemistry (5.5) |  |
| CHEM 1B | General Chemistry (5.5) |  |
| CHEM 2 | Elementary Chemistry (4.5) |  |
| CHEM 3 | Intro to Gen, Organic and Biochemistry (5) |  |
| CHEM 4 | Survey of Chemistry and Physics (4) ${ }^{2}$ |  |
| CHEM 12A | Organic Chemistry (5.5) |  |
| CHEM 12B | Organic Chemistry (5.5) |  |
| ENVRS 1 | Energy for the Future (3) |  |
| GEOL $1 / 1 \mathrm{H}$ | General Physical Geology (4.5) |  |
| GEOL 2 | General Geology, Physical (3) |  |
| GEOL 2F | Geology Field Trips (1) |  |
| GEOL 2 L | General Geology, Physical Geology Lab (1.5) |  |
| GEOL 3/3H | Historical Geology (4.5) |  |
| GEOL 4 | Field Geology (2) |  |
| GEOL 5 | Environmental Geology (3) |  |
| GEOL 7 | Field Studies: Western Environments (2) |  |
| GEOL 10 | Earth Science for Educators (4) |  |
| GEOL 16 | Field Techniques/Geol: So Calif Deserts (3) |  |
| GEOL 17 | Geology of Southern California Deserts (2) |  |
| GEOL 18 | Geology of California (3) |  |
| PGEOG 1 | Physical Geography (3) |  |
| PGEOG 1L | Physical Geography Lab (1.5) |  |
| PGEOG 2 | Weather and Climate (3) |  |
| PHYS 2A | General Physics (4.5) |  |
| PHYS 2B | General Physics (4.5) |  |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics (5.5) |  |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M (4.5) |  |


| PHYS 3C | Physics for Sci. \& Eng. - Modern Physics <br> $(4.5)$ |
| :--- | :--- |
| PHYS 4 | Survey of Chemistry and Physics (4) ${ }^{2}$ |

## Biological Sciences

| Code Number <br> ANAT 1 | Course Title |
| :--- | :--- |
| ANAT 41 | Anatomy \& Physiology (5) |
| ANTHR 1/1H | Physical Anthropology (3) |
| ANTHR 1L | Physical Anthropology Laboratory (2) |
| ANTHR 11 | Physical Anthropology Lecture and Lab (5) |
| BIO 1A | Biology for Science Majors (5) |
| BIO 1B | Biology for Science Majors (5) |
| BIO 2 | General Microbiology (5) |
| BIO 5 | Plant Biology (4) |
| BIO 11 | Environmental Problems of Man (3) |
| BIO 20/20H | Marine Biology (4) |
| BIO 22 | The Marine Environment (3) |
| BIO 25 | Biology and Society (3) |
| BIO 30 | Wildlife Biology (4) |
| BIO 31 | Birds (2) |
| BIO 41/41H | Contemporary Biology (3) |
| BIO 41L | Contemporary Biology Laboratory (1) |
| BIO 60 | Human Biology (4) |
| BIO 60L | Human Biology Laboratory (1) |
| BIO 61 | Introduction to Pathophysiology (3) |
| PHYSI 1 | Human Physiology (5) |
| 2 | A cross-listed course cannot be used in more than one discipline nor |
| can it be used to certify more than one area on Plan A. |  |

## Social Sciences

One class required ( 3 units minimum).
Code Number Course Title Units
Complete one of the following:

| ANTHR 2/2H | Cultural Anthropology (3) |
| :--- | :--- |
| ANTHR 3/3H | Intro to Archaeology (3) |
| ANTHR 4 | Linguistic Anthropology (3) |
| CDECE 45 | Child \& Adolescent Development DS1 (3) |
| CDECE 47 | Human Development (3) |
| COMM 25 | Elements of Intercultural Communication <br> $(3)^{3}$ |
| COMM 40 | Elements of Communication Theory (3) |
| ECON 1/1H | Macro Economic Analysis (3) |
| ECON 2/2H | Micro Economic Analysis (3) |
| ECON 3 | General Concepts in Economics (3) |
| ECON 4 | Contemporary Economic Issues (3) |
| ECON 5 | The Global Economy (3) ${ }^{2}$ |
| ETHST 1/1H | Introduction to Ethnic Studies (3) |
| FASH 32 | History of Fashion (3) |
| GEOG 2 | Elements of Cultural Geography (3) |
| GEOG 5 | The Global Economy (3) ${ }^{2}$ |


| GEOG 40 | World Regional Geography (3) |
| :---: | :---: |
| GEOG 48 | Geography of California (3) |
| GLST 1 | Introduction to Global Studies (3) |
| GLST 2 | Global Issues (3) |
| HLED 10 | Human Sexuality (3) ${ }^{2}$ |
| HLED 21 | Introduction to Public Health (3) |
| HLED 22 | Health and Social Justice (3) |
| HIST 1A/1AH | History of Western (European) Civilization (3) |
| HIST 1B/1BH | History of Western (European) Civilization (3) |
| HIST 2B | World History to 1500 (3) |
| HIST 2C/2CH | World History Since 1500 (3) |
| HIST 7 | Ancient Egypt History (3) |
| HIST 9A | History of China (3) |
| HIST 9B | History of Japan and Korea (3) |
| HIST 9C | History of India and Southeast Asia (3) |
| HIST 18 | History of Mexico (3) |
| HIST 25 | History of Women and Gender in the U.S. (3) |
| HIST 27A | African American History to 1877 (3) |
| HIST 27B | African American History 1877 to present (3) |
| HIST 33 | Introduction to Chicana/o History (3) |
| JOURN 10 | Intro to Global Media Communications (3) |
| PHIL 1/1H | Philosophy of LGBTQIA+ Studies (3) |
| PHIL 10/10H | Introduction to Feminist Philosophy (3) |
| POLSC $2 / 2 \mathrm{H}$ | Comparative Government (3) |
| POLSC 4/4H | World Politics (3) |
| POLSC 9 | The Constitution, Law and Society (3) |
| POLSC 10 | Introduction to Political Science (3) |
| POLSC 11 | Introduction to Political Theory (3) |
| PSYCH 1/1H | Introduction to Psychology (3) |
| PSYCH 2 | Research Methods for Psychology (4) |
| PSYCH 4 | Psychology of Adjustment (3) |
| PSYCH 10 | Human Sexuality (3) ${ }^{3}$ |
| PSYCH 11 | Social Psychology (3) |
| PSYCH 14 | Abnormal Psychology (3) |
| PSYCH 33 | Psychology of Personality (3) |
| PUBAD 1 | Introduction to Public Administration (3) |
| SOCSC 1/1H | Comparative World Cultures (3) ${ }^{2}$ |
| SOCSC 7 | Intro to Ethnic Histories and Identity (3) ${ }^{2}$ |
| SOCIO 1/1H | Introduction to Sociology (3) |
| SOCIO 2 | Modern Social Problems (3) |
| SOCIO 11/11H | Race \& Ethnic Relations in the U.S. (3) |
| SOCIO 13 | Sociology of Latinos and Latinas (3) |
| SOCIO 17 | Introduction to Sociology of Gender (3) |
| SOCIO 40 | Sociology of the Family (3) |
| A cross-listed course cannot be used in more than one discipline nor can it be used to certify more than one area on Plan A. <br> Prior to Fall 2020, COMM 25 was listed in the Communication and Analytical thinking and Social Sciences area of Plan A. Effective Fall 2020, COMM 25 has been removed from the Communication and Analytical Thinking and will only remain in the area of Social Sciences |  |

This change is being made in order to align the course on Plan A with the CSUGE-B (Plan B) and IGETC (Plan C) general education patterns.

## American History

One class required (3 units minimum).
Note: Not required for the A.S. Degree
Note: Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either $8 \mathrm{~A} / 8 \mathrm{AH}$ or $8 \mathrm{~B} / 8 \mathrm{BH}$ to fulfill the history portion of the U.S. History, Constitution, and American Ideals requirements. (Retroactive to Fall 2011)

| Code Number | Course Title <br> Complete one of the following: |
| :--- | :--- |
| HIST 8A/8AH History of the Americas (3) |  |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) (3) |
| HIST 11/11H | Hist./Modern America (Reconstr-Present) <br> $(3)$ |
| HIST 25 | History of Women and Gender in the U.S. (3) |
| HIST 27A | African American History to 1877 (3) |
| HIST 27B | African American History 1877 to present <br> $(3)$ |
| HIST 33 | Introduction to Chicana/o History (3) |

## Political Science

## One class required (3 units minimum).

Note: Not required for the A.S. Degree.

| Code Number | Course Title |
| :--- | :--- |
| Complete one of the following: |  | Units

## Humanities and Arts

One class required (3 units minimum).

| Code Number <br> Complete one of the following: <br> Clite |  |
| :--- | :--- |
| ART $1 / 1$ H | Art and Civilization (3) |
| ART 2/2H | Art and Civilization (3) |
| ART 3 | Modern and Contemporary Art (3) |
| ART 4 | African, Oceanic, Native American Art (3) |
| ART 5 | History of Asian Art (3) |
| ART 9 | Introduction to Art (3) |
| ART 10 | Art Appreciation (3) |
| ART 11 | Latin American Art and Architecture (3) |
| ART 15 | Beginning Drawing (3) |
| ART 23 | Beginning Painting (3) |
| ART 24 | Watercolor, Beginning (3) |
| ART 26 | Figure Painting (3) |
| ART 30 | Three Dimensional Design (3) |
| ART 31 | Two Dimensional Design (3) |
| ART 34 | Applied Design/Crafts (3) |


| ART 35 | Beginning Jewelry (3) |
| :---: | :---: |
| ART 50 | Ceramics I (3) |
| ART 51 | Ceramics II (3) |
| ART 60 | Beginning Sculpture (3) |
| ART 62 | Metal Fabrication Sculpture (4) |
| ART 70 | Printmaking, Silkscreen (3) |
| ART 71 | Printmaking, Intaglio (3) |
| ART 80 | Elements of Photography (3) |
| CHIN 1 | Elementary Chinese 1 (5) |
| CHIN 2 | Elementary Chinese 2 (5) |
| COMM 50 | Elements of Oral Interpretation (3) |
| CART 41 | The Arts and Modern Man (3) |
| DANCE 1 | Dance Forms Through the Ages (3) |
| DANCE 19 | Hip Hop Dance History (3) |
| DMA 15 | Interaction and Web Design (3) |
| ENGL 2 | Introduction to Literature/Composition (4) |
| ENGL 26 | Creative Writing 1 (3) |
| ENGL 32 | Masterpieces/Asian Literature (in English) (3) |
| ENGL 33/33H | Mythology (4) |
| ENGL 34 | Literature for Children and Young Adults (4) |
| ENGL 35 | Interpreting the Short Story (3) |
| ENGL 36 | The Novel (3) |
| ENGL 37 | Science Fiction, Fantasy and Horror (3) |
| ENGL 38 | The Bible as Lit: The Old Testament (3) |
| ENGL 39 | The Bible as Lit: Apocrypha/New Testament (3) |
| ENGL 41 | American Literature I (4) |
| ENGL 42 | American Literature II (4) |
| ENGL 43A | Introduction to Shakespeare (4) |
| ENGL 43B | Introduction to Shakespeare (4) |
| ENGL 44/44H | World Literature I (4) |
| ENGL 45/45H | World Literature II (4) |
| ENGL 46 | Survey of British Literature I (4) |
| ENGL 47 | Survey of British Literature II (4) |
| ENGL 48/48H | Modern \& Contemporary Literature (3) |
| ENGL 49/49H | Film and Literature (3) |
| ENGL 53A | Introduction to Creative Nonfiction (3) |
| FASH 32 | History of Fashion (3) |
| FILM 1 | Introduction to Film Studies (3) |
| FILM 2A | Film History I (3) |
| FILM 2B | Film History II (3) |
| FILM 10 | Film Genres (3) |
| FILM 25 | Introduction to Digital Cinematography (3) |
| FREN 1 | Elementary French (5) |
| FREN 1 C | French 1 for Spanish Speakers (5) |
| FREN 2 | Elementary French (5) |
| FREN 2 C | French 2 for Spanish Speakers (5) |
| FREN 3 | Intermediate French (5) |
| FREN 4 | Intermediate French (5) |
| FREN 25A | Advanced French: Culture in Literature (3) |
| GER 1 | Elementary German (5) |


| GER 2 | Elementary German (5) |
| :---: | :---: |
| HUMAN 1/1H | Comparative World Cultures (3) ${ }^{2}$ |
| HUMAN 7 | Intro to Ethnic Histories and Identity (3) ${ }^{2}$ |
| ITAL 1 | Elementary Italian (5) |
| ITAL 2 | Elementary Italian (5) |
| JAPAN 1 | Elementary Japanese (5) |
| JAPAN 2 | Elementary Japanese (5) |
| JAPAN 3 | Intermediate Japanese (5) |
| JAPAN 4 | Intermediate Japanese (5) |
| KHMER 9 | Khmer for Heritage Speakers (5) |
| KHMER 10 | Khmer for Heritage Speakers (5) |
| LING 1/1H | Linguistics 1 (3) |
| LING $3 \mathrm{H} / 3 \mathrm{H}$ | Honors Introduction to World Languages (3) |
| MUSIC 6 | Introduction to Music Theory (3) |
| MUSIC 28AD | Percussion Ensemble (1.5) |
| MUSIC 32 | History of Jazz (3) |
| MUSIC 33B | Intercultural Music (3) |
| MUSIC 35 | Music of Multicultural America (3) |
| MUSIC 40/40H | Appreciation of Music (3) |
| MUSIC 89 | History of Rock (3) |
| PHIL 3 | Intro to Issues/Phil, Psych \& Religion (3) ${ }^{2}$ |
| PHIL 4 | History of Ancient Philosophy (3) |
| PHIL 5 | History of Modern Philosophy (3) |
| PHIL 6/6H | Introduction to Philosophy (3) |
| PHIL 7/7H | Introduction to Ethics (3) |
| PHIL 8 | Philosophies of Global East and South (3) |
| PHIL 9 | Introduction to Existentialism (3) |
| PHIL 10 | Introduction to Feminist Philosophy (3) |
| PHIL 14 | Philosophy of Religion (3) |
| PHIL 15 | Introduction to Political Philosophy (3) |
| PHIL 16 | Introduction to Business Ethics (3) |
| PHOT 10 | History of Photography (3) |
| R_TV 1 | Introduction to Broadcasting (3) |
| SPAN 1/1H | Elementary Spanish (5) |
| SPAN $2 / 2 \mathrm{H}$ | Elementary Spanish (5) |
| SPAN 3 | Intermediate Spanish (5) |
| SPAN 4 | Intermediate Spanish (5) |
| SPAN 8 | Spoken Spanish (3) |
| SPAN 9/9H | Spanish for Spanish Speakers (5) |
| SPAN 10/10H | Spanish for Spanish Speakers (5) |
| SPAN 25A | Advanced Spanish: Culture in Literature (3) |
| SPAN 25B | Advanced Spanish: History (3) |
| SPAN 25C | Advanced Spanish: Politics, Current Event (3) |
| SPAN 25D | Advanced Spanish: Literature (3) |
| TART 1 | Acting 1-Introduction to Acting (3.5) |
| TART 25 | Introduction to Theatre (3) |
| TART 30 | Introduction to Dramatic Literature (3) |
| A cross-listed course cannot be used in more than one discipline nor can it be used to certify more than one area on Plan A. |  |

## Physical Fitness/Wellness

## One unit required.

Note: Courses fulfilling Physical Fitness/Wellness provide content focused primarily on any of the following: physical activity, fitness, healthy eating, weight management, and stress management.

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| Complete one of the following: |  |  |
| DANCE 3 | Musical Theatre Dance (2) |  |
| DANCE 5 | Tap Dance 1 (2) |  |
| DANCE 6 | Tap Dance 2 (2) |  |
| DANCE 8 | Stretch and Relaxation (2) |  |
| DANCE 12A | Pilates 1 (2) |  |
| DANCE 13 | Turns (2) |  |
| DANCE 14 | Modern Dance 1 (2) |  |
| DANCE 17 | Modern Dance 4 (2) |  |
| DANCE 18A | Folk and Ethnic Dance-African (2) |  |
| DANCE 18B | Folk and Ethnic Dance-Belly Dance (2) |  |
| DANCE 20 | Jazz Dance 1 (2) |  |
| DANCE 21 | Jazz Dance 2 (2) |  |
| DANCE 26 | Ballet 1 (2) |  |
| DANCE 29 | Ballet 4 (2) |  |
| DANCE 31 | Choreography I (2) |  |
| DANCE 32 | Choreography 2 (2) |  |
| DANCE 33 | Dance Choreography Workshop (2) |  |
| DANCE 41/1 | Dance Performance (0.5) |  |
| DANCE 41/2 | Dance Performance (1) |  |
| DANCE 41/3 | Dance Performance (2) |  |
| DANCE 41 | Dance Performance (2.5) |  |
| NUTR 26 | Nutrition for the Active Person (1) |  |
| NUTR 250 | Nutrition in Healthy Cooking (2) |  |
| NUTR 254 | Nutrition for Adults and Aging (1) |  |
| NUTR 255 | Vegetarian Lifestyle (1) |  |
| NUTR 256 | Weight Control \& Energy Balance (2) |  |
| NUTR 260 | Cultural Foods (1) |  |
| NUTR 261 | Cooking for Wellness (1) |  |
| NUTR 262 | Cooking for Singles (1) |  |
| HLED 21 | Introduction to Public Health (3) |  |
| HLED 22 | Health and Social Justice (3) |  |
| HLED 24 | Drugs, Health and Society (3) |  |
| KINA 1 | PE for the Physically Limited (1) |  |
| KING 2 | Ultimate Frisbee (1) |  |
| KING 2B | Ultimate Frisbee (1) |  |
| KING 10 | Badminton (1) |  |
| KING 10B | Badminton (1) |  |
| KING 14 | Basketball (1) |  |
| KING 14B | Basketball (1) |  |
| KING 55 | Lifeguard/Water Safety Training (4) |  |
| KING 65 | Martial Arts (1) |  |
| KING 65B | Martial Arts (1) |  |
| KING 66 | Self-Defense (1) |  |
| KING 66B | Self Defense (1) |  |


| KING 70 | Soccer (1) |
| :---: | :---: |
| KING 70B | Soccer (1) |
| KING 74 | Softball (1) |
| KING 76 | Swimming (1) |
| KING 84 | Tennis (1) |
| KING 86 | Touch Football (1) |
| KING 90 | Volleyball (1) |
| KING 90B | Volleyball (1) |
| KING 92 | Sand Volleyball (1) |
| KING 92B | Sand Volleyball (1) |
| KING 94 | Rugby (1) |
| KINIA 1AD | Baseball (Men) (3) |
| KINIA 2AD | Off-Season Conditioning for Athletes (0.5-3) |
| KINIA 3AD | Basketball (Men) (3) |
| KINIA 4AD | Pre-Season Training for Athletes (0.5-3) |
| KINIA 5AD | Cross Country (Men) (3) |
| KINIA 7AD | Football (Men) (3) |
| KINIA 13AD | Soccer (Men) (3) |
| KINIA 15AD | Swimming (Men) (3) |
| KINIA 19AD | Track \& Field (Men) (3) |
| KINIA 21AD | Volleyball (Men) (3) |
| KINIA 23AD | Water Polo (Men) (3) |
| KINIA 27AD | Basketball (Women) (3) |
| KINIA 29AD | Cross Country (Women) (3) |
| KINIA 33AD | Beach Volleyball (Women) (3) |
| KINIA 35AD | Soccer (Women) (3) |
| KINIA 37AD | Softball (Women) (3) |
| KINIA 39AD | Swimming (Women) (3) |
| KINIA 41AD | Tennis (Women) (3) |
| KINIA 43AD | Track \& Field (Women) (3) |
| KINIA 45AD | Volleyball (Women) (3) |
| KINIA 47AD | Water Polo (Women) (3) |
| KINPF 3 | Aqua Calisthenics (1) |
| KINPF 4 | Deep Water Aerobics (1) |
| KINPF 6 | Cardio Fitness (1) |
| KINPF 8 | Circuit Weight Training (1) |
| KINPF 8B | Circuit Weight Training (1) |
| KINPF 10 | Stretch \& Relaxation (1) |
| KINPF 10B | Stretch \& Relaxation (1) |
| KINPF 12 | Core Conditioning (1) |
| KINPF 12B | Core Conditioning (1) |
| KINPF 14 | Yoga (1) |
| KINPF 17 | Jogging (1) |
| KINPF 17B | Jogging (1) |
| KINPF 18 | Triathlon Training (1) |
| KINPF 18B | Triathlon Training (1) |
| KINPF 21 | Low Impact Cardio (1) |
| KINPF 22 | Physical Fitness (1) |
| KINPF 22B | Physical Fitness (1) |
| KINPF 23 | Cycling Conditioning (1) |
| KINPF 24 | Cardio Cross Fit (1) |
| KINPF 42 | Swimming Fitness (1) |


| KINPF 53 | Resistance Training (1) |
| :--- | :--- |
| KINPF 54 | Weight Training (1) |
| KINPF 54B | Weight Training (1) |
| KINPF 81 | Fitness and Wellness Center (1) |
| KINPF 84A | Fitness and Wellness (2) |
| KINPF 84B | Fitness \& Wellness (2) |
| KINPP 7 | Intro to Community Recreation (3) |
| KINPP 10 | Prevention \& Care of Athletic Injuries (3) |
| KINPP 12 | Techniques of Physical Fitness (2) |
| KINPP 15 | Sports Officiating (Fall) (3) |
| KINPP 17 | Sports Officiating (Spring) (3) |
| TART 5A | Acting 1 - Movement (2) |
| TART 5B | Acting 2-Movement, Mime and Mask (2) |

## Health Education

3 units minimum required.

## Code Number Course Title Units

Complete one of the following:

| HLED 3 | Contemporary Health Issues (3) |
| :--- | :--- |
| HLED 4 | Women's Health Issues (3) |
| HLED 5 | Men's Health Issues (3) |
| NUTR 20 | Nutrition and Life (3) |
| OR |  |
| For VN Program you must complete both |  |
| BIO 60 | Human Biology (4) |
| \& PSYCH 1 | and Introduction to Psychology (3) |
| OR |  |
| For DMI Program you must complete the following or the LVN/RN |  |
| grouping below |  |


| ANAT 41 | Anatomy \& Physiology (5) |
| :--- | :--- |
| \& DMI 60 | and Radiologic Pathology (3) |
| \& PSYCH 1 | and Introduction to Psychology (3) |

OR
For LVN and RN Programs you must complete

| ANAT 1 | Human Anatomy (4) |
| :--- | :--- |
| \& PHYSI 1 | and Human Physiology (5) |
| \& PSYCH 1 | and Introduction to Psychology (3) |

## Other Graduation Requirements

## G.P.A. Requirements

For Graduation: A minimum major, LBCC, and cumulative G.P.A. of 2.0 ("C" average) based on all grades from all colleges from which courses are applied to LBCC degree. Some fields may have additional G.P.A. requirements; check the appropriate curriculum guide.

## Continuous Enrollment

Continuous Enrollment is enrollment in and receiving a grade ( $A, B, C, D$, $F$, $P$ or NP) in at least one class per ACADEMIC YEAR (August to June) at LBCC or any other accredited higher education institution after being initially enrolled at LBCC. Students enrolled in non-credit courses may qualify for continuous enrollment if the course instructor has noted satisfactory progress in the class rollbook. For additional information, see Degrees and Programs section of the catalog.

## Course Totals

General education units completed + field of concentration (Major) units completed + general elective units completed = overall total units. Must equal at least 60 units.

General education units total must equal 25 units for the A.A. or 19 units for the A.S. degree.

For graduation, complete a minimum of 60 A.A./A.S. applicable units (LBCC courses numbered 1-599). Some fields of concentration may require more units. Consult the appropriate curriculum guide at https:// www.lbcc.edu/curriculum-guides (https://www.lbcc.edu/curriculumguides/).

Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (approved by College Curriculum Committee in spring 2012 and applicable retroactively).

## Degree Residency

A minimum of 12 units must be completed at LBCC. Only LBCC courses numbered 1-599 are applicable to the degree.

## Field of Concentration (Major) Residency

For the field of concentration (LBCC Major), $50 \%$ of the requirements as defined by the appropriate curriculum guide must be completed at LBCC.

Number of major units completed at LBCC divided by the number of major units required multiplied by $100=\%$ of major units completed at LBCC (must be 50\% or greater).

## Application for Graduation

To receive a degree you must complete and submit the Application for Graduation form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office or online at http://admissions.lbcc.edu/. Refer to the Schedule of Classes (http://schedule.lbcc.edu) and click the "Important Dates" link to view the actual deadline for each semester.

## CSU GE Breadth (Plan B)

All information contained herein is subject to change without notice. ${ }^{1}$
Since individual plans and circumstances vary, students should consult with a counselor before beginning a program of study to ensure the appropriate General Education pattern is followed.

These requirements are designed for students planning to transfer to the California State University (CSU). Courses on this pattern are lowerdivision general education breadth requirements specific to the California State University System and used to obtain full or partial certification.

Students planning to transfer to the University of California should refer to the IGETC General Education Pattern (Plan C). Students planning to earn an associate degree and NOT transfer should follow Plan A. Both Plans A and C are accessible at https://www.lbcc.edu/general-educationpatterns (https://www.lbcc.edu/general-education-patterns/).

[^0]
## Cross-Listed Courses

A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plan B: CHEM 4 = PHYS 4: Survey of Chemistry and Physics; ECON 5 = GEOG 5: The Global Economy; HUMAN 1/1H =SOCSC 1/1H: Comparative World Cultures/Honors CWC; HUMAN 7三 SOCSC 7: American Pluralism and Identity; HLED 10 = PSYCH 10: Human Sexuality. ETHST $6=$ EDUC 6 Ethnic Studies for Education/Educators.

## Area Requirements

Double-counting of courses listed in more than one area of this general education pattern is NOT allowed. For example, PHIL 3 is listed in areas C2 (Humanities) and D (Social Sciences), but it may be used to satisfy only one of these requirements.

## Area A1: Oral Communication

One class required (3 units minimum).

| Code Number | Course Title |
| :--- | :--- |
| Complete one of the following: | Units |
| COMM 10/10H | Elements of Public Speaking (3) |
| COMM 20 | Elements of Interpersonal Communication <br> $(3)$ |
| COMM 30 | Elements of Group Communication (3) |
| COMM 45 | Elements of Persuasion (3) |
| COMM 60 | Elements of Argumentation and Debate (3) |

## Area A2: Written Communication

One class required (3 units minimum).

| Code Number | Course Title |
| :--- | :--- |
| Complete one of the following: | Units |
| ENGL 1/1H | Reading and Composition (4) |
| ENGL 1S | Reading and Composition with Support (5) |
| ESL 1S | College Writing for Non-Native Speakers (5) |

## Area A3: Critical Thinking

One class required (3 units minimum).
Code Number Course Title Units

Complete one of the following:

| COMM 60 | Elements of Argumentation and Debate (3) |
| :--- | :--- |
| COSA 2 | Critical Thinking Using Computers (3) |
| ENGL 3/3H | Argumentative and Critical Writing (4) |
| ENGL 4/4H | Critical Analysis of Literature (4) |
| HIST 47 | Facts, Evidence, and Explanation (3) |
| PHIL 11 | Critical Thinking (3) |
| PHIL 12 | Introduction to Logic (3) |
| PHIL 22 | Symbolic Logic (3) |
| READ 84 | Analytical Reading (3) |

## Area B: Scientific Inquiry

Two classes required ( 6 units minimum) - ONE from physical science (B1) and ONE from biological science (B2); one class must include an associated laboratory component (B3).

Note: Some classes listed have a laboratory component included and some have a separate class listing for the laboratory component. Classes with a lecture/laboratory combination are indicated by an asterisk

## Area B1: Physical Science

One class required (3 units minimum). Students can choose to take the laboratory component from either B1 or B2.

Code Number Course Title Units
Complete one of the following:

| ASTR 1/1H | Elementary Astronomy (3) |
| :---: | :---: |
| ASTR 1L | Astronomy Laboratory (2) |
| CHEM 1A | General Chemistry (5.5)* |
| CHEM 1B | General Chemistry (5.5)* |
| CHEM 2 | Elementary Chemistry (4.5) * |
| CHEM 3 | Intro to Gen, Organic and Biochemistry (5) * |
| CHEM 4 | Survey of Chemistry and Physics (4) ${ }^{*} 2$ |
| ENVRS 1 | Energy for the Future (3) |
| GEOL 1/1H | General Physical Geology (4.5) * |
| GEOL 2 | General Geology, Physical (3) |
| GEOL 2F | Geology Field Trips (1) |
| GEOL 2L | General Geology, Physical Geology Lab (1.5) |
| GEOL 3/3H | Historical Geology (4.5) * |
| GEOL 4 | Field Geology (2) * |
| GEOL 5 | Environmental Geology (3) |
| GEOL 7 | Field Studies: Western Environments (2) |
| GEOL 10 | Earth Science for Educators (4) * |
| GEOL 18 | Geology of California (3) |
| PGEOG 1 | Physical Geography (3) |
| PGEOG 1L | Physical Geography Lab (1.5) |
| PGEOG 2 | Weather and Climate (3) |
| PHYS 2A | General Physics (4.5) * |
| PHYS 2B | General Physics (4.5) * |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics (5.5)* |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M (4.5) * |
| PHYS 3C | Physics for Sci. \& Eng. - Modern Physics (4.5)* |
| PHYS 4 | Survey of Chemistry and Physics (4) ${ }^{*} 2$ |

2 A cross-listed course cannot be used in more than one discipline nor can it be used to certify more than one area on Plan B.

## Area B2: Biological Sciences

One class required (3 units minimum). Students can choose to take the laboratory component from either B1 or B2.

## Code Number Course Title

Units
Complete one of the following:

| ANAT 1 | Human Anatomy (4) |
| :--- | :--- |
| ANAT 41 | Anatomy \& Physiology (5) * |


| ANTHR 1/1H | Physical Anthropology (3) ${ }^{*}$ |
| :--- | :--- |
| ANTHR 1L | Physical Anthropology Laboratory (2) |
| ANTHR 11 | Physical Anthropology Lecture and Lab (5) * |
| BIO 1A | Biology for Science Majors (5) * |
| BIO 1B | Biology for Science Majors (5) |
| BIO 2 | General Microbiology (5) $^{*}$ |
| BIO 5 | Plant Biology (4) |

## Area B3: Laboratory Activity

One of the classes selected from B1 or B2 must include an associated laboratory component.

## Area B4: Mathematics/Quantitative Reasoning

One class required (3 units minimum).
Note: Effective Fall 2021, students who complete GBUS 10 may use it to fulfill Area B4. Students who completed this course between Fall 2014 through Summer 2019 may only use it to fulfill Area E; GBUS 10 was removed from Area E effective Fall 2019.

Code Number Course Title Units
Complete one of the following:

| GBUS 10 | Personal Finance (3) |
| :--- | :--- |
| MATH 27 | Probability and Statistics for Elementary <br> Teachers (3) |
| MATH 28 | Mathematics for Elementary Teaching I (3) |
| MATH 37 | Finite Mathematics (3) |
| MATH 40 | Trigonometry (3) |
| MATH 45 | College Algebra (4) |
| MATH 47 | Calculus for Business (3) |
| MATH 50 | Precalculus Math (5) |
| MATH 60/60H | First Calculus Course (5) |
| MATH 70/70H | Second Calculus Course (5) |
| MATH 80 | Third Calculus Course (5) |
| MATH 84 | Intro Differential Eqns and Linear Alg (5) |
| STAT 1/1H | Elementary Statistics (4) |

## Area C: Arts and Humanities

Three classes required (9 units minimum). Students must take one class from C1 and C2 plus an additional class from either area for a total of 3 classes.

## Area C1: Arts

Code Number Course Title Units

Complete one or two of the following:

| ARCHT 80 | Arch. History - Ancient to Medieval (3) |
| :--- | :--- |
| ARCHT 81 | Arch. History - Medieval to Renaissance (3) |
| ART 1/1H | Art and Civilization (3) |
| ART 2/2H | Art and Civilization (3) |
| ART 3 | Modern and Contemporary Art (3) |
| ART 4 | African, Oceanic, Native American Art (3) |
| ART 5 | History of Asian Art (3) |
| ART 9 | Introduction to Art (3) |
| ART 10 | Art Appreciation (3) |
| ART 11 | Latin American Art and Architecture (3) |
| ART 30 | Three Dimensional Design (3) |
| ART 31 | Two Dimensional Design (3) |
| ART 80 | Elements of Photography (3) |
| COMM 50 | Elements of Oral Interpretation (3) |
| CART 41 | The Arts and Modern Man (3) |
| DANCE 1 | Dance Forms Through the Ages (3) |
| DANCE 19 | Hip Hop Dance History (3) |
| FASH 32 | History of Fashion (3) |
| FILM 1 | Introduction to Film Studies (3) |
| FILM 2A | Film History I (3) |
| FILM 2B | Film History II (3) |
| FILM 10 | Film Genres (3) |
| MUSIC 6 | Introduction to Music Theory (3) |
| MUSIC 32 | History of Jazz (3) |
| MUSIC 33B | Intercultural Music (3) |
| MUSIC 35 | Music of Multicultural America (3) |
| MUSIC 40/40H | Appreciation of Music (3) |
| MUSIC 89 | History of Rock (3) |
| PHOT 10 | History of Photography (3) |
| R_TV 1 | Introduction to Broadcasting (3) |
| TART 1 | Acting 1-Introduction to Acting (3.5) |
| TART 25 | Introduction to Theatre (3) |
| TART 30 | Introduction to Dramatic Literature (3) |

## Area C2: Humanities

| Code Number | Course Title |
| :--- | :--- |
| Complete one or two of the following: | Units |
| ASL 1 | American Sign Language 1 (4) |
| ASL 2 | American Sign Language 2 (4) |
| ASL 3 | American Sign Language 3 (4) |
| ASL 4 | American Sign Language 4 (4) |
| ASL 24 | American Deaf Cultures (3) |
| CHIN 1 | Elementary Chinese 1 (5) |
| CHIN 2 | Introduction to Literature/Composition (4) |
| ENGL 2 | Creative Writing 1 (3) <br> ENGL 26 |
| ENGL 32 | Masterpieces/Asian Literature (in English) <br> (3) <br> Mythology (4) |
| ENGL 33/33H |  |


| ENGL 34 | Literature for Children and Young Adults (4) |
| :---: | :---: |
| ENGL 35 | Interpreting the Short Story (3) |
| ENGL 36 | The Novel (3) |
| ENGL 37 | Science Fiction, Fantasy and Horror (3) |
| ENGL 38 | The Bible as Lit: The Old Testament (3) |
| ENGL 39 | The Bible as Lit: Apocrypha/New Testament (3) |
| ENGL 41 | American Literature I (4) |
| ENGL 42 | American Literature II (4) |
| ENGL 43A | Introduction to Shakespeare (4) |
| ENGL 43B | Introduction to Shakespeare (4) |
| ENGL 44/44H | World Literature I (4) |
| ENGL 45/45H | World Literature II (4) |
| ENGL 46 | Survey of British Literature I (4) |
| ENGL 47 | Survey of British Literature II (4) |
| ENGL 48/48H | Modern \& Contemporary Literature (3) |
| ENGL 49/49H | Film and Literature (3) |
| ENGL 53A | Introduction to Creative Nonfiction (3) |
| FREN 1 | Elementary French (5) |
| FREN 2 | Elementary French (5) |
| FREN 3 | Intermediate French (5) |
| FREN 4 | Intermediate French (5) |
| FREN 25A | Advanced French: Culture in Literature (3) |
| GER 1 | Elementary German (5) |
| GER 2 | Elementary German (5) |
| HIST 1A/1AH | History of Western (European) Civilization (3) |
| HIST 1B/1BH | History of Western (European) Civilization (3) |
| HIST 2B | World History to 1500 (3) |
| HIST 2C/2CH | World History Since 1500 (3) |
| HIST 7 | Ancient Egypt History (3) |
| HIST 8A/8AH | History of the Americas (3) |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |
| HIST 9A | History of China (3) |
| HIST 9B | History of Japan and Korea (3) |
| HIST 9C | History of India and Southeast Asia (3) |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) (3) |
| HIST 11/11H | Hist./Modern America (Reconstr-Present) (3) |
| HIST 18 | History of Mexico (3) |
| HIST 25 | History of Women and Gender in the U.S. (3) |
| HIST 27A | African American History to 1877 (3) |
| HIST 27B | African American History 1877 to present (3) |
| HIST 33 | Introduction to Chicana/o History (3) |
| HUMAN 1/1H | Comparative World Cultures (3) ${ }^{2}$ |
| HUMAN 7 | Intro to Ethnic Histories and Identity (3) ${ }^{2}$ |
| ITAL 1 | Elementary Italian (5) |
| ITAL 2 | Elementary Italian (5) |
| JAPAN 1 | Elementary Japanese (5) |
| JAPAN 2 | Elementary Japanese (5) |
| JAPAN 3 | Intermediate Japanese (5) |


| JAPAN 4 | Intermediate Japanese (5) |
| :--- | :--- |
| KHMER 9 | Khmer for Heritage Speakers (5) |
| KHMER 10 | Khmer for Heritage Speakers (5) |
| LING 1/1H | Linguistics 1 (3) |
| LING 3/3H | Introduction to World Languages (3) |
| PHIL 3 | Intro to Issues/Phil, Psych \& Religion (3) |

## Area D: Social Sciences

## Two classes required ( 6 units minimum).

Note: New students starting at LBCC beginning Fall 2021 or later must complete 6 semester units or 9 quarter units in either the same or different disciplines for CSUGE certification. Students who started LBCC prior to Fall 2021 and have maintained continuous enrollment must complete 9 semester units or 12 quarter units in at least two different disciplines for CSUGE certification.

| Code Number | Course Title |
| :--- | :--- |
| Complete three of the following: |  |
| ANTHR 2/2H Cultural Anthropology (3) <br> ANTHR 3/3H Intro to Archaeology (3) <br> ANTHR 4 Linguistic Anthropology (3) <br> ANTHR 10 Magic, Witchcraft and Religion (3) <br> CDECE 45 Child \& Adolescent Development DS1 (3) <br> CDECE 47 Human Development (3) <br> COMM 25Elements of Intercultural Communication <br> COMM 40 |  |


| ECON 1/1H | Macro Economic Analysis (3) |
| :---: | :---: |
| ECON 2/2H | Micro Economic Analysis (3) |
| ECON 3 | General Concepts in Economics (3) |
| ECON 4 | Contemporary Economic Issues (3) |
| ECON 5 | The Global Economy (3) ${ }^{2}$ |
| ETHST 1/1H | Introduction to Ethnic Studies (3) |
| GLST 1 | Introduction to Global Studies (3) |
| GLST 2 | Global Issues (3) |
| HIST 1A/1AH | History of Western (European) Civilization (3) |
| HIST 1B/1BH | History of Western (European) Civilization (3) |
| HIST 2B | World History to 1500 (3) |
| HIST 2C/2CH | World History Since 1500 (3) |
| HIST 7 | Ancient Egypt History (3) |
| HIST 8A/8AH | History of the Americas (3) |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |
| HIST 9A | History of China (3) |
| HIST 9B | History of Japan and Korea (3) |
| HIST 9C | History of India and Southeast Asia (3) |
| HIST 18 | History of Mexico (3) |
| HIST 25 | History of Women and Gender in the U.S. (3) |
| HIST 27A | African American History to 1877 (3) |
| HIST 27B | African American History 1877 to present (3) |
| HIST 33 | Introduction to Chicana/o History (3) |
| HLED 21 | Introduction to Public Health (3) |
| HLED 22 | Health and Social Justice (3) |
| HUMAN 1/1H | Comparative World Cultures (3) ${ }^{2}$ |
| HUMAN 7 | Intro to Ethnic Histories and Identity (3) ${ }^{2}$ |
| JOURN 10 | Intro to Global Media Communications (3) |
| PHIL 1/1H | Philosophy of LGBTQIA+ Studies (3) |
| PHIL 3 | Intro to Issues/Phil, Psych \& Religion (3) ${ }^{2}$ |
| PHIL 10/10H | Introduction to Feminist Philosophy (3) |
| PHIL 15 | Introduction to Political Philosophy (3) |
| PHIL 16 | Introduction to Business Ethics (3) |
| POLSC 1/1H | Introduction to Government (3) |
| POLSC $2 / 2 \mathrm{H}$ | Comparative Government (3) |
| POLSC 3 | Issues of American Government (3) |
| POLSC 4 | World Politics (3) |
| POLSC 9 | The Constitution, Law and Society (3) |
| POLSC 10 | Introduction to Political Science (3) |
| POLSC 11 | Introduction to Political Theory (3) |
| PSYCH 1/1H | Introduction to Psychology (3) |
| PSYCH 11/11H | Social Psychology (3) |
| PSYCH 14 | Abnormal Psychology (3) |
| PSYCH 33 | Psychology of Personality (3) |
| PUBAD 1 | Introduction to Public Administration (3) |
| SOCSC 1/1H | Comparative World Cultures (3) ${ }^{2}$ |
| SOCSC 7 | Intro to Ethnic Histories and Identity (3) ${ }^{2}$ |
| SOCIO 1/1H | Introduction to Sociology (3) |
| SOCIO 2 | Modern Social Problems (3) |
| SOCIO 11/11H | Race \& Ethnic Relations in the U.S. (3) |


| SOCIO 13 | Sociology of Latinos and Latinas (3) |
| :--- | :--- |
| SOCIO 17 | Introduction to Sociology of Gender (3) |
| SOCIO 40 | Sociology of the Family (3) |
| 2 | A cross-listed course cannot be used in more than one discipline nor |
| can it be used to certify more than one area on Plan B. |  |

## Area E: Lifelong Learning and SelfDevelopment

One class required (3 units minimum) from either LIST A or LIST B.
Note: LIST B requires completion of two classes for a total of 3 units minimum. To determine which Kinesiology activity courses satisfy this area requirement, check the approved course list for CSU GE-Breadth Certification Area E located on the ASSIST website at https://assist.org/.

| Code Number | Course Title |
| :--- | :--- |
| Complete 3 units from either LIST A or LIST B: |  |
| LIST A |  |
| CDECE 45 | Child \& Adolescent Development DS1 (3) |
| CDECE 47 | Human Development (3) |
| COUNS 2 | Making a Difference with Mentoring (3) |
| COUNS 7 | College and Professional Success (3) |
| COUNS 50 | Career Planning and College Success (3) |
| NUTR 20 | Nutrition and Life (3) |
| HLED 3 | Contemporary Health Issues (3) |
| HLED 4 | Memen's Health Issues (3) |
| HLED 5 | Human Sexuality (3) ${ }^{2}$ |
| HLED 10 | Drugs, Health and Society (3) |
| HLED 24 | Introduction to Kinesiology (3) |
| KINPP 1 | Lifetime Wellness Principles (3) |
| KINPP 4 | Learning and Academic Strategies (3) |
| LEARN 11/11H | Psychology of Adjustment (3) |
| PSYCH 4 | Human Sexuality (3) |
| PSYCH 10 |  |
| LIST B | Techniques of Physical Fitness (2) |
| KINPP 12 |  |

\& 1 unit of a Kinesiology activity class
${ }^{2}$ A cross-listed course cannot be used in more than one discipline nor can it be used to certify more than one area on Plan B.

## Area F: Ethnic Studies

One class required (3 units minimum).
Note: New students starting at LBCC beginning Fall 2021 or later are required to complete 3 semester units or 4 quarter units for CSUGE certification. Students who started at LBCC prior to Fall 2021 and have maintained continuous enrollment are not required to complete Area F for CSUGE certification.

| Code Number Course Title |
| :--- |
| Complete one of the following: |
| ETHST $1 / 1 \mathrm{H} \quad$ Introduction to Ethnic Studies (3) |

ETHST 6 Ethnic Studies for Education/Educators (3)
EDUC 6
Ethnic Studies for Education/Educators (3)

## U.S. History, Constitution, and American Ideals - CSU Graduation Requirement

Two classes required ( 6 units minimum) - ONE class from history and ONE class from political science.

This is a CSU graduation requirement that can be completed after transferring to a CSU.

Note: Only courses completed at LBCC may be used to certify this requirement. Effective Fall 2016, students are no longer required to take both HIST 8A/8AH and HIST 8B/8BH at LBCC. Students may now take either course to meet the History portion of the U.S. History, Constitution, and American Ideals graduation requirement (Retroactive to Fall 2004).

The following courses may be used to satisfy both the GE and U.S. History requirements: HIST 8A/8AH, HIST 8B/8BH, HIST 10/10H, HIST 11/11H, HIST 27A , HIST 27B , HIST 33 and POLSC 1/1H (retroactive to Fall 2011).

## History

One class required (3 units minimum).
Code Number Course Title Units
Complete one of the following:

| HIST 8A/8AH | History of the Americas (3) |
| :--- | :--- |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) (3) |
| HIST 11/11H | Hist./Modern America (Reconstr-Present) <br> (3) |
| HIST 27A | African American History to 1877 (3) |
| HIST 27B | African American History 1877 to present <br> $(3)$ |
| HIST 33 | Introduction to Chicana/o History (3) |

## Political Science

One class required (3 units minimum).
Code Number Course Title
Complete one of the following:
POLSC $1 / 1 \mathrm{H} \quad$ Introduction to Government (3)

## Additional Information

## Admissions

Effective Fall 2005, the CSU requires completion of a minimum of 60 transferable units for junior standing for students not eligible for admission to CSU from high school. LBCC courses numbered 1-99 will transfer to all CSU campuses.

As part of the 60 units, 30 units of General Education must be completed, including the Golden Four (Areas A1, A2, A3, and B4). The Golden Four must be completed with a grade of " C "/" P " or better for admissions purposes.

A maximum of 70 transferable semester units earned at a California community college will be accepted by a CSU toward a Bachelor's Degree.

Generally, a 2.0 overall G.P.A. in CSU transferable units (LBCC courses numbered 1-99) is the required minimum. Certain impacted/popular majors and universities may require a higher G.P.A. (See a LBCC counselor for more information.)

The online application for CSU is located at www2.calstate.edu/apply (https://www2.calstate.edu/apply/).

Priority Application Filing Periods:

- Fall Quarter/Semester. October 1 - November 30
- Winter Quarter/Semester. June 1-30
- Spring Quarter/Semester. August 1-31
- Summer Quarter. February 1-28
**Check with a counselor for open filing periods**


## Certification

Certification is the process whereby Long Beach City College approves lower-division general education coursework for CSU transfer. Only courses taken from approved lists are eligible for certification for CSU GEBreadth. When a transcript is certified by LBCC, it is marked to indicate that the lower-division general education requirements for CSU have been met. Completion of the full 39 unit pattern is recommended. With permission of the CSU, students may transfer to a CSU and return to LBCC to complete classes for certification. Students must see a counselor to use non-LBCC courses on this plan.

## Certification requirements:

A minimum of 12 General Education units must be completed in residence at LBCC in order to qualify for certification.

The following requirements, known as "The Golden Four,", must each be completed:

- Area A1 Completed
- Area A2 Completed
- Area A3 Completed
- Area B4 Completed


## IGETC Pattern (Plan C)

All information contained herein is subject to change without notice. ${ }^{1}$
Since individual plans and circumstances vary, students should consult with a counselor before beginning a program of study to ensure the appropriate General Education pattern is followed.

These requirements are designed for students planning to transfer to the University of California (UC) system or the California State University (CSU) system. Courses on this pattern are lower-division general education requirements unique to IGETC and established by the UC and CSU. Students MUST meet with an LBCC counselor to initiate and complete the IGETC Certification process.

Students who wish to complete an Associate Degree and do not plan to transfer should NOT follow this plan.

A grade of "C" or better is required in each course.

[^1]
## Cross-Listed Courses

A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plan C: CHEM $4=$ PHYS 4: Survey of Chemistry and Physics; ECON 5 = GEOG 5: The Global Economy; HUMAN 1/1H = SOCSC 1/1H: Comparative World Cultures/ Honors CWC; HUMAN 7= SOCSC 7: American Pluralism and Identity; HLED 10 = PSYCH 10: Human Sexuality; ETHST 6 = EDUC 6: Ethnic Studies for Education/Educators.

## Area Requirements

Double-counting of courses listed in more than one area of this general education pattern is NOT allowed. For example, PHIL 3 is listed in areas 3B (Humanities) and 4 (Social Sciences ), but it may be used to satisfy only one of these requirements.

## Area 1A: English Composition

One class required (3 units minimum).

| Code Number | Course Title |
| :--- | :--- |
| Complete one of the following: |  |
| ENGL 1/1H | Reading and Composition (4) |
| ENGL 1S | Reading and Composition with Support (5) |
| ESL 1S | College Writing for Non-Native Speakers (5) |

## Area 1B: Critical Thinking and Composition

One class required (3 units minimum).
Code Number Course Title Units

Complete one of the following:

| ENGL 3/3H | Argumentative and Critical Writing (4) |
| :--- | :--- |
| ENGL 4/4H | Critical Analysis of Literature (4) |
| HIST 47 | Facts, Evidence, and Explanation (3) |
| PHIL 11 | Critical Thinking (3) |
| READ 84 | Analytical Reading (3) |

## Area 1C: Oral Communication (Required by CSU only)

One class required (3 units minimum).
Code Number Course Title Units

Complete one of the following:

| COMM 10/10H | Elements of Public Speaking (3) |
| :--- | :--- |
| COMM 30 | Elements of Group Communication (3) |
| COMM 45 | Elements of Persuasion (3) |
| COMM 60 | Elements of Argumentation and Debate (3) |

## Area 2: Mathematical Concepts and Quantitative Reasoning

One class required (3 units minimum).
Code Number Course Title Units

Complete one of the following:

| MATH 37 | Finite Mathematics (3) |
| :--- | :--- |
| MATH 45 | College Algebra (4) ${ }^{2}$ |
| MATH 47 | Calculus for Business (3) $^{2}$ |
| MATH 50 | Precalculus Math (5) ${ }^{2}$ |
| MATH 60/60H | First Calculus Course (5) |
| MATH 70/70H | Second Calculus Course (5) |
| MATH 80 | Third Calculus Course (5) |
| MATH 84 | Intro Differential Eqns and Linear Alg (5) |
| STAT 1/1H | Elementary Statistics (4) |

${ }^{2}$ Course limitation may exist. For an explanation of limitation, please refer to the UC Transfer Course Agreement available on the ASSIST website at www.assist.org (https://www.assist.org/).

## Area 3: Arts and Humanities

Three classes required (9 units minimum). Students must take one class from Area 3A and Area 3B plus an additional class from either area for a total of 3 classes.

## Area 3A: Arts

Code Number Course Title Units

Complete one or two of the following:

| ARCHT 80 | Arch. History - Ancient to Medieval (3) |
| :---: | :---: |
| ARCHT 81 | Arch. History - Medieval to Renaissance (3) |
| ART 1/1H | Art and Civilization (3) |
| ART 2/2H | Art and Civilization (3) |
| ART 3 | Modern and Contemporary Art (3) |
| ART 4 | African, Oceanic, Native American Art (3) |
| ART 5 | History of Asian Art (3) |
| ART 10 | Art Appreciation (3) |
| ART 11 | Latin American Art and Architecture (3) |
| CART 41 | The Arts and Modern Man (3) |
| DANCE 1 | Dance Forms Through the Ages (3) |
| DANCE 19 | Hip Hop Dance History (3) |
| FASH 32 | History of Fashion (3) |
| FILM 1 | Introduction to Film Studies (3) |
| FILM 2A | Film History I (3) |
| FILM 2B | Film History II (3) |
| FILM 10 | Film Genres (3) |
| MUSIC 32 | History of Jazz (3) |
| MUSIC 33B | Intercultural Music (3) |
| MUSIC 35 | Music of Multicultural America (3) |
| MUSIC 40/40H | Appreciation of Music (3) |
| MUSIC 89 | History of Rock (3) |
| PHOT 10 | History of Photography (3) |
| TART 25 | Introduction to Theatre (3) |
| TART 30 | Introduction to Dramatic Literature (3) |

## Area 3B: Humanities

|  |  | Units |
| :---: | :---: | :---: |
| Complete one or two of the following: |  |  |
| ASL 1 | American Sign Language 1 (4) |  |
| ASL 2 | American Sign Language 2 (4) |  |
| ASL 3 | American Sign Language 3 (4) |  |
| ASL 4 | American Sign Language 4 (4) |  |
| ASL 24 | American Deaf Cultures (3) |  |
| ENGL 32 | Masterpieces/Asian Literature (in English) (3) |  |
| ENGL 33/33H | Mythology (4) |  |
| ENGL 34 | Literature for Children and Young Adults (4) |  |
| ENGL 35 | Interpreting the Short Story (3) |  |
| ENGL 36 | The Novel (3) |  |
| ENGL 37 | Science Fiction, Fantasy and Horror (3) |  |
| ENGL 38 | The Bible as Lit: The Old Testament (3) |  |
| ENGL 39 | The Bible as Lit: Apocrypha/New Testament (3) |  |
| ENGL 41 | American Literature I (4) |  |
| ENGL 42 | American Literature II (4) |  |
| ENGL 43A | Introduction to Shakespeare (4) |  |
| ENGL 43B | Introduction to Shakespeare (4) |  |
| ENGL 44/44H | World Literature I (4) |  |
| ENGL 45/45H | World Literature II (4) |  |
| ENGL 46 | Survey of British Literature I (4) |  |
| ENGL 47 | Survey of British Literature II (4) |  |
| ENGL 48/48H | Modern \& Contemporary Literature (3) |  |
| ENGL 49/49H | Film and Literature (3) ${ }^{2}$ |  |
| FREN 3 | Intermediate French (5) |  |
| FREN 4 | Intermediate French (5) |  |
| FREN 25A | Advanced French: Culture in Literature (3) |  |
| HIST 1A/1AH | History of Western (European) Civilization (3) |  |
| HIST 1B/1BH | History of Western (European) Civilization (3) |  |
| HIST 2B | World History to 1500 (3) |  |
| HIST 2C/2CH | World History Since 1500 (3) |  |
| HIST 7 | Ancient Egypt History (3) |  |
| HIST 8A/8AH | History of the Americas (3) |  |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |  |
| HIST 9A | History of China (3) |  |
| HIST 9B | History of Japan and Korea (3) |  |
| HIST 9C | History of India and Southeast Asia (3) |  |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) (3) ${ }^{2}$ |  |
| HIST 11/11H | Hist./Modern America (Reconstr-Present) $(3)^{2}$ |  |
| HIST 18 | History of Mexico (3) |  |
| HIST 25 | History of Women and Gender in the U.S. (3) |  |
| HIST 27A | African American History to 1877 (3) |  |
| HIST 27B | African American History 1877 to present (3) |  |
| HIST 33 | Introduction to Chicana/o History (3) |  |
| HUMAN 1/1H | Comparative World Cultures (3) ${ }^{3}$ |  |



## Area 4: Social and Behavioral Sciences

Two classes required ( 6 units minimum). Students must take courses from at least two different disciplines.

- Effective Fall 2023 students who enroll in a CA community college in Fall 2023 or later must complete 2 courses ( 6 units minimum) in Area 4.
- Students who began at a CA community college prior to Fall 2023 must complete 3 courses ( 9 units minimum) in Area 4. Consult your LBCC counselor for more details or limitations.

| Code Number | Course Title |
| :--- | :--- |
| Complete three of the following: |  |
| ANTHR 2/2H | Cultural Anthropology (3) |
| ANTHR 3/3H | Intro to Archaeology (3) |
| ANTHR 4 | Linguistic Anthropology (3) |
| ANTHR 10 | Magic, Witchcraft and Religion (3) |
| CDECE 45 | Child \& Adolescent Development DS1 (3) |


| CDECE 47 | Human Development (3) |
| :---: | :---: |
| COMM 25 | Elements of Intercultural Communication (3) |
| COMM 40 | Elements of Communication Theory (3) |
| ECON 1/1H | Macro Economic Analysis (3) |
| ECON 2/2H | Micro Economic Analysis (3) |
| ECON 3 | General Concepts in Economics (3) |
| ECON 4 | Contemporary Economic Issues (3) |
| ECON 5 | The Global Economy (3) ${ }^{\text {2,3 }}$ |
| GEOG 2 | Elements of Cultural Geography (3) |
| GEOG 5 | The Global Economy (3) ${ }^{3}$ |
| GEOG 40 | World Regional Geography (3) |
| GLST 1 | Introduction to Global Studies (3) |
| GLST 2 | Global Issues (3) |
| HLED 21 | Introduction to Public Health (3) |
| HLED 22 | Health and Social Justice (3) |
| HUMAN 1/1H | Comparative World Cultures (3) ${ }^{3}$ |
| HUMAN 7 | Intro to Ethnic Histories and Identity (3) ${ }^{3}$ |
| JOURN 10 | Intro to Global Media Communications (3) |
| PHIL 1/1H | Philosophy of LGBTQIA+ Studies (3) |
| PHIL 3 | Intro to Issues/Phil, Psych \& Religion (3) ${ }^{3}$ |
| PHIL 10/10H | Introduction to Feminist Philosophy (3) |
| PHIL 15 | Introduction to Political Philosophy (3) |
| PHIL 16 | Introduction to Business Ethics (3) |
| POLSC 1/1H | Introduction to Government (3) |
| POLSC 2/2H | Comparative Government (3) |
| POLSC 3 | Issues of American Government (3) |
| POLSC 4/4H | World Politics (3) |
| POLSC 9 | The Constitution, Law and Society (3) |
| POLSC 10 | Introduction to Political Science (3) |
| POLSC 11 | Introduction to Political Theory (3) |
| PSYCH 1/1H | Introduction to Psychology (3) |
| PSYCH 11/11H | Social Psychology (3) |
| PSYCH 14 | Abnormal Psychology (3) |
| SOCIO 1/1H | Introduction to Sociology (3) |
| SOCIO 2 | Modern Social Problems (3) |
| SOCIO 11/11H | Race \& Ethnic Relations in the U.S. (3) |
| SOCIO 13 | Sociology of Latinos and Latinas (3) |
| SOCIO 17 | Introduction to Sociology of Gender (3) |
| SOCIO 40 | Sociology of the Family (3) |
| SOCSC 1/1H | Comparative World Cultures (3) ${ }^{3}$ |
| SOCSC 7 | Intro to Ethnic Histories and Identity (3) ${ }^{3}$ |

${ }^{2}$ Course limitation may exist. For an explanation of limitation, please refer to the UC Transfer Course Agreement available on the ASSIST website at www.assist.org (https://www.assist.org/).
${ }^{3}$ A cross-listed course cannot be used in more than one discipline nor can it be used to certify more than one area on Plan C.

## Area 5: Physical and Biological Sciences

Two classes required (7 units minimum) - ONE from physical science (5A) and ONE from biological science (5B); One class in this area must include an associated laboratory component (5C).

Note: Some classes listed have a laboratory component included and some have a separate class listing for the laboratory component. Classes with a lecture/laboratory combination are indicated by an asterik.

## Area 5A: Physical Sciences

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| Complete one of the following: |  | 3 |
| ASTR 1/1H | Elementary Astronomy (3) |  |
| ASTR 1L | Astronomy Laboratory (2) |  |
| CHEM 1A | General Chemistry (5.5)* |  |
| CHEM 1B | General Chemistry (5.5)* |  |
| CHEM 2 | Elementary Chemistry (4.5) ${ }^{\text {*, } 2}$ |  |
| CHEM 3 | Intro to Gen, Organic and Biochemistry (5) * |  |
| CHEM 4 | Survey of Chemistry and Physics (4) ${ }^{*} 3$ |  |
| GEOL 1/1H | General Physical Geology (4.5) ${ }^{*}$, 2 |  |
| GEOL 2 | General Geology, Physical (3) ${ }^{2}$ |  |
| GEOL 2L | General Geology, Physical Geology Lab (1.5) |  |
| GEOL 3/3H | Historical Geology (4.5) * |  |
| GEOL 5 | Environmental Geology (3) |  |
| GEOL 10 | Earth Science for Educators (4)* |  |
| GEOL 18 | Geology of California (3) |  |
| PGEOG 1 | Physical Geography (3) |  |
| PGEOG 1L | Physical Geography Lab (1.5) |  |
| PGEOG 2 | Weather and Climate (3) |  |
| PHYS 2A | General Physics (4.5) ${ }^{\text {* }}$ 2 |  |
| PHYS 2B | General Physics (4.5) ${ }^{*} 2$ |  |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics (5.5) ${ }^{*} 2$ |  |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M (4.5) ${ }^{*}$, 2 |  |
| PHYS 3C | Physics for Sci. \& Eng. - Modern Physics (4.5) ${ }^{*, 2}$ |  |
| PHYS 4 | Survey of Chemistry and Physics (4) ${ }^{3}$ |  |

${ }^{2}$ Course limitation may exist. For an explanation of limitation, please refer to the UC Transfer Course Agreement available on the ASSIST website at www.assist.org (https://www.assist.org/).
${ }^{3}$ A cross-listed course cannot be used in more than one discipline nor can it be used to certify more than one area on Plan C.

## Area 5B: Biological Sciences

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| Complete one of the following: |  |  |
| ANAT 1 | Human Anatomy (4) ${ }^{*} 2$ |  |
| ANAT 41 | Anatomy \& Physiology (5) ${ }^{*} 2$ |  |
| ANTHR 1/1H | Physical Anthropology (3) |  |
| ANTHR 1L | Physical Anthropology Laboratory (2) |  |
| ANTHR 11 | Physical Anthropology Lecture and Lab (5) * |  |
| BIO 1A | Biology for Science Majors (5) * |  |
| BIO 1B | Biology for Science Majors (5) * |  |
| BIO 2 | General Microbiology (5) * |  |


| BIO 5 | Plant Biology (4) |
| :---: | :---: |
| BIO 20/20H | Marine Biology (4) ${ }^{\text {* }}$ |
| BIO 30 | Wildlife Biology (4) ${ }^{*} 2$ |
| BIO 41/41H | Contemporary Biology (3) ${ }^{2}$ |
| BIO 41L | Contemporary Biology Laboratory (1) |
| BIO 60 | Human Biology (4) ${ }^{2}$ |
| BIO 60L | Human Biology Laboratory (1) ${ }^{2}$ |
| BIO 61 | Introduction to Pathophysiology (3) ${ }^{2}$ |
| PHYSI 1 | Human Physiology (5) ${ }^{*}$, 2 |
| Course limitation may exist. For an explanation of limitation, please refer to the UC Transfer Course Agreement available on the ASSIST website at www.assist.org (https://www.assist.org/). |  |

## Area 5C: Laboratory Activity

One of the classes selected from 5A or 5B must include an associated laboratory component.

## Area 6: Language Other Than English (Required by UC only)

Proficiency equivalent to two years of high school study in the same language. This requirement may be met by any one of the following options:

- Completion of two years of foreign language in high school with a grade of "C" or better
- Performance on foreign language proficiency tests administered at a UC Campus
- Earn a score of 550 on an appropriate College Board Achievement Test
- Satisfactory score (3 or higher) on the College Board Advanced Placement examinations in languages other than English
- Satisfactory score (5 or higher) on the International Baccalaureate Higher Level Examinations in languages other than English

OR completion of a second or more advanced level of foreign language course offered at LBCC:

Code Number Course Title Units
Complete one of the following

| CHIN 1 | Elementary Chinese 1 (5) |
| :--- | :--- |
| CHIN 2 | Elementary Chinese 2 (5) |
| FREN 1 | Elementary French (5) |
| FREN 2 | Elementary French (5) |
| FREN 3 | Intermediate French (5) |
| FREN 4 | Intermediate French (5) |
| GER 2 | Elementary German (5) |
| ITAL 2 | Elementary Italian (5) |
| JAPAN 1 | Elementary Japanese (5) |
| JAPAN 2 | Elementary Japanese (5) |
| JAPAN 3 | Intermediate Japanese (5) |
| JAPAN 4 | Intermediate Japanese (5) |
| KHMER 9 | Khmer for Heritage Speakers (5) |
| KHMER 10 | Khmer for Heritage Speakers (5) |
| SPAN 1/1H | Elementary Spanish (5) |


| SPAN 2/2H | Elementary Spanish (5) |
| :--- | :--- |
| SPAN 3 | Intermediate Spanish (5) |
| SPAN 4 | Intermediate Spanish (5) |
| SPAN 9/9H | Spanish for Spanish Speakers (5) |
| SPAN 10/10H | Spanish for Spanish Speakers (5) |

## Area 7: Ethnic Studies

Complete one of the following

- UC transfer students following the IGETC general education pattern will need to complete the new Area 7 of Ethnic Studies if they enrolled at a CA community college beginning Fall 2023. For students who enrolled at a CA community college prior to Fall 2023, the IGETC general education pattern the student used when they first enrolled at a CA community college may be used (without having to complete Area 7). Students do not have to be continuously enrolled in courses to use a certain year's IGETC general education pattern for certification. Consult your LBCC counselor for more details or limitations.

| Code Number | Course Title |
| :---: | :--- |
| ETHST 1/1H | Introduction to Ethnic Studies (3) |
| ETHST 6 | Ethnic Studies for Education/Educators (3) |
| EDUC 6 | Ethnic Studies for Education/Educators (3) |

## U.S. History, Constitution, and American Ideals - CSU Graduation Requirement (Required by CSU only).

Two classes required ( 6 units minimum) - ONE class from history and ONE class from political science.

This is a CSU graduation requirement and can be completed after transferring to a CSU.

Note: Only courses completed at LBCC may be used to certify this requirement. Effective Fall 2016, students are no longer required to take both HIST 8A/8AH and HIST 8B/8BH at LBCC. Students may now take either course to meet the History portion of the U.S. History, Constitution, and American Ideals graduation requirement (Retroactive to Fall 2004).

The following courses may be used to satisfy both the GE and U.S. History requirements: HIST 8A/8AH, HIST 8B/8BH, HIST 10/10H, HIST $11 / 11 \mathrm{H}$, HIST 27A , HIST 27B , HIST 33 and POLSC $1 / 1 \mathrm{H}$ (retroactive to Fall 2011).

## History

One class required (3 units minimum).

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| Complete one of the following | 3 |  |
| HIST 8A/8AH | History of the Americas (3) |  |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |  |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) (3) |  |
| HIST 11/11H | Hist./Modern America (Reconstr-Present) <br> (3) |  |
| HIST 27A | African American History to 1877 (3) |  |


| HIST 27B | African American History 1877 to present |
| :--- | :--- |
|  | (3) |
| HIST 33 | Introduction to Chicana/o History (3) |

## Political Science

One class required (3 units minimum).

| Code Number $\quad$ Course Title | Units |
| :--- | ---: | ---: |
| Complete one of the following | 3 |
| POLSC $1 / 1 \mathrm{H}$ | Introduction to Government (3) |

## Additional Information

## UC Admissions

Minimum admission requirements include:

- at least 60 transferable units.
- at least a 2.4 G.P.A. in transferable units.

UC transferable units are noted in the LBCC Catalog and Schedule of Classes. This information is also available on ASSIST.org, at www.assist.org (https://assist.org/).

Some majors require a higher G.P.A. for admission. See application and major requirements for more information. The online app for the UC: http://admissions. universityofcalifornia.edu. Only 14 UC transferable units may be completed on a P/NP basis.

A maximum of 70 transferable semester units earned at California Community Colleges will be accepted by the UC system toward a degree.

UC Priority Application Filing Periods:

- Fall Quarter/Semester. November 1-30
- Winter Quarter. July 1-31
- Spring Quarter. October 1-31 (except Berkeley)
- Spring Semester - UC Merced: July1-31
**Check with counselor for open filing periods.**


## CSU Admissions

Minimum admission requirements include:

- at least 60 transferable units
- at least a 2.0 G.P.A. in transferable units

CSU transferable units are LBCC courses numbered 1-99.
Certain impacted/popular majors and universities may require a higher G.P.A. (See university admissions websites or www2.calstate.edu/apply (https://www2.calstate.edu/apply/) for more information.)

A maximum of 70 transferable semester units earned at a California community college will be accepted by a CSU toward a Bachelor's Degree.

CSU Priority Application Filing Periods:

- Fall Quarter/Semester. October 1 - November 30
- Winter Quarter/Semester: June 1-30
- Spring Quarter/Semester: August 1-31
- Summer Quarter: February 1-28
**Check with a counselor for open filing periods.**


## IGETC Certification

Certification is the process whereby LBCC approves lower-division general education course work for CSU or UC transfer. Only courses taken from approved lists are eligible for certification for IGETC.

To use the IGETC, all courses must be completed at an accredited community college or university prior to transfer. This means that courses may be transferred from one community college or university to another and may be used for certification. Students who begin their college work at any UC may NOT use the IGETC for transfer back to the same UC.

A grade of " C " or better is required in each class.

## Admission Requirements for Transfer Admission Requirements for Transfer to the California State University

While attending LBCC, students planning to transfer to the California State University System (CSU) should follow the recommended pattern of GE-breadth/General Education requirements listed in Plan B. Students planning to transfer to either the CSU System or the University of California System (UC) may follow the recommended pattern of GEbreadth/General Education requirements in Plan C. In addition, students should take the specific lower-division courses required for their chosen majors. Students should consult a counselor for assistance in identifying these requirements. Course equivalencies between CSU or UC campuses and California Community Colleges (articulated coursework) are found at www.assist.org (https://www.assist.org/).

Lower-division transfers: Undergraduate transfer applicants with fewer than 60 transferable semester units may qualify for regular admission if they were eligible as freshmen and have been in continuous attendance since high school graduation or if they were eligible as freshmen except for the subject requirements and have completed appropriate college courses in the missing subjects. All transfers must have a 2.0 minimum grade point average (GPA) and be in good standing at the last college attended. Impacted majors or campuses may require a higher GPA for admissions. Applicants who were not eligible as freshmen cannot be admitted as lower-division transfers and must establish eligibility by completing the requirements for upper-division transfers. Lower-division transfer opportunities to CSU campuses or majors may be limited. Students should talk to their counselor about lower-division transfer opportunities.

Undergraduate transfer applicants with fewer than 60 semester units of transferable college credit who have not completed the subject requirements may do so by meeting the following requirements:

- Completing appropriate courses with a C or better in adult school or high school summer sessions or
- Completing appropriate courses in college with a C or better. One course of three semester, or four quarter, units will be considered equivalent to one year of high school study or
- Earning appropriate scores on specified examinations.

Upper-division transfers: Upper-division transfers may qualify for admission to a CSU if they have completed 60 transferable semester units and have completed appropriate college courses to fulfill any missing college preparatory subject requirements.

An applicant may also be eligible as a freshman to be admitted as a lower-division transfer. The missing college preparatory subject requirements may be made up in the following ways:

- Complete the missing subject requirements in ways specified for lower-division applicants or
- Students who graduated from high school prior to 1988 may complete with grades of C or better the CSU GE requirements in communication in the English language (9 units in areas A1, A2, and A3) and math (from Area B4) or
- Students who graduated from high school in 1988 or later may complete with grades of $C$ or better in a minimum of 30 semester, or 45 quarter, units selected from courses in English, arts and humanities, social science, science, and math of at least equivalent level to courses that meet GE or transfer curriculum requirements.

Each student must complete all CSU GE requirements in communication in the English language (9 units in Areas A1, A2, A3) and the GE requirement in math (from Area $B 4$ ) as part of the 30 semester unit requirement.

Please consult the LBCC Counseling Department and Transfer Center regarding appropriate courses and tests to satisfy the subject requirements as well as continuous attendance issues and criteria used to determine eligibility as a first-time freshman.

Courses numbered 1-99 in the LBCC Catalog are transferable to the CSU. Students with 60 CSU transferable units are eligible to be admitted as upper-division transfers. A maximum of 70 CSU transferable units earned at a California community college will be accepted by a CSU campus for the baccalaureate degree.

A program at a CSU campus may be declared to be impacted when the number of applications received in the first month of the admission filing period is greater than the number of spaces available. Admissions standards may be raised for impacted programs. Students are urged to consult with an LBCC counselor to be aware of the filing deadlines and any additional admissions criteria for such programs.

## Admission Requirements to Transfer to the University of California

Students planning to transfer to the University of California (UC) are encouraged to follow the recommended pattern of GE breadth/General Education requirements listed in Plan C/IGETC. However, some high-unit majors (e.g. engineering) may suggest you do not complete Plan C/IGETC for admissions. Please talk to an LBCC counselor.

A transfer student from LBCC may meet the UC admission requirements through any of three options. In all cases, transfer students who are California residents must have at least a 2.4 GPA in all UC transferable coursework to be admitted to the university. Other requirements depend on whether a student was eligible for admission to the university when he/she/they graduated from high school in June 1986 or later.

The options are as follows:

1. If a student was eligible for admission to the university when he/she/ they graduated from high school, that student may transfer at any time provided that he or she has maintained a 2.0 GPA in transferable community college courses.
2. If a student was not eligible for admission after high school because he/she/they did not meet subject requirements, the student may take
college courses in the subjects that were missed and transfer upon successful completion of those courses. Students must earn a grade of $C$ or better in each of these required courses and an overall GPA of 2.0 in all transferable college coursework. If fewer than 12 semester, or 16 quarter, units of transferable college coursework are completed, the student must also satisfy examination requirements for freshman applicants.
3. If a student was not eligible for admission after high school graduation because he/she/they did not achieve the required score on the eligibility index and may also have lacked the required A-G subjects, the student must do the following:
a. Complete 60 semester units of UC transferable college credit with a GPA of at least 2.4 and satisfy either (b) or (c) below.
b. Complete appropriate college courses with grades of C or better in the A-G subjects that were lacking. The university will waive up to two units, or two academic years, of the required high school coursework except in math and English.
c. Complete with grades of C or better in the following college courses:
i. English: one transferable college course in English.
ii. Math: math courses equivalent to three years of high school math (i.e., elementary algebra, intermediate algebra, and geometry) or one course in math or statistics for which intermediate algebra is the prerequisite. For applicants who graduated from high school prior to June 1986, the math course must have elementary algebra as a prerequisite.
iii. U.S. history, lab science, foreign language: one transferable college course selected from these subjects.

Students are advised to see a counselor to ensure they are following the correct academic program.

The specific UC requirement for American History and Institutions is met by those students who have earned a grade of $B$ or better in their high school history and government classes.

A student who plans to transfer to the UC System is advised to concentrate on university and college requirements and on the available prerequisite and introductory courses required by their major.

## Private Colleges and Universities Transfer Information

Private colleges and universities, often called independent institutions, offer a diversity of educational programs and opportunities. Great differences in size, educational purpose, and emphasis exist among independent colleges and universities in the state of California. For information on private colleges and universities, students should contact the LBCC Counseling Department. Additional information on transferring to a private college is at https://aiccu.edu/page/transferstudents (https://aiccu.edu/page/transferstudents/).

## General Education Philosophy

General Education requirements at LBCC provide a broad educational experience that encourages students to explore various areas of human inquiry and equips them with a range of intellectual and practical skills to succeed in a rapidly-changing world. As the foundation of life-long learning, these requirements expose students to the principles, methods, values and thought processes employed in different disciplines and
impart a strong sense of the social and ethical responsibilities associated with being civic-minded, informed and engaged global citizens.

The awarding of an Associate degree represents more than an accumulation of units. It symbolizes a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively both orally and in writing, to use quantitative reasoning skills, to understand the modes of inquiry of the major disciplines, to be aware of other cultures and time periods, to appreciate the contributions and struggles of various communities and ethnic groups within the United States, to achieve insights gained through experience in thinking about ethical issues, and to develop the capacity for self-understanding.

## Institutional Student Learning Outcomes (ISLOs)

LBCC's commitment to excellence in student learning incorporates the following institutional outcomes for the educational process. ISLOs are statements that define the knowledge, skills, and perspectives acquired by students who satisfy the College's GE requirements. In alignment with LBCC's mission and values, students will be able to do the following upon completion of the College's high-quality educational programs:

1. Appreciate and interpret a range of cultural expression in the arts and humanities to generate useful and original ideas.
2. Effectively communicate with, and respond to, varied audiences in written, spoken, signed, or artistic forms.
3. Demonstrate critical thinking, problem-solving, and diagnostics skills with an understanding of research, science, as well as information literacy and quantitative reasoning.
4. Critically and ethically engage in global and local issues with sensitivity to the diversity of individuals, groups, and cultures.
5. Demonstrate the skills required to successfully enter and advance in the workforce, fulfill one's educational goals, and make lifestyle choices that promote personal well-being.

## Course Credit and Class Preparation In This Section:

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Maximum Student Unit Load (p. 72)
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Transferring Credit from Other Institutions (p. 74)

## Course Credit

To earn one unit of lecture course credit, students must complete a minimum of 18 hours of class time during a semester or equivalent term and are expected to devote an average of two hours of preparation outside of class for each one hour of lecture class time. To earn one unit of credit in a laboratory, demonstration or practice situation class, students must complete a minimum of 54 hours of class time for one semester or equivalent term. Some additional outside-of-class
preparation may be expected. For work experience classes, one unit of credit represents 75 hours of paid employment or 60 hours of volunteer work per semester. In order to qualify for Work Experience, students must be currently enrolled in a qualifying occupational program and have an instructor's approval.

## Open Courses

Every LBCC course, course section, or class for which the full time equivalent student units are to be reported for state aid, unless specifically exempted by statute, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets course requisites.

## Online Learning

Online Learning refers to three types of courses:

- Fully Online: a course that meets $100 \%$ online
- Hybrid: a course that meets partially in a classroom and partially online
- Web-Enhanced: a face-to-face course that meets $100 \%$ in a classroom yet also uses a Learning Management System

The Fully Online and Hybrid courses are also known as Distance Learning Courses. The Web-Enhanced courses are regular face-to-face classes in which your instructor uses online tools as additional resources for students.

## Online Courses

Online courses are offered entirely online and do not require students to be present on campus. Online courses are facilitated through remote access by using a personal computer, internet connection, and a valid email address. Students can access these courses at home, at off-campus public facilities, or by using the college's Academic Computing Centers to log on to their course website. Online courses may include video content that can be accessed on the Web, and through embedded or streaming media.

Fully Online courses are taught in these formats:

- Asynchronous - There are no required meetings in real-time; no meeting day/times are listed in the schedule. Asynchronous classes will be noted in the class schedule by the days and time being "Web" and the location being "Online."
- Synchronous - There are required meetings in real-time; meeting day/time patterns are in the schedule. Some instructors may use a combination of scheduled "real time" meetings (synchronous) and online work accessed on the students' chosen time (asynchronous meetings), but the required meetings are regularly scheduled and show in the class schedule.


## Hybrid includes Face-to-Face Class Meetings

Face-to-face meetings - Some essential class labs in the trades and health sciences (Nursing, DMI, etc.) have been approved to meet face-toface. In these instances, the class schedule will note a room number and times. These classes will be a hybrid format with face-to-face meetings on-campus, and the rest of the content delivered online. Online Learning courses are designed to be equivalent and comparable to their oncampus course versions in terms of quality, learning outcomes, special
requirements, course fees, and credit. Students can enroll in these classes through the regular college registration process, whether by walkin or by accessing the Viking Student System through the LBCC website. Online Learning students are offered equivalent online services and support as on-campus students. Electronic library services are extended beyond the services available on campus and include an online reference desk, resources, electronic databases, and catalog access. For more information, visit http://www.lbcc.edu/dl (http://www.lbcc.edu/dl/) or call 562-938-4818.

## Course Grading

## Pass/No Pass Courses and Grading

Some courses allow a student to change the grading option to pass/no pass instead of a letter grade. Students may change the grading option online via student self-service. The deadline for changing the grading option for eligible classes can be found in the class schedule. Students are required to do all work assigned and take examinations as though they were receiving letter grades. To receive a grade of pass, a student must do work equivalent to a C grade or higher. Students seeking an associate degree are limited to 20 units on a pass/no pass grading basis. All 800-band courses, which are not applicable to a degree, are graded pass/no-pass. Courses taken on a pass/no pass grading basis do not affect the grade point average at LBCC. Students should consult the catalogs of the schools to which they intend to transfer to determine those schools' policies.

## Maximum Student Unit Load

Full-time unit load definitions for a regular academic semester are as follows:

- Minimum full-time unit load: 12 units
- Normal full-time unit load: 15 units
- Maximum full-time unit load without waiver. 18 units
- Maximum full-time unit load with waiver: 21 units

For students with good academic standing and who are not on any form of probation, the maximum full-time unit load definitions for any one or combination of summer/winter terms in a given year are as follows:

## Summer

- Minimum unit load for full-time summer status: 6 units
- Maximum full-time unit load: 10 units
- Maximum full-time unit load with waiver: 12 units
- Minimum unit load for half-time summer status: 3 units


## Winter

- Maximum full-time unit load: 6 units
- Maximum full-time unit load with waiver. 10 units

Enrollment limitations by residency category are as follows:

- Residents of California may enroll for up to the maximum full-time unit loads, as stated, during the academic year and summer session and winter intersession.
- Nonresidents, unless restricted by visa, may enroll for up to the maximum full-time unit loads, as stated, during the academic year, summer sessions, and winter intersession and must pay nonresident tuition.
- High School Students - During the academic year, eligible high school students may enroll in a maximum of 8 units for fall and spring semesters and 5 units for summer terms and winter intersession. See the high school concurrent application form for specific requirements.


## Waiver of Maximum Unit Load Limitation

1. A student may request a waiver of the maximum unit load limitation. The determination to waive the maximum unit load limitation is the responsibility of the counseling department and will be made only for extraordinarily capable students of proven academic ability and excellent past academic performance.
2. To apply for a waiver, a student must meet the following requirements:
a. The student must be matriculated so that their college placement examination scores, transcripts of previous academic performance, and other pertinent data are available to the counseling department.
b. The student must apply to the counseling department for a waiver no later than two weeks prior to the first day of open registration for the semester concerned. A waiver request after the two-week deadline requires approval of the Dean of Counseling and Student Support Services.
3. The Vice President of Student Services, reserves the right to grant special waivers in unusual circumstances.
4. Any student enrolled in more units than are permitted for their classification by these regulations will have their program of studies reduced to the applicable allowable maximum by the Dean of Enrollment Services or designated representative.

## Credit for Prior Learning

Credit by Advanced Placement (AP), International Baccalaureate (IB) Examination, and College Level Examination Program (CLEP)
LBCC recognizes the Advanced Placement (AP) Program and College Level Examination Program of the College Board, the California State University System credit lists for Advanced Placement and International Baccalaureate, the Intersegmental Committee of the Academic Senates IGETC Policy and Standards for Credit by External Exams (7.0), the California Community College General Education AP List and the International Baccalaureate Examination Program.

Students are required to order official copies of their College Board AP and/or IB transcripts and have the transcripts sent to LBCC's Office of Admissions and Records. Course credit is granted for Advanced Placement examinations with a score of three, four, or five in those instances in which the department concerned has determined that the material covered is comparable to a specific course offering within that department. Advanced Placement credit is granted for the fulfillment of LBCC degree requirements. However, when a student transfers to any other college or university, that institution routinely reevaluates Advanced Placement units in accordance with its own internal policies. Thus, advanced placement units are indicated as such in official records and do not transfer as LBCC courses. Specific course credit will be granted for the IB examinations in alignment with score standards of the California State University System credit lists for International Baccalaureate
exams and the Intersegmental Committee of the Academic Senates IGETC Policy and Standards for Credit by External Exams (7.0).

AP, IB, and CLEP credit for the Associate Degree for Transfer is approved through the general education certification for transfer to colleges or universities that accept Long Beach City College's certification.

## Credit by Examination

Credit by Examination is a provision whereby a student who is enrolled in the college and is in good standing may, with departmental approval, take an examination to earn credit in a specific course. The student must have completed at least 12 semester units at LBCC and have the prior approval of the department head and school dean before being allowed to take the examination for credit. Exceptions to the 12-unit limitation must be approved by the office of the Vice President of Student Services. For courses identified in the High School Pathways Project as eligible for Credit by Examination, the 12-unit limitation does not apply. In all cases, courses eligible for Credit by Examination will be determined by the department in which each course is offered. The department shall determine how many times credit by examination is offered to an individual student per semester and how many times students are allowed to attempt to pass the exam.

1. The department concerned also determines specific standards of student eligibility. The method of evaluation, including a copy of any written exam or a description of its contents, must be approved by the department and kept on file in the department and in the office of the school dean. For courses identified in the High School Articulation Project, a description of the contents of the examination, as developed and approved in the articulation process, must be kept on file in the department.
2. Students who take an exam for credit will be given the grade earned. For high school articulated courses, students will be given the grade earned or receive a "credit" grade depending on the method of grading for the course; if the student does not pass the examination, no notation will be made on the transcript and no credit will be awarded.
3. Units earned through Credit by Examination may not be counted toward the 12-unit residency requirement for the associate degree.
4. A fee will be charged for students to take Credit by Examination. The fee will be waived for participants in the High School Pathways Project.

## Credit by College-Level Examination Program (CLEP)

LBCC recognizes the CLEP examinations of the College Board under the following conditions:

1. Students are required to order official copies of their College Board transcripts with the appropriate CLEP scores and have the transcripts sent to LBCC's Enrollment Services Office.
2. Specific course credit will be granted for the CLEP examinations in those instances in which the department concerned has determined that the material covered is comparable to a specific course offering within that department.
3. In situations where comparable courses are not offered by a department, CLEP scores may be applied toward General Education or elective unit requirements.
4. CLEP credit is granted for the fulfillment of LBCC degree requirements. However, when a student transfers to any other college
or university, that institution routinely reevaluates CLEP units in accordance with its own internal policies for CLEP. Thus, CLEP units are indicated as such in official records and do not transfer as LBCC courses.
5. CLEP credit for an Associate Degree for Transfer is approved through the General Education certification for transfer to colleges or universities that accept LBCC's certification.

A full version of the Procedure can be viewed at https://www.lbcc.edu/ pod/lbccd-board-policies-procedures (https://www.lbcc.edu/pod/lbccd-board-policies-procedures/).

## Credit for Cooperative Work Experience Education

LBCC recognizes job experience as a valuable learning resource. The Cooperative Work Experience Education Program affords students the opportunity to earn college credit for learning while working on their jobs.

To earn Cooperative Work Experience credit, students must successfully fulfill measurable learning objectives prior to the completion of the semester. The process of establishing these learning objectives for the student employee involves the employer directly. The work experience instructor visits each job site to validate the learning environment and working conditions and to ensure good communication between the employer and the college.

Students must be enrolled in a Career and Technical Education program offered at the college and have met one of the following two requirements:

1. Completed at least one-third of the units required for the program.
2. Completed or be concurrently enrolled in a course in the same program.

Students must also participate in on\#the\#job learning experiences that contribute to occupational or educational goals and have the approval of the professor.

International students who wish to enroll in Cooperative Work Experience education must receive a release from the International Student Office prior to enrolling in work experience. The office is located at the Liberal Arts Campus, Building A, 562-938-4745.

Cooperative Work Experience education units meet eligibility requirements for veteran's benefits, social security, and financial aid. Cooperative Work Experience operates without regard to race, age, sex, religion, skin color, national origin, handicap, sexual orientation, marital status, ancestry, medical conditions such as cancer related illness, or status as a veteran. Additional information on the program and enrollment is available at the Academic Services Office located on the Liberal Arts Campus.

## Credit for Educational Experience in Military Service

LBCC presently requires three units in a combination of physical education and health education classes for its associate degree. Veterans may be granted these three units of credit toward graduation if they served on active duty for at least 12 continuous months. A student who wishes to receive these credits must have a copy of their DD-214 and file number from the Veterans' Administration to request such
credit. Please contact the Veterans Affairs Office at LAC in building A for additional assistance.

If a veteran feels their military schooling provided sufficient knowledge in a particular subject area and this credit is needed for graduation or advanced placement, he or she should refer to the section of this catalog on credit by examination. Each department head handles the particular subjects under their department. Not all departments allow credit by examination, so students should check the eligibility requirements carefully and then contact the department head involved to make the necessary arrangements for an exam, if one is permissible.

Students may demonstrate proficiency in a course eligible for Credit for Prior Learning and receive college credit through the approved alternative methods for awarding credit, including: evaluation of Joint Services Transcripts (JST), achievement of an examination administered by other agencies approved by the District, evaluation of industry-recognized credential documentation and evaluation of student-created portfolios.

In order to be eligible for Credit for Prior Learning a student must:

1. Be in good standing with the District,
2. Previously earned credit or noncredit from the Long Beach Community College District, or
3. Be currently registered in the District, and
4. The student is not currently enrolled in the course to be challenged.

Current students must have an educational plan on file. The eligible course must be listed in the Long Beach City College Catalog. Credits acquired by prior learning are not applicable to meeting unit load requirements for Selective Service deferment, Veterans, Financial Aid, or Social Security benefits.

## Transferring Credit from Other Institutions

## Transfer Credit from Other Colleges, Universities, and Institutions

The Long Beach Community College District accepts unit transfer credit from other appropriately accredited academic and professional institutions, provided that the student establishes residency at LBCC and satisfies any other curricular or academic limitations imposed by the District.

[^2]
## Acceptable Transfer Credit

- Only lower division credit will generally be accepted. An upper division course will only be accepted if the specific course is substantially the same as a corresponding course at LBCC.
- Second party credits will not be accepted. For example, School A, whose credits LBCC would normally accept, has itself accepted credits from School B. LBCC will not accept these credits from School B through School A, but only directly from School B, if otherwise acceptable.
- Where equivalency of transfer credits is questionable, the Records Office shall solicit the assistance of the School and College Articulation Office and the appropriate school dean or department head in determining whether or not a transfer credit is equivalent to LBCC coursework.
- LBCC presently requires three units in a combination of physical education and health education classes for its associate degree. Veterans may be granted these three units of credit toward graduation if they served on active duty for at least 12 continuous months. A student who wishes to receive these credits must have a copy of their DD-214 and file number from the Veterans' Administration to request such credit. Please contact the Veterans Affairs Office at LAC in building A for additional assistance.
- No credit will be granted for seminars or other instruction conducted by private or public agencies even though the academic level can be shown to be equal to LBCC courses. Students in these situations may apply for credit by examination, if such credit is offered.


## Reciprocity of General Education Courses

Courses from other regionally accredited colleges and universities can be used towards the fulfillment of General Education at LBCC under Plan A. Courses approved for a specific General Education area at another institution will be honored for the comparable General Education area at LBCC.

Courses from schools without GE subject areas or proficiencies such as information competency will be evaluated for equivalency in order to satisfy that area.

Physical education activity and dance performance courses can be used to fulfill the Physical Fitness/ Wellness area. Courses in food and nutrition and theater arts must be evaluated and approved by the department as an activity course.

Courses from regionally accredited colleges and universities can be used towards the fulfillment of general education at LBCC for GE Plans A, B, and $C$. Courses approved for a specific general education area at another institution will be honored for the same CSU or UC General Education Area at LBCC.

Any student with a bachelor's degree from a regionally accredited college or university is exempt from the Plan A general education and graduation requirements. Students are exempt from the graduation requirements should LBCC verify that the earned associate degree meets the current graduation requirements for English and math.

## Foreign Institutions

Acceptance of transfer credit from foreign institutions shall be subject to the student obtaining, at their own expense, a transcript evaluation from a credentials evaluation service as designated by the Dean of Enrollment Services.

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## LIST OF AWARDS AND PLAN CODES

The information that follows provides a global view of the awards available and their corresponding local Plan Codes. The college offers credit-based Associate of Arts or Associate of Science degrees, which are listed in the rows beginning with Associate Degrees for Transfer (AA-T or AS-T), and then the local associate degrees (AA or AS.) Next are the credit certificates (ACH, ACC) and then the noncredit certificates (COMP). All award types are followed by the unique Plan Code (e.g. ACH 3921).

| Programs of Study and Plan Codes | Transfer Degree | Associate Degree | Certificate of Achievement | Certificate of Accomplishment | Certicate of Competency/ Completion |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Administration of Justice | AS-T 5504B/C | AA 1800 | ACH 3800 |  |  |
| Criminal Forensics |  |  | ACH 3029 |  |  |
| Public Services: Transportation Security Administration Associate |  |  |  | ACC 4800 |  |
| Security Guard Training |  |  |  |  | COMP 6171 |
| Administrative Assistant, Customer Support |  | AS 2200 | ACH 3200 |  |  |
| Administrative Assistant, Customer Relations Specialist |  |  | ACH 3199 |  |  |
| Administrative Assistant, Human Resources Support |  | AS 2201 | ACH 3201 |  |  |
| Administrative Assistant, Office Support |  | AS 2202 | ACH 3202 |  |  |
| Administrative Assistant, Office Technologies |  |  |  |  |  |
| Microsoft Access for Windows |  |  |  |  | COMP 6010 |
| Microsoft Excel |  |  |  |  | COMP 6011 |
| Microsoft Office |  |  |  |  | COMP 6012 |
| Microsoft Outlook |  |  |  |  | COMP 6013 |
| Microsoft PowerPoint |  |  |  |  | COMP 6014 |
| Microsoft Word for Windows |  |  |  |  | COMP 6015 |
| Introduction to Computers |  |  |  |  | COMP 6016 |
| Networking Fundamentals |  |  |  |  | COMP 6017 |
| Administrative Assistant, Virtual Support |  | AS 2203 | ACH 3203 |  |  |
| Advanced Manufacturing Technology |  | AS 2921 | ACH 3921 |  |  |
| Advanced Manufacturing and Design Technology |  |  | ACH 3923 |  |  |
| Advanced Manufacturing Technology Core Skills |  |  | ACH 3922 |  |  |
| Advanced Transportation Technology |  | AS 2952 | ACH 3952 |  |  |
| Alternative Fuel Vehicles |  |  | ACH 3937 |  |  |
| Electric \& Hybrid Vehicles |  |  | ACH 3938 |  |  |
| American Sign Language and Deaf Studies |  | AA 1245 |  |  |  |
| Anthropology | AA-T 5011B/C |  |  |  |  |
| Architectural Design |  | AS 2908 | ACH 3908 |  |  |
| Building Information Modeling (BIM) Coordinator |  |  | ACH 3904 |  |  |
| Design Basics |  |  | ACH 3903 |  |  |
| ARE Exam Prep |  |  |  |  | COMP 6042 |
| Adobe for Designers |  |  |  |  | COMP 6043 |


| AutoCAD Essentials |  |  |  |  | COMP 6044 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Design Introduction |  |  |  |  | COMP 6045 |
| Designing with Rhinoceros |  |  |  |  | COMP 6046 |
| REVIT Essentials |  |  |  |  | COMP 6047 |
| SketchUp Essentials |  |  |  |  | COMP 6048 |
| Art |  | AA 1194 |  |  |  |
| Art History | AA-T 5015B/C |  |  |  |  |
| Studio Arts | AA-T 5013B/C |  |  |  |  |
| Applied Design in Art: 3D Materials and Processes |  |  | ACH 3279 |  |  |
| Jewelry Entrepreneurship |  |  | ACH 3280 |  |  |
| Sculptural Design: 3D Materials and Processes |  |  | ACH 3281 |  |  |
| Automotive Technology |  | AS 2941 | ACH 3941 |  |  |
| Automotive Engine and Transmission Service |  |  | ACH 3939 |  |  |
| Automotive Engine Performance Service |  |  | ACH 3940 |  |  |
| Automotive Maintenance Service |  |  | ACH 3926 |  |  |
| Automotive Quick Service |  |  |  | ACC 4923 | COMP 6033 |
| Light-Duty Diesel Generator Engine Maintenance |  |  |  |  | COMP 6030 |
| Baking \& Pastry Arts |  | AS 2142 | ACH 3142 |  |  |
| Advanced Baking \& Pastry Arts |  |  | ACH 3144 |  |  |
| Biological Sciences |  | AS 2500 |  |  |  |
| Biology | AS-T 5505B/C |  |  |  |  |
| Business |  |  |  |  |  |
| Business Administration 2.0 | AS-T 5509B/C |  |  |  |  |
| Economics | AA-T 5018B/C |  | ACH 3019 |  |  |
| Business: Accounting |  | AA 1100 | ACH 3100 |  |  |
| Business: General Business |  | AA 1111 | ACH 3111 |  |  |
| Business: Global Trade and Logistics |  | AA 1151 | ACH 3151 |  |  |
| Business: Management |  | AA 1143 | ACH 3143 |  |  |
| Business: Marketing |  | AA 1153 | ACH 3153 |  |  |
| Business: Business Economics |  |  |  | ACC 4145 |  |
| Business: Foundations of Accounting |  |  |  | ACC 4200 |  |
| Business: Foundations of Business |  |  |  | ACC 4111 |  |
| Business: Foundations of International Business |  |  |  | ACC 4151 |  |
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| Business: Foundations of Marketing |  |  |  | ACC 4153 |  |
| Business: Logistics |  |  |  | ACC 4127 |  |
| Business: Money and Banking |  |  |  | ACC 4144 |  |
| Foundations of Entrepreneurship |  |  |  | ACC 4203 |  |
| Personal Financial Planning |  |  |  | ACC 4202 |  |
| Real Estate Broker |  |  |  | ACC 4154 |  |
| Real Estate Salesperson |  |  |  | ACC 4115 |  |
| Social Media Application Development |  |  |  | ACC 4201 |  |
| DRE Exam Preparation |  |  |  |  | COMP 6131 |
| Business Information Worker |  |  |  |  |  |
| Digital and Social Media |  |  | ACH 3135 |  |  |


| Microsoft Essentials |  | ACH 3136 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Telecommuting Fundamentals |  | ACH 3169 |  | COMP 6001 |
| Business Digital Literacy |  |  | ACC 4130 |  |
| Computer Hardware Technician |  |  |  | COMP 6009 |
| Office Technologies - Job Search Skills |  |  |  | COMP 6003 |
| Office Technologies - Microsoft Access |  |  |  | COMP 6004 |
| Office Technologies - Microsoft Excel |  |  |  | COMP 6005 |
| Office Technologies - Microsoft Outlook |  |  |  | COMP 6007 |
| Office Technologies - Microsoft PowerPoint |  |  |  | COMP 6008 |
| Office Technologies - Microsoft Word |  |  |  | COMP 6006 |
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| CDECE: Assistant Teacher |  |  | ACC 4055 |  |
| CDECE: Associate Teacher |  |  | ACC 4056 |  |
| CDECE: Family Development |  |  | ACC 4052 |  |
| CD: Permit Specialization Area Child Health and Safety |  |  | ACC 4059 |  |
| CD: Permit Specialization Area Children with Exceptional Needs |  |  | ACC 4060 |  |
| CD: Permit Specialization Area - Curriculum in Early Childhood Education |  |  | ACC 4122 |  |
| CD: Permit Specialization Area - Early Literacy |  |  | ACC 4066 |  |
| CD: Permit Specialization Area Family Child Care |  |  | ACC 4061 |  |
| CD: Permit Specialization Area Infant/Toddler |  |  | ACC 4062 |  |
| Family Child Care Management |  |  |  | COMP 6112 |
| Parent Educator |  |  |  | COMP 6111 |
| Child Development: Special Education Assistant | AA 1310 | ACH 3310 |  |  |
| Communication Studies | AA 1240 |  |  |  |
| Communication Studies 2.0 AAT 5016B/C |  |  |  |  |
| Computer Aided Design Mechanical | AS 2913 | ACH 3907 |  |  |
| Computer Science | AS 2119 | ACH 3119 |  |  |
| Android App Developer |  |  | ACC 4119 |  |
| Computer Security and Networking | AS 2125 | ACH 3125 |  |  |
| Cloud Computing | AS 2132 | ACH 3132 |  |  |
| Information Technology Cybersecurity | AS 2105 | ACH 3105 |  |  |
| Cyber Security |  | ACH 3106 |  |  |
| Computer Hardware Technician |  | ACH 3133 |  |  |
| Microsoft Windows Networking Technician |  | ACH 3137 |  |  |
| UNIX Network Administrator |  | ACH 3139 |  |  |
| Computer Networking Technician |  |  | ACC 4125 |  |
| Computer Technology | AS 2126 | ACH 3126 |  |  |
| Cryptocurrency Fundamentals |  |  | ACC 4133 | COMP 6000 |


| Computer Information Competency |  |  |  | COMP 6002 |
| :---: | :---: | :---: | :---: | :---: |
| Construction Technology | AS 2948 | ACH 3948 |  |  |
| Construction Apprenticeship Readiness |  | ACH 3953 |  | COMP 6034 |
| Home Remodeling |  | ACH 3949 |  | COMP 6032 |
| Forklift Fundamentals |  |  |  | COMP 6031 |
| Counseling and Student Development |  |  |  |  |
| Adult Learning Skills |  |  |  | COMP 6591 |
| Social Competency Skills |  |  |  | COMP 6191 |
| Transitioning to Higher Learning |  |  |  | COMP 6192 |
| Culinary Arts | AS 2147 | ACH 3147 |  |  |
| Dance | AA 1260 |  |  |  |
| Database Management | AS 2127 | ACH 3127 |  |  |
| Database Administrator Specialist |  |  | ACC 4080 |  |
| SQL Programmer Specialist |  |  | ACC 4158 |  |
| Design Management | AS 2903 |  |  |  |
| Diagnostic Medical Imaging (Radiologic Technology) | AS 2612 | ACH 3612 |  |  |
| Computed Tomography |  |  | ACC 4045 |  |
| Magnetic Resonance Imaging Technologist |  |  | ACC 4613 |  |
| Digital Media Arts |  |  |  |  |
| Digital Media: Comics \& Animation |  | ACH 3258 |  |  |
| Digital Media: Graphic Design |  | ACH 3195 |  |  |
| Digital Media: Multimedia Interaction \& Game Design |  | ACH 3255 |  |  |
| Photography | AA 1256 | ACH 3256 |  |  |
| Electrical Technology |  |  |  |  |
| Electrical Apprenticeship Preparation |  | ACH 3954 |  |  |
| Electrical Program Preparation |  |  |  | COMP 6036 |
| FCC Amateur Radio Technician Preparation |  |  |  | COMP 6050 |
| IPC-620 Wire Harness Assembly and Inspection |  |  |  | COMP 6037 |
| Power Generation Technician Electrical |  |  |  | COMP 6051 |
| Robotics Exploration |  |  |  | COMP 6052 |
| Electrical Technology, Automation Technician | AS 2991 | ACH 3991 |  |  |
| Automation Technician |  | ACH 3931 |  |  |
| Electrical Technology, CISCO Certified Network Installation | AS 2992 | ACH 3992 |  |  |
| CISCO Certified Network Installation Associate |  | ACH 3932 |  |  |
| Network Cabling Specialist |  |  | ACC 4089 |  |
| Electrical Technology, General Industrial Electrician | AS 2993 | ACH 3993 |  |  |
| General Industrial Electrician |  | ACH 3933 |  |  |
| Electrical Technology, High Voltage Test Technician | AS 2995 | ACH 3995 |  |  |
| High Voltage Test Technician |  | ACH 3935 |  |  |



| Film Production |  |  | ACH 3257 |
| :--- | :--- | :--- | :--- | :--- |
| Film, Television and Electronic | AS-T 5507B/C |  |  |
| Media |  |  |  |


| Robotic Welding Automation |  |  | ACH 3990 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Music | AA-T 5008B/C | AA 1220 |  |  |  |
| Commercial Music |  |  | ACH 3220 |  |  |
| Nursing: LVN to RN Career Ladder |  | AS 2626 | ACH 3626 |  |  |
| Nursing: Registered Nursing |  | AS 2621 |  |  |  |
| Nursing: Vocational/Practical |  | AS 2630 | ACH 3630 |  |  |
| Home Health Aide |  |  |  | ACC 4631 |  |
| Nursing Assistant |  |  |  | ACC 4630 |  |
| Nutrition and Dietetics | AS-T 5506B/C |  |  |  |  |
| Dietetic Service Supervisor |  | AA 1320 | ACH 3320 |  |  |
| Nutrition Assistant |  | AS 2321 |  |  |  |
| Formula Room Technician |  |  | ACH 3221 |  |  |
| Cake Decorating Techniques |  |  |  |  | COMP 6062 |
| Certified Dietary Manager (CDM) Board Exam Preparation |  |  |  |  | COMP 6061 |
| Philosophy | AA-T 5012B/C |  |  |  |  |
| Physical Sciences |  | AS 2540 |  |  |  |
| Physics | AS-T 5540C |  |  |  |  |
| UCTP in Physics | AS-T 5539C |  |  |  |  |
| Political Science | AA-T 5005B/C |  |  |  |  |
| Psychology | AA-T 5000B/C |  |  |  |  |
| Public Health Science | AS-T 5508B/C |  |  |  |  |
| Radio/Television Broadcast News |  | AA 1251 | ACH 3251 |  |  |
| Radio/Television Performance |  | AA 1252 | ACH 3252 |  |  |
| Radio/Television Producer |  | AA 1253 | ACH 3253 |  |  |
| Radio/Television Multimedia Production |  |  | ACH 3254 |  |  |
| Radio/Television Sports Broadcasting |  | AA 1249 | ACH 3249 |  |  |
| Reading |  |  |  |  |  |
| Adult Literacy |  |  |  |  | COMP 6611 |
| Reading in the Health Sciences |  |  |  |  | COMP 6151 |
| Social Justice Studies | AA-T 5020B/C |  |  |  |  |
| Social Work |  | AA 1810 | ACH 3810 |  |  |
| Aides, Assistants and Caregivers |  |  | ACH 3809 |  |  |
| Family Violence Specialist |  |  | ACH 3808 |  |  |
| Sociology | AA-T 5001B/C |  |  |  |  |
| TEAS Preparation |  |  |  |  | COMP 6545 |
| Theatre Arts | AA-T 5017B/C |  |  |  |  |
| Theatre - Acting Academy |  | AA 1272 |  |  |  |
| Theatre-General |  | AA 1271 |  |  |  |
| Show Business - Commercials, Voice-Over, Film Acting |  |  | ACH 3274 |  |  |
| Deploy the Arts |  |  |  | ACC 4278 |  |
| Web Development |  | AS 2128 |  |  |  |
| Web Development-Full Stack |  |  | ACH 3128 |  |  |
| Front End Web Developer |  |  | ACH 3134 |  |  |
| PHP Web Programmer |  |  | ACH 3138 |  |  |
| Android App Developer |  |  |  | ACC 4119 |  |
| Welding Technology |  | AS 2988 | ACH 3988 |  |  |
| Gas Tungsten Arc Welding (GTAW) |  |  | ACH 3989 |  |  |
| Introduction to Gas Tungsten Arc |  |  | ACH 3977 |  |  |


| Semi-Automatic Welding |  | ACH 3979 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shielded Metal Arc Welding (SMAW) |  | ACH 3985 |  |  |
| Introduction to Shielded Metal Arc Welding (SMAW) |  | ACH 3978 |  |  |
| Basic Arc Welding |  |  |  | COMP 6039 |
| Basic Gas Tungsten Arc Welding |  |  |  | COMP 6040 |
| Basic Oxy-Acetylene Welding |  |  |  | COMP 6041 |
| Basic Semi-Automatic Welding |  |  |  | COMP 6038 |
| Exploring Welding and Metal Fabrication |  |  |  | COMP 6035 |
| World Languages |  |  |  |  |
| Spanish AA-T 5010B/C |  | ACH 3428 |  |  |
| Foreign Languages | AA 1420 |  |  |  |
| Japanese | AA 1964 | ACH 3426 |  |  |
| French |  | ACH 3427 |  |  |
| Spanish for Medical Professionals |  | ACH 3430 | ACC 4430 |  |

## DEGREES/CERTIFICATES

This section contains all of the Programs of Study in alphabetical order, including Program Learning Outcomes. This section lists the available Associate Degrees for transfer, local Associate Degrees, Certificates of Achievement, Certificates of Accomplishment, and Certificates of Completion or Competency for each program of study.

## Alphabetical List of Awards

## A

- Addiction Studies - Certificate of Achievement (p. 225)
- Administration of Justice - Associate in Arts (p. 92)
- Administration of Justice - Associate in Science Transfer Degree (p. 92)
- Administration of Justice - Certificate of Achievement (p. 93)
- Administrative Assistant, Customer Relations Specialist - Certificate of Achievement (p. 95)
- Administrative Assistant, Customer Support - Associate in Science (p. 95)
- Administrative Assistant, Customer Support - Certificate of Achievement (p. 95)
- Administrative Assistant, Human Resources Support - Certificate of Achievement (p. 97)
- Administrative Assistant, Human Resources Support - Associate in Science (p. 97)
- Administrative Assistant, Office Support - Associate in Science (p. 98)
- Administrative Assistant, Office Support - Certificate of Achievement (p. 98)
- Administrative Assistant, Virtual Support - Associate in Science (p. 101)
- Administrative Assistant, Virtual Support - Certificate of Achievement (p. 101)
- Adobe for Designers - Certificate of Completion (p. 111)
- Adult Learning Skills - Certificate of Competency (p. 161)
- Adult Literacy - Certificate of Competency (p. 276)
- Advanced Baking \& Pastry Arts - Certificate of Achievement (p. 121)
- Advanced Manufacturing and Design Technology - Certificate of Achievement (p. 104)
- Advanced Manufacturing Technology - Associate in Science (p. 102)
- Advanced Manufacturing Technology - Certificate of Achievement (p. 102)
- Advanced Manufacturing Technology Core Skills - Certificate of Achievement (p. 102)
- Advanced Transportation Technology - Associate in Science (p. 105)
- Advanced Transportation Technology - Certificate of Achievement (p. 105)
- Aides, Assistants and Caregivers - Certificate of Achievement (p. 278)
- Alternative Fuel Vehicles - Certificate of Achievement (p. 105)
- American Sign Language and Deaf Studies - Associate in Arts (p. 108)
- Android App Developer - Certificate of Accomplishment (p. 287)
- Anthropology - Associate in Arts Transfer Degree (p. 109)
- Applied Design in Art: 3D Materials and Processes - Certificate of Achievement (p. 116)
- Architectural Design - Associate in Science (p. 110)
- Architectural Design - Certificate of Achievement (p. 110)
- ARE Exam Prep - Certificate of Completion (p. 111)
- Art - Associate in Arts (p. 114)
- Art History - Associate in Arts Transfer Degree (p. 113)
- Athletic Coaching - Certificate of Accomplishment (p. 234)
- AutoCAD Essentials - Certificate of Completion (p. 111)
- Automation Technician - Certificate of Achievement (p. 178)
- Automotive Engine and Transmission Service - Certificate of Achievement (p. 118)
- Automotive Engine Performance Service - Certificate of Achievement (p. 119)
- Automotive Maintenance Service - Certificate of Achievement (p. 119)
- Automotive Quick Service - Certificate of Accomplishment (p. 119)
- Automotive Quick Service - Certificate of Completion (p. 119)
- Automotive Technology - Associate in Science (p. 118)
- Automotive Technology - Certificate of Achievement (p. 118)


## B

- Baking \& Pastry Arts - Associate in Science (p. 121)
- Baking \& Pastry Arts - Certificate of Achievement (p. 122)
- Basic Arc Welding - Certificate of Completion (p. 289)
- Basic Gas Tungsten Arc Welding - Certificate of Completion (p. 290)
- Basic Oxy-Acetylene Welding - Certificate of Completion (p. 289)
- Basic Semi-Automatic Welding - Certificate of Completion (p. 289)
- Biological Sciences - Associate in Science (p. 123)
- Biology - Associate in Science Transfer Degree (p. 123)
- Building Information Modeling (BIM) Coordinator - Certificate of Achievement (p. 110)
- Business Administration 2.0-Associate in Science Transfer Degree (p. 125)
- Business Digital Literacy - Certificate of Accomplishment (p. 134)
- Business: Accounting - Certificate of Achievement (p. 127)
- Business: Accounting Concentration - Associate in Arts (p. 127)
- Business: Business Economics - Certificate of Accomplishment (p. 126)
- Business: Foundations of Accounting - Certificate of Accomplishment (p. 127)
- Business: Foundations of Business - Certificate of Accomplishment (p. 128)
- Business: Foundations of International Business - Certificate of Accomplishment (p. 130)
- Business: Foundations of Management - Certificate of Accomplishment (p. 131)
- Business: Foundations of Marketing - Certificate of Accomplishment (p. 132)
- Business: General Business - Certificate of Achievement (p. 128)
- Business: General Business Concentration - Associate in Arts (p. 128)
- Business: Global Trade and Logistics Concentration - Associate in Arts (p. 129)
- Business: Global Trade and Logistics - Certificate of Achievement (p. 130)
- Business: Logistics - Certificate of Accomplishment (p. 130)
- Business: Management - Certificate of Achievement (p. 131)
- Business: Management Concentration - Associate in Arts (p. 130)
- Business: Marketing - Certificate of Achievement (p. 132)
- Business: Marketing Concentration - Associate in Arts (p. 131)
- Business: Money and Banking - Certificate of Accomplishment (p. 126)


## C

- Cake Decorating Techniques - Certificate of Completion (p. 260)
- CDECE: Assistant Teacher - Certificate of Accomplishment (p. 140)
- CDECE: Associate Teacher - Certificate of Accomplishment (p. 140)
- CDECE: Family Development - Certificate of Accomplishment (p. 140)
- Certified Dietary Manager (CDM) Board Exam Preparation - Certificate of Completion (p. 260)
- Child Development: Early Childhood Education - Associate in Arts (p. 137)
- Child Development: Early Childhood Education - Certificate of Achievement (p. 138)
- Child Development: Permit Specialization Area - Child Health and Safety - Certificate of Accomplishment (p. 141)
- Child Development: Permit Specialization Area - Children with Exceptional Needs - Certificate of Accomplishment (p. 141)
- Child Development: Permit Specialization Area - Curriculum in Early Childhood Education - Certificate of Accomplishment (p. 142)
- Child Development: Permit Specialization Area - Early Literacy Certificate of Accomplishment (p. 142)
- Child Development: Permit Specialization Area - Family Child Care Certificate of Accomplishment (p. 142)
- Child Development: Permit Specialization Area - Infant/Toddler Certificate of Accomplishment (p. 143)
- Child Development: Special Education Assistant - Associate in Arts (p. 145)
- Child Development: Special Education Assistant - Certificate of Achievement (p. 145)
- CISCO Certified Network Installation Associate - Certificate of Achievement (p. 180)
- Cloud Computing - Associate in Science (p. 152)
- Cloud Computing - Certificate of Achievement (p. 152)
- Commercial Music - Certificate of Achievement (p. 248)
- Communication Studies - Associate in Arts (p. 147)
- Communication Studies 2.0 - Associate in Arts Transfer Degree (p. 147)
- Computed Tomography - Certificate of Accomplishment (p. 171)
- Computer Aided Design - Mechanical - Associate in Science (p. 149)
- Computer Aided Design - Mechanical - Certificate of Achievement (p. 149)
- Computer Hardware Technician - Certificate of Achievement (p. 154)
- Computer Hardware Technician - Certificate of Completion (p. 135)
- Computer Information Competency - Certificate of Completion (p. 157)
- Computer Networking Technician - Certificate of Accomplishment (p. 154)
- Computer Science - Associate in Science (p. 150)
- Computer Science - Certificate of Achievement (p. 150)
- Computer Security and Networking - Associate in Science (p. 153)
- Computer Security and Networking - Certificate of Achievement (p. 153)
- Computer Technology - Associate in Science (p. 156)
- Computer Technology - Certificate of Achievement (p. 156)
- Construction Apprenticeship Readiness - Certificate of Achievement (p. 158)
- Construction Apprenticeship Readiness - Certificate of Completion (p. 159)
- Construction Technology - Associate in Science (p. 158)
- Construction Technology - Certificate of Achievement (p. 158)
- Criminal Forensics - Certificate of Achievement (p. 93)
- Cryptocurrency Fundamentals - Certificate of Accomplishment (p. 156)
- Cryptocurrency Fundamentals - Certificate of Completion (p. 156)
- CSU GE Breadth (Plan B) - Certificate of Achievement (p. 216)
- Culinary Arts - Associate in Science (p. 162)
- Culinary Arts - Certificate of Achievement (p. 162)
- Cyber Security - Certificate of Achievement (p. 155)


## D

- Dance - Associate in Arts (p. 164)
- Database Administrator Specialist - Certificate of Accomplishment (p. 165)
- Database Management - Associate in Science (p. 165)
- Database Management - Certificate of Achievement (p. 165)
- Deploy the Arts - Certificate of Accomplishment (p. 284)
- Design Basics - Certificate of Achievement (p. 111)
- Design Introduction - Certificate of Completion (p. 111)
- Design Management- Associate in Science (p. 167)
- Designing with Rhinoceros - Certificate of Completion (p. 112)
- Diagnostic Medical Imaging (Radiologic Technology) - Associate in Science (p. 170)
- Diagnostic Medical Imaging (Radiologic Technology) - Certificate of Achievement (p. 171)
- Dietetic Service Supervisor - Associate in Arts (p. 259)
- Dietetic Service Supervisor - Certificate of Achievement (p. 260)
- Digital and Social Media - Certificate of Achievement (p. 134)
- Digital Media: Comics \& Animation - Certificate of Achievement (p. 174)
- Digital Media: Graphic Design - Certificate of Achievement (p. 174)
- Digital Media: Multimedia Interaction \& Game Design - Certificate of Achievement (p. 174)
- DRE Exam Preparation - Certificate of Completion (p. 133)

E

- Early Childhood Education - Associate in Science Transfer Degree (p. 137)
- Economics - Associate in Arts Transfer Degree (p. 125)
- Economics - Certificate of Achievement (p. 126)
- Educational Aide I - Certificate of Achievement (p. 189)
- Educational Aide II - Certificate of Achievement (p. 190)
- Educator Workforce Preparation - Certificate of Competency (p. 190)
- Electric \& Hybrid Vehicles - Certificate of Achievement (p. 106)
- Electrical Apprenticeship Preparation - Certificate of Achievement (p. 175)
- Electrical Program Preparation - Certificate of Completion (p. 175)
- Electrical Technology, Automation Technician - Associate in Science (p. 177)
- Electrical Technology, Automation Technician - Certificate of Achievement (p. 177)
- Electrical Technology, CISCO Certified Network Installation Associate - Associate in Science (p. 179)
- Electrical Technology, CISCO Certified Network Installation Associate - Certificate of Achievement (p. 179)
- Electrical Technology, General Industrial Electrician - Associate in Science (p. 181)
- Electrical Technology, General Industrial Electrician - Certificate of Achievement (p. 181)
- Electrical Technology, High Voltage Test Technician - Associate in Science (p. 183)
- Electrical Technology, High Voltage Test Technician - Certificate of Achievement (p. 183)
- Electrical Technology, Solar Installation and Maintenance - Associate in Science (p. 185)
- Electrical Technology, Solar Installation and Maintenance - Certificate of Achievement (p. 185)
- Electrical Technology, Traffic Signal Technician - Associate in Science (p. 187)
- Electrical Technology, Traffic Signal Technician - Certificate of Achievement (p. 187)
- Elementary Teacher Education - Associate in Arts Transfer Degree (p. 189)
- Emergency Medical Technician - Certificate of Accomplishment (p. 244)
- Engineering - Associate in Science (p. 191)
- Engineering Automation Technology - Certificate of Achievement (p. 193)
- Engineering Technology - Associate in Science (p. 192)
- Engineering Technology - Certificate of Achievement (p. 192)
- Engineering Technology Advanced - Certificate of Achievement (p. 192)
- English - Associate in Arts Transfer Degree (p. 194)
- English for Everyday - Level 1 - Certificate of Competency (p. 197)
- English for Everyday - Level 2 - Certificate of Competency (p. 197)
- English for Everyday - Level 3 - Certificate of Competency (p. 197)
- English, Creative Writing - Associate in Arts (p. 195)
- English, Language and Literature - Associate in Arts (p. 195)
- ESL Literacy - Certificate of Competency (p. 197)
- ESL Reading for Citizenship - Certificate of Competency (p. 198)
- Exploring Welding and Metal Fabrication - Certificate of Completion (p. 289)


## F

- Family Child Care Management - Certificate of Completion (p. 143)
- Family Violence Specialist - Certificate of Achievement (p. 279)
- Fashion Design - Associate in Science (p. 201)
- Fashion Design - Certificate of Achievement (p. 201)
- Fashion Design - Advanced Apparel Construction - Certificate of Completion (p. 203)
- Fashion Design - Industrial Sewing and Factory Production Methods - Certificate of Completion (p. 203)
- Fashion Design - Swimwear Construction - Certificate of Completion (p. 204)
- Fashion Design - Textile Surface Design - Certificate of Completion (p. 204)
- Fashion Design: Custom Apparel Design - Certificate of Achievement (p. 202)
- Fashion Design: Patternmaker/Technical Design - Certificate of Achievement (p. 202)
- Fashion Design: Wardrobe Designer/Stylist - Certificate of Achievement (p. 203)
- Fashion Merchandising - Associate in Science (p. 205)
- Fashion Merchandising - Certificate of Achievement (p. 205)
- FCC Amateur Radio Technician Preparation - Certificate of Completion (p. 175)
- Film Production - Certificate of Achievement (p. 207)
- Film, Television, and Electronic Media - Associate in Science Transfer Degree (p. 208)
- Financial Literacy - Certificate of Competency (p. 209)
- Fire Science - Associate in Science (p. 210)
- Fire Science - Certificate of Achievement (p. 210)
- Floral Design - Associate in Arts (p. 211)
- Floral Design - Certificate of Achievement (p. 211)
- Foreign Languages - Associate in Arts (p. 294)
- Forklift Fundamentals - Certificate of Completion (p. 159)
- Formula Room Technician - Certificate of Achievement (p. 259)
- Foundational Skills - Certificate of Competency (p. 213)
- Foundations of Entrepreneurship - Certificate of Accomplishment (p. 129)
- Foundations of Geospatial Data and Programming - Certificate of Accomplishment (p. 217)
- French - Certificate of Achievement (p. 295)
- Front End Web Developer - Certificate of Achievement (p. 286)
- Fundamentals of Academic Research - Certificate of Accomplishment (p. 237)
- Fundamentals of Academic Research - Certificate of Completion (p. 237)


## G

- Gas Tungsten Arc Welding (GTAW) - Certificate of Achievement (p. 290)
- GED/HiSET Preparation - Certificate of Competency (p. 214)
- GED/HiSET Preparation Spanish - Certificate of Competency (p. 214)
- Gender and Sexuality Studies - Certificate of Achievement (p. 215)
- General Industrial Electrician - Certificate of Achievement (p. 182)
- Geography - Associate in Arts Transfer Degree (p. 217)
- Geology - Associate in Science Transfer Degree (p. 219)
- Global Studies - Associate in Arts Transfer Degree (p. 220)


## H

- High Voltage Test Technician - Certificate of Achievement (p. 184)
- History - Associate in Arts Transfer Degree (p. 221)
- Home Health Aide - Certificate of Accomplishment (p. 257)
- Home Remodeling - Certificate of Achievement (p. 159)
- Home Remodeling - Certificate of Completion (p. 159)
- Horticulture - Associate in Science (p. 222)
- Horticulture - Certificate of Achievement (p. 222)
- Hospitality Management - Associate in Science Transfer Degree (p. 224)
- Human Services Addiction Studies - Associate in Arts (p. 225)

I

- IGETC (Plan C) - Certificate of Achievement (p. 216)
- Industrial Design - Associate in Science (p. 228)
- Information Competency - Certificate of Accomplishment (p. 237)
- Information Competency - Certificate of Competency (p. 238)
- Information Technology Cybersecurity - Associate in Science (p. 154)
- Information Technology Cybersecurity - Certificate of Achievement (p. 154)
- Interior Design - Associate in Science (p. 229)
- Interior Design - Certificate of Achievement (p. 229)
- Intermediate Grammar - Certificate of Competency (p. 198)
- Intermediate Oral Skills - Certificate of Competency (p. 198)
- Intermediate Reading and Writing - Certificate of Competency (p. 198)
- Introduction to Computers - Certificate of Completion (p. 99)
- Introduction to Gas Tungsten Arc Welding (GTAW) - Certificate of Achievement (p. 290)
- Introduction to Shielded Metal Arc Welding (SMAW) - Certificate of Achievement (p. 291)
- IPC-620 Wire Harness Assembly and Inspection - Certificate of Completion (p. 175)


## J

- Japanese - Associate in Arts (p. 293)
- Japanese - Certificate of Achievement (p. 294)
- Jewelry Entrepreneurship - Certificate of Achievement (p. 116)
- Journalism - Associate in Arts (p. 230)
- Journalism - Associate in Arts Transfer Degree (p. 230)


## K

- Kinesiology - Associate in Arts (p. 232)
- Kinesiology - Associate in Arts Transfer Degree (p. 232)


## L

- Library Technician - Associate in Science (p. 236)
- Library Technician - Certificate of Achievement (p. 236)
- Library Technician - Certificate of Completion (p. 237)
- Library Technician Patron Facing - Certificate of Completion (p. 238)
- Library Technician School Media Assistant - Certificate of Completion (p. 238)
- Library Technician Technical Services - Certificate of Completion (p. 238)
- Light-Duty Diesel Generator Engine Maintenance - Certificate of Completion (p. 120)
- Linguistics - Associate in Arts (p. 239)
- LVN to RN Career Ladder (30-unit option) - Certificate of Achievement (p. 251)
- LVN to RN Career Ladder - Associate in Science (p. 250)

M

- Magnetic Resonance Imaging Technologist - Certificate of Accomplishment (p. 172)
- Mathematics - Associate in Science (p. 240)
- Mathematics - Associate in Science Transfer Degree (p. 240)
- Medical Assisting: Administrative Option - Certificate of Achievement (p. 243)
- Medical Assisting: Clinical Option - Certificate of Achievement (p. 243)
- Medical Assisting: Combined Administrative/Clinical - Associate in Science (p. 242)
- Medical Assisting: Combined Administrative/Clinical - Certificate of Achievement (p. 242)
- Medical Insurance Billing - Certificate of Accomplishment (p. 244)
- Metal Fabrication Technology - Associate in Science (p. 245)
- Metal Fabrication Technology - Certificate of Achievement (p. 245)
- Microsoft Access for Windows - Certificate of Completion (p. 99)
- Microsoft Essentials - Certificate of Achievement (p. 134)
- Microsoft Excel - Certificate of Completion (p. 99)
- Microsoft Office - Certificate of Completion (p. 99)
- Microsoft Outlook - Certificate of Completion (p. 99)
- Microsoft PowerPoint - Certificate of Completion (p. 100)
- Microsoft Windows Networking Technician - Certificate of Achievement (p. 155)
- Microsoft Word for Windows - Certificate of Completion (p. 100)
- Music - Associate in Arts (p. 247)
- Music - Associate in Arts Transfer Degree (p. 247)

N

- Network Cabling Specialist - Certificate of Accomplishment (p. 180)
- Networking Fundamentals - Certificate of Completion (p. 100)
- Nursing Assistant - Certificate of Accomplishment (p. 257)
- Nursing: Vocational/Practical - Associate in Science (p. 255)
- Nursing: Vocational/Practical - Certificate of Achievement (p. 256)
- Nutrition and Dietetics - Associate in Science Transfer Degree (p. 258)
- Nutrition Assistant - Associate in Science (p. 258)

0

- Office Technologies - Job Search Skills - Certificate of Completion (p. 135)
- Office Technologies - Microsoft Access - Certificate of Completion (p. 135)
- Office Technologies - Microsoft Excel - Certificate of Completion (p. 135)
- Office Technologies - Microsoft Outlook - Certificate of Completion (p. 136)
- Office Technologies - Microsoft PowerPoint - Certificate of Completion (p. 136)
- Office Technologies - Microsoft Word - Certificate of Completion (p. 136)


## P

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- Social Competency Skills - Certificate of Completion (p. 161)
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- Telecommuting Fundamentals - Certificate of Achievement (p. 134)
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## ADMINISTRATION OF JUSTICE

The Administration of Justice program is a comprehensive offering of courses created and designed for the purpose of educating and training diverse groups of students who aspire for careers in the Criminal Justice System. The program provides both certificates and degrees that reflect our student's level of educational preparedness for entry-level opportunities in law enforcement, corrections, and the courts. Students are expected to successfully develop college-level skills and knowledge in furtherance of transferring to four-year institutions of higher learning and successful careers in Criminal Justice.

## Administration of Justice - Associate in Science Transfer Degree

## Plan Code: 5504B/C

This program is a comprehensive offering of courses created and designed to prepare students for upper-division study in any of the criminal justice fields. The Associate in Science in Administration of Justice for Transfer degree provides students with a fundamental knowledge of the history, development, structure, and functions of the American criminal justice system. This degree program also develops students' critical thinking skills through applying the criminological theories, principles, and concepts to address real-life situations in the field; recognizing the importance of legal and ethical behavior in a professional work setting; and analyzing, interpreting, and evaluating criminological justice theories, policies, practices and procedures to develop strategies to control and prevent crime. The Associate in Science in Administration of Justice for Transfer degree prepares students for a seamless transfer to a baccalaureate degree program in Criminal Justice/ Criminology in the CSU system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Explore the history development, structure and functions of the American criminal justice system.
- Recognize the importance and practice of legal and ethical behavior in a professional criminal justice work setting.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:
Code Number Course Title Units

## REQUIRED CORE COURSES

| ADJUS 2 | Introduction Administration of Justice | 3 |
| :--- | :--- | :--- |
| ADJUS 4 | Criminal Law | 3 |

Subtotal Units 6

IN ADDITION, complete TWO (2) courses from LIST A:
LIST A
ADJUS 3 Introduction to Criminal Procedures (3)
ADJUS $6 \quad$ Introduction to Evidence (3)
ADJUS 8 Introduction to Investigation (3)
ADJUS 20 Introduction to Corrections (3)
Subtotal Units
6

IN ADDITION, complete TWO (2) courses from LIST B:
LIST B
Any LIST A course not already used
PSYCH 1/1H Introduction to Psychology (3)
SOCIO $1 / 1 \mathrm{H} \quad$ Introduction to Sociology (3)
STAT $1 / 1 \mathrm{H} \quad$ Elementary Statistics (4)
Subtotal Units 6-7

Required Subtotal 18-19
Complete one of the following: ${ }^{1}$ 37-39
Plan B
Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$
Degree Total
${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Administration of Justice - Associate in Arts

Plan Code: 1800
This program will prepare students for career advancements in Law Enforcement, Corrections, and the Courts. Appropriate course selection will also facilitate transfer in a related major.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Explore the history, development, structure and functions of the American criminal justice system.
- Recognize the importance and practice of legal and ethical behavior in a professional criminal justice work setting.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

Code Number Course Title Units
REQUIRED COURSES
ADJUS 2 Introduction Administration of Justice 3

ADJUS 3 Introduction to Criminal Procedures 3
ADJUS 4 Criminal Law 3
ADJUS 5 Community and Human Relations 3
ADJUS 6 Introduction to Evidence 3

| ADJUS 8 | Introduction to Investigation | 3 |
| :---: | :---: | :---: |
| Subtotal Units |  | 18 |
| IN ADDITION, complete SIX (6) units from the following: |  |  |
| ADJUS 10 | Writing for Criminal Justice (3) |  |
| ADJUS 14 | Juvenile Law and Procedures (3) |  |
| ADJUS 16 | Vice, Narcotics and Organized Crime (3) |  |
| ADJUS 17 | Computer Use in Criminal Justice (3) |  |
| ADJUS 18 | Police Field Operations (3) |  |
| ADJUS 19 | Fingerprint Classif \& Identification (3) |  |
| ADJUS 20 | Introduction to Corrections (3) |  |
| ADJUS 40 | Street Gangs and Law Enforcement (3) |  |
| ADJUS 45 | Drug Abuse and Law Enforcement (3) |  |
| ADJUS 255 | Introduction to Forensics (3) |  |
| ADJUS 269 | Pre-Employment Preparation for Law Enforcement (3) |  |
| PUBAD 1 | Introduction to Public Administration (3) |  |
| Subtotal Units |  | 6 |
| Required Subtotal |  | 24 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Total |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

## Administration of Justice Certificate of Achievement

## Plan Code: 3800

This program will prepare students for an entry-level position in a variety of entry level employment opportunities within the criminal justice system such as Law Enforcement, Corrections, and the Courts.

## Program Student Learning Outcomes

- Demonstrate an understanding and ability to analyze crime, policies, procedures and the people that shape the Justice System.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ADJUS 2 | Introduction Administration of Justice | 3 |
| ADJUS 3 | Introduction to Criminal Procedures | 3 |
| ADJUS 4 | Criminal Law | 3 |
| ADJUS 5 | Community and Human Relations | 3 |
| ADJUS 6 | Introduction to Evidence | 3 |
| Subtotal Units |  | $\mathbf{1 5}$ |
| IN ADDITION, complete NINE (9) units from the following: |  |  |
| COMM 10 |  | Elements of Public Speaking (3) |


| COMM 30 | Elements of Group Communication (3) |
| :--- | :--- |
| ENGL 1 | Reading and Composition (4) |
| or ENGL 1H | Honors Reading and Composition (4) |
| or ENGL 1S | Reading and Composition with Support (5) |
| or ESL 1S | College Writing for Non-Native Speakers (5) |
| or ENGL 105 | Fundamentals of Writing (4) |
| POLSC 1 | Introduction to Government (3) |
| PSYCH 1 | Introduction to Psychology (3) |
| SOCIO 1 | Introduction to Sociology (3) |
| Subtotal Units |  |
| Total Units | $\mathbf{9 4}$ |

## Criminal Forensics - Certificate of Achievement

Plan Code: 3029

This program prepares students for entry-level jobs in Crime Scene Investigation and fingerprint collection and identification.

## Program Student Learning Outcomes

- Demonstrate the critical thinking skills that are needed to identify potential evidence
- Analyze and process a crime scene and establish a chain of custody for all collected evidence


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| ADJUS 6 | Introduction to Evidence | 3 |
| ADJUS 8 | Introduction to Investigation | 3 |
| ADJUS 19 | Fingerprint Classif \& Identification | 3 |
| ADJUS 255 | Introduction to Forensics | $\mathbf{1 2}$ |
| Subtotal Units |  |  |
| IN ADDITION, complete ONE (1) course from the following: |  |  |
| ADJUS 3 | Introduction to Criminal Procedures (3) |  |
| ADJUS 4 | Criminal Law (3) |  |
| ADJUS 10 | Writing for Criminal Justice (3) |  |
| ADJUS 17 | Computer Use in Criminal Justice (3) |  |
| Total Units |  | $\mathbf{1 5}$ |

## Public Services: Transportation

 Security Administration Associate Certificate of AccomplishmentPlan Code: 4800

This program will prepare the student for an entry level position in the Transportation Security Administration and aid those already employed in the field in their efforts to advance.

## Program Student Learning Outcomes

- Demonstrate knowledge of plans and programs at federal, state and local levels that reflect the evolving strategic policy issues associated with a statutory and presidential direction for Homeland Security.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| HSA 401 | Introduction to Homeland Security | 3 |
| HSA 402 | Intelligence Analysis/Security Mgmt | 3 |
| HSA 403 | Transportation and Border Security | 3 |
| Total Units |  | $\mathbf{9}$ |

## Security Guard Training - Certificate of Completion

Plan Code: 6171
This program is designed for students pursuing employment as a registered security guard or private security officer and shall follow the standards prescribed by section 7583.6(b) of the Business and Professions Code. The certificate will provide the student with the required training for state licensure as a Security Guard through the Bureau of Security and Investigative Services and provides the option for students to take the state mandated licensure exam in class. Upon completion of this training and successfully passing the state exam, the student may apply to the state for licensure as a Security Guard. Licensure is contingent on completing the training, obtaining a passing score on the state exam and a Livescan. This program prepares students for careers in Private and Proprietary Security: Private Security Guard, Loss Prevention/Assets Protection Specialist, Proprietary Security Officer and Proprietary Investigator.

## Program Student Learning Outcomes

- Demonstrate the skills and knowledge relevant to the position of State Security Officer.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ADJUS 600 | Powers of Arrest/Weapons of Destruction | 9 |
| ADJUS 601 | Public Relations \& Liability | 9 |
| ADJUS 602 | Communication/Observation/ | 9 |
|  | Documentation |  |
| Subtotal Hours |  | $\mathbf{2 7}$ |
| IN ADDITION, complete EIGHTEEN (18) hours from the following: |  |  |
| ADJUS 603 | Search, Seizure, Scene Preservation | 9 |
| ADJUS 604 | Officer Safety \& First Aid CPR | 9 |
| ADJUS 605 | Conflict Management \& Crowd Control | 9 |
| Subtotal Hours |  | $\mathbf{1 8}$ |
| Total Hours |  | $\mathbf{4 5}$ |

# ADMINISTRATIVE ASSISTANT, CUSTOMER SUPPORT 

# Administrative Assistant, Customer Support - Associate in Science 

Plan Code: 2200
This program provides students with a solid foundation in computer support for the business environment. The curriculum provides students with customer service and IT skills for applications support as well as business communication strategies and operating system troubleshooting basics.

Some potential jobs this program prepares students for include Customer Support Representative, Customer Support Coordinator, Customer Care Representative, Member Services Representative, Customer Service Representative (CSR), Customer Service Technical Analyst, IT Service Desk Representative, Help Desk Tech Support Specialist, Applications Support Technician, and Office Support Specialist. Potential risks associated with this degree are occupations that are inherently competitive and low-salaried.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Evaluate customer support and end-user requirements to employ suitable tools and methods.
- Manage software tools for user support.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| BCOM 262 | Soft Skills for the Workplace | 1 |
| BCOM 263 | Customer Service | 3 |
| COSA 2 | Critical Thinking Using Computers | 3 |
| COSA 5 | Microsoft Windows Operating System | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSK 200 | Keyboarding and Document Production | 3 |
| Required Subtotal |  | 30 |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree T |  | 60 |

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Administrative Assistant, Customer Support - Certificate of Achievement 

Plan Code: 3200
This program will provide students with a solid foundation in computer support for the business environment. The curriculum provides students with customer service and IT skills for applications support as well as business communication strategies and operating system troubleshooting basics.

## Program Student Learning Outcomes

- Evaluate customer support needs and end-user requirements to employ suitable tools and methods.
- Integrate the use of various software tools to provide user support.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| BCOM 15 | Business Communications | 1 |
| BCOM 262 | Soft Skills for the Workplace | 3 |
| BCOM 263 | Customer Service | 3 |
| COSA 2 | Critical Thinking Using Computers | 3 |
| COSA 5 | Microsoft Windows Operating System | 3 |
| COSA 30 | Introduction to Computers | 4 |
| COSA 50 | Intro to IT Concepts and Applications | 3 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSK 200 | Keyboarding and Document Production | 4 |
| COSN 5 | Computer Hardware Fundamentals | $\mathbf{3 0}$ |

## Administrative Assistant, Customer Relations Specialist - Certificate of Achievement

## Plan Code: 3199

This program will prepare students for employment in a variety of fields that require knowledge of computer information systems and the ability to enter and process data using MS Office Suite, business communications skills, and training in human relations/customer service. This program helps students learn communication skills and customer service techniques that are in demand in the workforce.

## Program Student Learning Outcomes

- Apply effective communication skills to satisfy customers' needs and build relationships.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| BCOM 260 | Channels of Business Communication | 1 |
| BCOM 262 | Soft Skills for the Workplace | 1 |
| BCOM 263 | Customer Service | 3 |
| Total Units |  | $\mathbf{8}$ |

## ADMINISTRATIVE ASSISTANT, HUMAN RESOURCES SUPPORT

## Administrative Assistant, Human Resources Support - Associate in Science

Plan Code: 2201
This program provides students with a solid foundation for individuals seeking positions in human resources. The program emphasizes employee relations, communication, ethics, recruitment, career platforms, developing training documents, presentations, and utilizing spreadsheet software.

Some potential jobs that this program may prepare students for include Benefits Specialist, Human Resources Analyst, Human Resources Assistant, Human Resources Coordinator, Human Resources Generalist, Human Resources Specialist, Payroll Technician, Recruiter, Talent Acquisition Specialist, and Training Coordinator.

Potential risks associated with this degree are occupations that are inherently competitive and low-salaried.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply proper communications and ethics to human resource management.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| BCOM 25 | Digital and Social Media | 3 |
| BCOM 222 | Job Search Skills | 3 |
| COSA 15 | Microsoft Excel for Windows | 3 |
| COSA 20 | Microsoft PowerPoint for Windows | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 210 | Intro to Project Management for IT | 3 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSK 200 | Keyboarding and Document Production | 3 |
| MGMT 50 | Human Resource Management | 3 |
| Required Subtotal |  | $\mathbf{3 0}$ |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Administrative Assistant, Human Resources Support - Certificate of Achievement

Plan Code: 3201
This program will provide students with a solid foundation for individuals seeking positions in human resources. The program emphasizes employee relations, communication, ethics, recruitment, career platforms, developing training documents, presentations, and utilizing spreadsheet software.

## Program Student Learning Outcomes

- Describe the connections between business communications and ethics.
- Apply recruitment management tools to fulfill staffing needs.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| BCOM 15 | Business Communications | 3 |
| BCOM 25 | Digital and Social Media | 3 |
| BCOM 222 | Job Search Skills | 3 |
| COSA 15 | Microsoft Excel for Windows | 3 |
| COSA 20 | Microsoft PowerPoint for Windows | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 210 | Intro to Project Management for IT | 3 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSK 200 | Keyboarding and Document Production | 3 |
| MGMT 50 | Human Resource Management | $\mathbf{3 0}$ |
| Total Units |  |  |

## ADMINISTRATIVE ASSISTANT, OFFICE SUPPORT

## Administrative Assistant, Office Support - Associate in Science

Plan Code: 2202
This program provides students with an understanding of the fundamentals of administrative and office support, records and information management, communication technology, productivity software to manage travel and meeting coordination, and office environment planning.

Some potential jobs this program prepares students for include Office Assistant, Receptionist, Information Clerk, Office Coordinator, Front Office Assistant, Administrative Assistant, Administrative Clerk, Administrative Support Coordinator, Records and Information Management Specialist, Travel and Meeting Coordinator, Office Support Specialist, and Information Management Assistant.

The potential risks associated with this degree are low as there is a consistent demand for graduates across varying industries. The occupation, however, is inherently competitive and starts at a lowersalaried rate

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Create a variety of business documents using business application software.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| BCOM 15 | Business Communications | 3 |
| BCOM 222 | Job Search Skills | 3 |
| BCOM 263 | Customer Service | 3 |
| COSA 5 | Microsoft Windows Operating System | 3 |
| COSA 10 | Microsoft Word for Windows | 3 |
| COSA 15 | Microsoft Excel for Windows | 3 |
| COSA 20 | Microsoft PowerPoint for Windows | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSK 200 | Keyboarding and Document Production | 30 |
| Required Subtotal |  | $\mathbf{3 0}$ |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Administrative Assistant, Office Support - Certificate of Achievement 

Plan Code: 3202
This program will provide an understanding of the fundamentals of administrative and office support, records and information management, communication technology, productivity software to manage travel and meeting coordination, and office environment planning.

## Program Student Learning Outcomes

- Create a variety of business documents using business application software.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| BCOM 222 | Job Search Skills | 3 |
| BCOM 263 | Customer Service | 3 |
| COSA 5 | Microsoft Windows Operating System | 3 |
| COSA 10 | Microsoft Word for Windows | 3 |
| COSA 15 | Microsoft Excel for Windows | 3 |
| COSA 20 | Microsoft PowerPoint for Windows | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSK 200 | Keyboarding and Document Production | 3 |
| Total Units |  | 30 |

# ADMINISTRATIVE ASSISTANT, OFFICE TECHNOLOGIES 

# Introduction to Computers Certificate of Completion 

Plan Code: 6016
This program is designed to teach students computer information literacy, focusing on the relationship between technology, individuals, and society. It encompasses the use of computers, common software programs, peripherals, and social media. It prepares students and employees for office-type work environments.

## Program Student Learning Outcomes

- Explain how various computer software is used in the workplace and society.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :--- |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSA 632 | Introduction to Computers | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Microsoft Access for Windows Certificate of Completion

Plan Code: 6010
This program is designed to teach the fundamental knowledge and skills related to Microsoft Access. It is designed to prepare students for employment in business and industry as well as support workers who are already employed or will be employed in office-type environments.

## Program Student Learning Outcomes

- Use Microsoft Access to create, customize, and format business databases.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSA 624 | Microsoft Access for Windows | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Microsoft Excel - Certificate of Completion

Plan Code: 6011
This program is designed to teach the fundamental knowledge and skills related to Microsoft Excel. It is designed to prepare students for
employment in business and industry as well as support workers who are already employed or will be employed in office-type environments.

## Program Student Learning Outcomes

- Use Microsoft Excel to create, customize, and format business spreadsheets.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSA 618 | Microsoft Excel for Windows | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Microsoft Office - Certificate of Completion

Plan Code: 6012
This program is designed to teach an overview of the fundamental knowledge and skills related to the Microsoft Office suite. It is designed to prepare students for employment in business and industry as well as support workers who are already employed or will be employed in officetype environments.

## Program Student Learning Outcomes

- Use the Microsoft Office suite to create, customize, and format business files.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSA 635 | Microsoft Office | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Microsoft Outlook - Certificate of Completion

Plan Code: 6013
This program is designed to teach the fundamental knowledge and skills related to Microsoft Outlook. It is designed to prepare students for employment in business and industry as well as support workers who are already employed or will be employed in office-type environments.

## Program Student Learning Outcomes

- Use Microsoft Outlook to create, customize, and format business correspondences.


## Program Requirements

Code Number Course Title Hours
REQUIRED COURSES
COSA 601
Computer Information Competency
36

# COSA 631 <br> Microsoft Outlook for Windows <br> Total Hours <br> Microsoft PowerPoint - Certificate of Completion 

Plan Code: 6014
This program is designed to teach the fundamental knowledge and skills related to Microsoft PowerPoint. It is designed to prepare students for employment in business and industry as well as support workers who are already employed or will be employed in office-type environments.

## Program Student Learning Outcomes

- Use Microsoft PowerPoint to create, customize, and format business presentations.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSA 623 | Microsoft PowerPoint for Windows | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Microsoft Word for Windows Certificate of Completion

Plan Code: 6015
This program is designed to teach the fundamental knowledge and skills related to Microsoft Word. It is designed to prepare students for employment in business and industry as well as support workers who are already employed or will be employed in office-type environments.

## Program Student Learning Outcomes

- Use Microsoft Word to create, customize, and format business documents.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSA 613 | Microsoft Word for Windows | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Networking Fundamentals Certificate of Completion

## Plan Code: 6017

This program is designed to teach the fundamental knowledge and skills related to computer networking and the process of exchanging data and sharing resources. It is designed to prepare students for employment
in business and industry as well as support workers who are already employed or will be employed in office-type environments.

## Program Student Learning Outcomes <br> - Illustrate the fundamentals of computer networking and demonstrate the process of exchanging data and sharing resources.

## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSN 605 | Computer Hardware Fundamentals | 72 |
| COSN 610 | Networking Fundamentals | 54 |
| Total Hours |  | $\mathbf{1 2 6}$ |

## ADMINISTRATIVE ASSISTANT, VIRTUAL SUPPORT

## Administrative Assistant, Virtual Support - Associate in Science

Plan Code: 2203
This program prepares students for careers involving virtual work in office environments. The program curriculum prepares students for business office work requiring remote workers, remote administrative assistance, or global support in contemporary business environments.

Some potential jobs that this program may prepare students for include Online Administrative Assistant, Online Assistant, Remote Administrative Assistant, Remote Assistant, Remote Office Manager, Virtual Administrative Assistant, Virtual Assistant, Virtual Executive Assistant, Virtual Office Assistant, Virtual Secretary.

Potential risks associated with this certificate are occupations that are inherently competitive and low-salaried.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply digital resources to conduct remote administrative support work.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| BCOM 15 | Business Communications | 3 |
| BCOM 20 | Business Writing | 3 |
| BCOM 25 | Digital and Social Media | 1 |
| BCOM 260 | Channels of Business Communication | 1 |
| BCOM 262 | Soft Skills for the Workplace | 3 |
| BCOM 263 | Customer Service | 3 |
| BCOM 264 | Business Telecommuting Fundamentals | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 210 | Microsoft Outlook for Windows | 3 |
| COSA 215 | Keyboarding and Document Production | 3 |
| COSK 200 |  | 29 |
| Required Subtotal |  |  |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) |  |  |

Minimum Degree Total
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Administrative Assistant, Virtual Support - Certificate of Achievement

Plan Code: 3203
This program prepares students for careers involving virtual work in office environments. The program curriculum prepares students for business office work requiring remote workers, remote administrative assistance, or global support in contemporary business environments.

## Program Student Learning Outcomes

- Apply digital resources to conduct remote administrative support work.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| BCOM 15 | Business Communications | 3 |
| BCOM 20 | Business Writing | 3 |
| BCOM 25 | Digital and Social Media | 1 |
| BCOM 260 | Channels of Business Communication | 1 |
| BCOM 262 | Soft Skills for the Workplace | 3 |
| BCOM 263 | Customer Service | 3 |
| BCOM 264 | Business Telecommuting Fundamentals | 3 |
| COSA 30 | Introduction to Computers | 3 |
| COSA 210 | Intro to Project Management for IT | 3 |
| COSA 215 | Microsoft Outlook for Windows | 3 |
| COSK 200 | Keyboarding and Document Production | 3 |
| Total Units |  | $\mathbf{2 9}$ |

## ADVANCED MANUFACTURING

## Advanced Manufacturing Technology - Associate in Science

Plan Code: 2921
This program prepares students for transfer to a California State University, and prepares students for careers in aerospace, medical device, automotive aftermarket, and many other advanced manufacturing sectors where machine tool technologies are utilized. Students will learn a variety of valuable skills including print reading, shop math, and CNC machine tool programming. Students will learn inspection techniques using calipers, micrometers, indicators, thread-gaging, and automated measurement equipment, such as digital height-gages, and indicators. Students will create machine programs using the latest software technologies on the latest CNC machine tool equipment and simulators. The program will provide students with the technical skills need to find employment or advancement in the field of advanced manufacturing/ machine tool technology. Students will find jobs or apprenticeships as machine operator, CNC operator, machinist, CNC programmer, or inspector.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate the ability to create and interpret mechanical engineering drawings and specifications.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ADMT 50 | Advanced Manufacturing, Introduction | 3 |
| ADMT 200 | Advanced Manufacturing Math | 3 |
| ADMT 251 | Advanced Manufacturing, CNC Mills/Lathes | 2 |
| ADMT 252 | Advanced Manufacturing, Sheet Metal CNC | 2 |
| ADMT 253 | Advanced Manufacturing, Capstone | 2 |
| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| CAD 5 | Intro to CAD/CAM MasterCAM | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| OSHA 254 | OSHA Standards for General Industry | 2 |
| WELD 50 | Introduction to Welding | 4 |
| Required Subtotal |  | $\mathbf{3 5}$ |
| Complete one of the following: ${ }^{1}$ | $19-39$ |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  | $\mathbf{6 0}$ |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Total |  |  |

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Advanced Manufacturing Technology - Certificate of Achievement 

Plan Code: 3921

This program prepares students for careers in aerospace, medical device, automotive aftermarket, and many other advanced manufacturing sectors where machine tool technologies are utilized. Students will learn a variety of valuable skills including print reading, shop math, and CNC machine tool programming. Students will learn inspection techniques using calipers, micrometers, indicators, thread-gaging, and automated measurement equipment, such as digital height-gages, and indicators. Students will create machine programs using the latest software technologies on the latest CNC machine tool equipment and simulators. The program is designed to be complete in 2 semesters and will provide students with the technical skills needed to find employment or advancement in the field of advanced manufacturing/machine tool technology.

## Program Student Learning Outcomes

- Demonstrate the ability to create and interpret mechanical engineering drawings and specifications.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ADMT 50 | Advanced Manufacturing, Introduction | 3 |
| ADMT 200 | Advanced Manufacturing Math | 3 |
| ADMT 251 | Advanced Manufacturing, CNC Mills/Lathes | 2 |
| ADMT 252 | Advanced Manufacturing, Sheet Metal CNC | 2 |
| ADMT 253 | Advanced Manufacturing, Capstone | 2 |
| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| CAD 5 | Intro to CAD/CAM MasterCAM | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| OSHA 254 | OSHA Standards for General Industry | 2 |
| WELD 50 | Introduction to Welding | 4 |
| Total Units |  | 35 |

## Advanced Manufacturing Technology Core Skills - Certificate of Achievement

## Plan Code: 3922

The Advanced Manufacturing Technology department will be offering several Certificates of Achievement to provide students the knowledge and training they need to enter a specialized career or enhance their skills
for advancement in their job. Coursework completed while earning a Certificate can also be applied to the Associate Degree. The Advanced Manufacturing Technology Core Skills Certificate provides a student the necessary skills for an entry-level/internship opportunity in the advanced manufacturing field with a focus on manufacturing.

## Program Student Learning Outcomes

- Demonstrate the ability to create and interpret mechanical engineering drawings and specifications.
- Create Computer Numerical Control (CNC) machine tool programs utilizing CNC programming technologies.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ADMT 50 | Advanced Manufacturing, Introduction | 3 |
| ADMT 200 | Advanced Manufacturing Math | 3 |
| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| OSHA 254 | OSHA Standards for General Industry | $\mathbf{2}$ |
| WELD 50 | Introduction to Welding | $\mathbf{4}$ |
| Total Units |  | $\mathbf{1 8}$ |

## Advanced Manufacturing and Design Technology - Certificate of Achievement

## Plan Code: 3923

The Advanced Manufacturing Technology department will be offering several Certificates of Achievement to provide students the knowledge and training they need to enter a specialized career or enhance their skills for advancement in their job. Coursework completed while earning a Certificate can also be applied to the Associate Degree. The Advanced Manufacturing and Design Technology certificate provides a student the necessary skills for an entry-level/internship opportunity in the advanced manufacturing field with a focus on Computer Aided Design, and Computer Aided Manufacturing.

## Program Student Learning Outcomes

- Demonstrate the ability to create and interpret mechanical engineering drawings and specifications.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| CAD 2 | Intro to Computer Aided Design AutoCAD | 3 |
| CAD 3 | Intro to Computer Aided Design CATIA | 3 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| CAD 5 | Intro to CAD/CAM MasterCAM | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| Total Units |  | $\mathbf{2 1}$ |

## ADVANCED TRANSPORTATION

## Advanced Transportation Technology <br> - Associate in Science

Plan Code: 2952
This program is designed to provide students with the knowledge and skills needed for today's technicians, service writers, and parts support specialists. The degree is designed to successfully prepare students for employment with entry and mid-level technician, service writer, and parts support specialist positions at dealerships, the ports of Long Beach and Los Angeles, and transit. The program focuses on the industry standard of fix-it-right scores by providing students with the opportunity to develop skills and resolve real-world customer concerns.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Students will analyze and demonstrate technical knowledge and practical skills to properly and accurately diagnose and repair advanced propulsion systems used in electric, hybrid, and Compressed Natural Gas vehicles.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 201 | Automotive Lubrication Service | 1 |
| AUTO 202 | Automotive Tire Service | 1 |
| AUTO 203 | Automotive Brake Inspection | 1 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 230 | Automotive Computer Systems | 3 |
| AUTO 270 | Intro to Hybrid and Electric Vehicles | 3 |
| AUTO 271 | Introduction to Alternative Fuel Systems | 3 |
| AUTO 280 | Light Duty Electric Vehicles | 3 |
| AUTO 281 | Light Duty Hybrid Vehicles | 3 |
| AUTO 282 | Light Duty Alternative Fuels | 3 |
| AUTO 283 | Light Duty EV Powertrain Diagnostics | 3 |
| AUTO 292 | Heavy Duty Alternative Fuels | 3 |
| Required Subtotal |  | 33 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree To |  | 60 |

2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Advanced Transportation Technology - Certificate of Achievement 

Plan Code: 3952

This program is designed to provide students with the knowledge and skills needed for today's technicians, service writers, and parts support specialists. The degree is designed to successfully prepare students for employment with entry and mid-level technician, service writer, and parts support specialist positions at dealerships, the ports of Long Beach and Los Angeles, and transit. The program focuses on the industry standard of fix-it-right scores by providing students with the opportunity to develop skills and resolve real-world customer concerns.

## Program Student Learning Outcomes

- Analyze and demonstrate technical knowledge and practical skills to properly and accurately diagnose and repair advanced propulsion systems used in electric, hybrid, and Compressed Natural Gas vehicles.


## Program Requirements

Code Number Course Title Units

## REQUIRED COURSES

| AUTO 200 | Introduction to Automotive Technology | 3 |
| :--- | :--- | ---: |
| AUTO 201 | Automotive Lubrication Service | 1 |
| AUTO 202 | Automotive Tire Service | 1 |
| AUTO 203 | Automotive Brake Inspection | 1 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 230 | Automotive Computer Systems | 3 |
| AUTO 270 | Intro to Hybrid and Electric Vehicles | 3 |
| AUTO 271 | Introduction to Alternative Fuel Systems | 3 |
| AUTO 280 | Light Duty Electric Vehicles | 3 |
| AUTO 281 | Light Duty Hybrid Vehicles | 3 |
| AUTO 282 | Light Duty Alternative Fuels | 3 |
| AUTO 283 | Light Duty EV Powertrain Diagnostics | 3 |
| AUTO 292 | Heavy Duty Alternative Fuels | 3 |
| Total Units |  | 33 |

## Alternative Fuel Vehicles - Certificate of Achievement

## Plan Code: 3937

This program is designed to provide students with the knowledge and skills needed for today's technicians, service writers, and parts support specialists. The degree is designed to successfully prepare students for employment with entry and mid-level technician, service writer, and parts support specialist positions at dealerships, the ports of Long Beach and Los Angeles, and transit. The program focuses on the industry standard of fix-it-right scores by providing students with the opportunity to develop skills and resolve real-world customer concerns.

## Program Student Learning Outcomes

- Define the pros and cons of various types of propulsion systems of alternative fueled vehicles.
- Formulate diagnostic strategies for resolving vehicle concerns.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 211 | Automotive Engine Repair | 3 |
| AUTO 230 | Automotive Computer Systems | 3 |
| AUTO 271 | Introduction to Alternative Fuel Systems | 3 |
| AUTO 282 | Light Duty Alternative Fuels | 3 |
| AUTO 292 | Heavy Duty Alternative Fuels | 3 |
| Total Units |  | $\mathbf{1 8}$ |

## Electric \& Hybrid Vehicles Certificate of Achievement

Plan Code: 3938

This program is designed to provide students with the knowledge and skills needed for today's technicians, service writers, and parts support specialists. The degree is designed to successfully prepare students for employment with entry and mid-level technician, service writer, and parts support specialist positions at automotive dealerships, the ports of Long Beach and Los Angeles, and transit. The program focuses on the industry standard of fix-it-right scores by providing students with the opportunity to develop skills and resolve real-world customer concerns.

## Program Student Learning Outcomes

- Define the pros and cons of various types of propulsion systems to include electric vehicles and hybrid fueled vehicles.
- Formulate diagnostic strategies for resolving vehicle concerns.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 230 | Automotive Computer Systems | 3 |
| AUTO 270 | Intro to Hybrid and Electric Vehicles | 3 |
| AUTO 280 | Light Duty Electric Vehicles | 3 |
| AUTO 281 | Light Duty Hybrid Vehicles | 3 |
| Total Units |  | $\mathbf{1 8}$ |

## ALCOHOL AND ADDICTION <br> STUDIES

See Human Services Alcohol and Addiction Studies (p. 225)

## AMERICAN SIGN LANGUAGE AND DEAF STUDIES

The American Sign Language (ASL) and Deaf Studies program offers formal transfer requirement courses in ASL and Deaf cultures. The program is designed to teach students to communicate effectively in ASL, to understand and appreciate Deaf cultures, and to provide a pool of candidates to fill positions in the community.

## American Sign Language and Deaf Studies - Associate in Arts

Plan Code: 1245
This program aligns with the college's mission to provide a transfer path for success. It prepares students to communicate effectively in ASL in a wide range of situations in both personal and professional settings. Students will broaden their cultural awareness and gain sensitivity to Deaf cultures. The skills obtained through this degree promote equitable learning and achievement and will prepare a diverse population of students for transfer to a four-year college or university.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate effective receptive and productive skills in American Sign Language in order to perform everyday communicative functions.
- Demonstrate the ability to analyze and to think critically in ASL in order to effectively participate in the Deaf community.
- Demonstrate understanding of the interrelationship between Deaf and hearing cultural norms and behaviors.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:
 degree-applicable units.

## ANTHROPOLOGY

The mission of this program is to present anthropology as the scientific global study of the biological and cultural aspects of humankind throughout time. This program will also prepare students to transfer successfully to a baccalaureate program at the university level. Students will be given the opportunity to apply theory and gain hands-on experience to explore the broad perspective of the diversity of interests that can be accommodated by pursuing a degree in anthropology. Training in anthropology will prepare students for any career that takes place in a multicultural setting.

## Anthropology - Associate in Arts Transfer Degree

Plan Code: 5011B/C

Anthropology is the global study of humankind throughout time. It is concerned with both the biological and cultural aspects of humankind. Anthropology is a holistic discipline that explores the entire nature of humanity from different perspectives. Cultural anthropology, or ethnology, focuses on an in-depth, long-term, total immersion into another culture through the fieldwork methodology of participant observation. Archaeology studies humankind in the past and seeks to understand past cultures through the study of the material remains, or artifacts, those past societies have left behind. Physical anthropology explores humankind from a biological perspective, including our origin as a species and our evolution as a species, within the broader framework of culture. Anthropology is a unique framework that allows us to study humankind in its entirety. We are living in an increasingly globalized world and Anthropology will provide the preparation for anyone who is preparing for a career that involves the interface between cultures and will enable one to succeed in that career.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze and describe the major concepts, theoretical perspectives, and empirical evidence on the cultural and/or biological evolution of the human species.
- Utilize the scientific method to analyze the advantages and limitations of various anthropological research methodologies used to address our understanding of the cultural and/or biological evolution of the human species.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| ANTHR $1 / 1 \mathrm{H}$ | Physical Anthropology | $3-5$ |
| or ANTHR 11 | Physical Anthropology Lecture and Lab |  |
| ANTHR 2/2H | Cultural Anthropology | 3 |
| ANTHR 3/3H | Intro to Archaeology | 3 |
| Subtotal Units |  | $9-11$ |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |



Degree Total
1 Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## ARCHITECTURAL DESIGN

## Architectural Design - Associate in Science

Plan Code: 2908
This program is designed to provide foundational knowledge of the practice of architecture with the option of maximizing the number of lower division transfer units. This Associate Degree will prepare students for a design-related career, and appropriate course selection will facilitate transfer to a professional degree program.
Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning
Outcomes (ISLOs).
- Evaluate appropriate techniques and technology to use in the
solution and documentation of architectural projects.
- Apply architectural and construction practices in the documentation
of architectural problems.

Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 20 | Visual Literacy and Civilization | 3 |
| ARCHT 21 | Design Methods and Theories | 3 |
| ARCHT 36 | Visualization and Communication | 3 |
| ARCHT 61 | Fundamental Design Studio | 4 |
| ARCHT 62 | Social Design Studio | 4 |
| ARCHT 65 | Context Design Studio | 4 |
| ARCHT 71 | Design/Build Studio | 4 |
| ARCHT 80 | Arch. History - Ancient to Medieval | 3 |
| ARCHT 91 | Environmental Controls Systems | 3 |
| ARCHT 93 | Structures 1 | 3 |
| DSGN 20 | Space Planning | 3 |
| Total Units |  | 37 |

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COMM 60 | Elements of Argumentation and Debate | 3 |
| ENGL 3/3H | Argumentative and Critical Writing | 4 |
| MATH 40 | Trigonometry | 3 |
| PHYS 2A | General Physics | 4.5 |

## Architectural Design - Certificate of Achievement

Plan Code: 3908
This program will prepare students for an entry-level position in a variety of design profession settings and may serve as a foundation for specialization.

## Program Student Learning Outcomes

- Acquire the professional attitude and desire for life-long learning and stay current with advanced technologies.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| ARCHT 20 | Visual Literacy and Civilization | 3 |
| ARCHT 36 | Visualization and Communication | 4 |
| ARCHT 61 | Fundamental Design Studio | 4 |
| ARCHT 62 | Social Design Studio | 3 |
| ARCHT 80 | Arch. History - Ancient to Medieval | 3 |
| ARCHT 81 | Arch. History - Medieval to Renaissance | 3 |
| COMM 60 | Elements of Argumentation and Debate | 3 |
| ENGL 3/3H | Argumentative and Critical Writing | 4 |
| MATH 40 | Trigonometry | 3 |
| PHYS 2A | General Physics | 4.5 |
| Total Units |  | $\mathbf{3 4 . 5}$ |

## Building Information Modeling (BIM) Coordinator - Certificate of Achievement

Plan Code: 3904
This program is designed for students with experience in the built environment profession that seek expertise in specific design software. The courses provide students with the knowledge and skills needed for today's architectural design profession, focusing on a range of relevant software (REVIT, Rhinoceros, AutoCAD, SketchUp). The program is designed to be completed in 1.5 years with part time enrollment and will provide students with the technical skills needed to find employment in architecture or an allied field.

## Program Student Learning Outcomes

- Develop the most up to date understanding of Building Information Modeling (BIM) software in the fields of architecture, engineering, and other related fields.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 32 | SketchUp I | 1.5 |
| ARCHT 33 | SketchUp II | 1.5 |
| or ARCHT 34 | AutoCAD Basics |  |
| ARCHT 35 | Rhino Basics | 1.5 |
| ARCHT 230 | REVIT I | 4 |
| ARCHT 231 | REVIT II | 4 |
| ARCHT 232 | REVIT III | 4 |
| ARCHT 233 | REVIT IV | 4 |

## ARCHT 234 <br> REVIT V <br> Total Units <br> Design Basics - Certificate of Achievement

24.5

Plan Code: 3903
This program provides students with the knowledge and skills needed to enter architecture, interior design or design management, or another design-related profession. Students will learn introductory drafting and design skills that can be applied in spatial design or related fields.

## Program Student Learning Outcomes

- Apply foundational drafting and design skills to architectural projects.

| Program Requirements |  |  |
| :--- | :--- | ---: |
| Code Number | Course Title | Units |
| REQUIRED Courses |  |  |
| ARCHT 20 | Visual Literacy and Civilization | 3 |
| ARCHT 32 | SketchUp I | 1.5 |
| ARCHT 34 | AutoCAD Basics | 1.5 |
| ARCHT 61 | Fundamental Design Studio | 4 |
| ARCHT 230 | REVIT I | 4 |
| Total Units |  | $\mathbf{1 4}$ |

## Adobe for Designers - Certificate of Completion

Plan Code: 6043
This program provides students with an introduction to drawing techniques as they relate to architecture, interior design, design management, and other design-related professions. Students will develop their skills using Adobe Suite software. This program can facilitate finding employment in the field of spatial design or related fields.

## Program Student Learning Outcomes

- Apply knowledge of theory and skillsets in Adobe software related to design professions like interior design, construction management, industrial design and architectural design.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| DSGN 601 | Photoshop for Designers | 54 |
| DSGN 602 | Illustrator for Designers | 54 |
| DSGN 603 | InDesign for Designers | 54 |
| Total Hours |  | $\mathbf{1 6 2}$ |

## ARE Exam Prep - Certificate of Completion

Plan Code: 6042
This program prepares students studying to be an architect for the Architect Registration Exam. Students will understand the skills and abilities required for providing services in the practice of architecture. Students who reach competencies may advance to develop skills for the workplace and to prepare for future educational opportunities.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to the profession of architecture.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 601 | ARE Exam Prep I | 27 |
| ARCHT 602 | ARE Exam Prep II | 27 |
| ARCHT 603 | ARE Exam Prep III | 27 |
| ARCHT 604 | ARE Exam Prep IV | 27 |
| ARCHT 605 | ARE Exam Prep V | 27 |
| ARCHT 606 | ARE Exam Prep VI | 27 |
| Total Hours |  | $\mathbf{1 6 2}$ |

## AutoCAD Essentials - Certificate of Completion

Plan Code: 6044
This program provides students with an introduction to drawing techniques as they relate to architecture, interior design, design management, and other design-related professions. Students will develop their skills using AutoCAD software. This program can facilitate finding employment in the field of spatial design or related fields.

## Program Student Learning Outcomes

- Apply knowledge of theory and skillsets in AutoCAD related to design professions like interior design, construction management, industrial design and architectural design.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 634 | AutoCAD Basics | 54 |
| ARCHT 637 | Advanced AutoCAD | 54 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## Design Introduction - Certificate of Completion

This program provides students with an introduction to the skillsets and foundations of architecture, interior design, and other design-related concepts. Students will develop skills necessary for introductory design and architectural modeling. This program facilitates students' ability to successfully participate in other certificates and degrees related to industrial and interior design.

## Program Student Learning Outcomes

- Apply knowledge of design theory and modeling skillsets to projects related to design professions like interior design and architectural design.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 610 | Design 101 | 27 |
| ARCHT 611 | Modeling 101 | 27 |
| Total Hours |  | 54 |

## Designing with Rhinoceros Certificate of Completion

Plan Code: 6046
This program provides students with an introduction to drawing techniques as they relate to architecture, interior design, and design management. Skills are developed using the Rhinoceros 3D software. This program can facilitate finding employment in the field of spatial design or related fields.

## Program Student Learning Outcomes

- Apply knowledge of theory and skillsets in Rhinoceros to projects related to design professions like interior design and architectural design.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 635 | Rhino Basics | 54 |
| ARCHT 661 | Fundamental Design Studio | 108 |
| Total Hours |  | $\mathbf{1 6 2}$ |

## REVIT Essentials - Certificate of Completion

Plan Code: 6047
This program provides students with an introduction to drawing techniques as they relate to architecture, interior design, and design management. Skills are developed using the REVIT software. This program can facilitate finding employment in the field of spatial design or related fields.

## Program Student Learning Outcomes

- Apply knowledge of theory and skillsets in Revit to projects related to design professions like interior design and architectural design.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 640 | REVIT I | 108 |
| ARCHT 641 | REVIT II | 108 |
| ARCHT 642 | REVIT III | 108 |
| Total Hours |  | $\mathbf{3 2 4}$ |

## SketchUp Essentials - Certificate of Completion

Plan Code: 6048
This program provides students with an introduction to drawing techniques as they relate to architecture, interior design, and design management. Skills are developed using the SketchUp software. This program can facilitate finding employment in the field of spatial design or related fields.

## Program Student Learning Outcomes

- Apply knowledge of theory and skillsets in SketchUp to projects related to design professions like interior design and architectural design.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 632 | SketchUp I | 54 |
| ARCHT 633 | SketchUp II | $\mathbf{5 4}$ |
| Total Hours |  | $\mathbf{1 0 8}$ |

## ART

The Visual and Media Arts Department provides students instruction in the visual arts whether beginning, advanced, or professional with a single class, general education courses, or a course of study, leading to transfer, an associate degree, a studio art certificate or vocational certificate. Students can pursue their individual interest in the visual arts through an array of foundational courses establishing a technical and critical understanding of visual language. These courses lead to improved personal creative expression or to specialized instruction in numerous areas within the creative and applied arts through the production, analysis, and exhibition of artwork.

The arts involve students in the process of their learning, demanding constant reflection and active participation. The arts enable students to collaborate toward a common purpose. The arts are a powerful connection force between disciplines. As our world and problems become more complex, the creativity fostered by the arts becomes all the more important. Creative thinking and critical analysis are essential 21 st century skills to achieve academic success in all areas and employment opportunities in a wide variety of professions.

# Art History - Associate in Arts Transfer Degree 

Plan Code: 5015B/C

The Art History program fosters an understanding of art from prehistory to the current day in diverse civilizations around the globe. This program will also prepare students to transfer successfully to a baccalaureate program at the university level. The historical study of art, architecture and visual culture involves learning fundamental art history terminology and art techniques in order to analyze and communicate the social, religious, political, and aesthetic functions of art in society. Classes explore artistic creativity, compare how art has changed over time, and reflect on the challenges of the human condition. In the 21 st century, which is saturated with visual images, the key skills of art history including close observation and analysis, creative and critical thinking, research and writing, will serve students in both their academic and professional careers.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate knowledge of significant examples of the visual arts and art historical methodology.
- Analyze and describe works of art based on how they communicate meaning visually.
- Utilize critical thinking to evaluate and discuss works of art in a variety of historical and cultural contexts.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| ART $1 / 1 \mathrm{H}$ | Art and Civilization | 3 |
| ART $2 / 2 \mathrm{H}$ | Art and Civilization | 3 |


| ART 15 | Beginning Drawing | 3 |
| :---: | :---: | :---: |
| Subtotal Units |  | 9 |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |
| ART 4 | African, Oceanic, Native American Art (3) |  |
| ART 5 | History of Asian Art (3) |  |
| ART 11 | Latin American Art and Architecture (3) |  |
| Subtotal Units |  | 3 |
| IN ADDITION, complete THREE (3) units from LIST B: |  |  |
| LIST B |  |  |
| ART 9 | Introduction to Art (3) |  |
| ART 19 | Life Drawing (3) |  |
| ART 23 | Beginning Painting (3) |  |
| ART 30 | Three Dimensional Design (3) |  |
| ART 31 | Two Dimensional Design (3) |  |
| ART 50 | Ceramics I (3) |  |
| ART 60 | Beginning Sculpture (3) |  |
| ART 70 or ART 71 | Printmaking, Silkscreen (3) Printmaking, Intaglio (3) |  |
| ART 80 or ART 81 | Elements of Photography (3) Introduction to Fine Art Photography (3) |  |
| DMA 1 | Introduction to Computer Graphics (3) |  |
| DMA 3 | Digital Illustration (3) |  |
| PHOT 31 | Intro to B\&W Photography Darkroom (4) |  |

Subtotal Units

IN ADDITION, complete ONE (1) course from LIST C:

## LIST C

Any LIST A or B course not already used

| ART 3 | Modern and Contemporary Art (3) |  |
| :--- | ---: | ---: |
| PHOT 10 | History of Photography (3) | $\mathbf{3 - 4}$ |
| Subtotal Units | $\mathbf{1 8 - 1 9}$ |  |
| Required Subtotal | $37-39$ |  |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan B |  |  |
| Plan C | $\mathbf{6 0}$ |  |

${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Art - Associate in Arts

Plan Code: 1194

This field of concentration is designed to provide a fundamental education for a variety of specializations within the field. It also substantially fulfills lower division requirements for a baccalaureate degree in this major.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Produce professional quality artwork that demonstrates skill, craftsmanship, comprehension of visual design, and aesthetic conceptual rigor.
- Develop a foundation of skills, craft, traditional, and digital technologies.
- Analyze, interpret, and exercise critical judgment in the evaluation of visual art forms.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| ART 1 | Art and Civilization | 3 |
| ART 2 | Art and Civilization | 3 |
| ART 15 | Beginning Drawing | 3 |
| ART 23 | Beginning Painting | 3 |
| ART 30 | Three Dimensional Design | 3 |
| ART 31 | Two Dimensional Design | 3 |
| ART 35 | Beginning Jewelry | 3 |
| ART 50 | Ceramics I | 3 |
| ART 60 | Beginning Sculpture | 3 |
| ART 81 | Introduction to Fine Art Photography | 3 |
| ART 292 | Professional Skills for Artists | 3 |
| DMA 1 | Introduction to Computer Graphics | 3 |
| Subtotal Units |  | 36 |
| IN ADDITION, complete ONE of the following Options: |  |  |
| Applied Design Option |  |  |
| Art History Option |  |  |
| Computer Art Option |  |  |
| Drawing and Painting Option |  |  |
| Design Option |  |  |
| Illustration Option |  |  |
| Printmaking Option |  |  |
| Sculpture Option |  |  |
| Fine Art Photography Option |  |  |
| Subtotal Units |  | 6-8 |
| Required Subtotal |  | 42-44 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Applied Design Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| Complete SEVEN (7) | units from the following: |  |
| ART 34 | Applied Design/Crafts | 3 |
| ART 36 | Casting for Jewelry | 4 |
| ART 38 | Advanced Topics in Jewelry | 4 |
| ART 51 | Ceramics II | 3 |
| ART 52 | Ceramics III | 3 |
| ART 53 | Ceramics IV | 3 |
| Subtotal Units |  | 7 |

## Art History Option

Code Number Course Title Units
Complete SIX (6) units from the following:

| ART 3 | Modern and Contemporary Art | 3 |
| :--- | :--- | :--- |
| ART 4 | African, Oceanic, Native American Art | 3 |
| ART 5 | History of Asian Art | 3 |
| ART 11 | Latin American Art and Architecture | 3 |
| ART 12 | Gallery and Exhibition Design | 3 |
| PHOT 10 | History of Photography | 3 |
| Subtotal Units |  | 6 |

## Computer Art Option

| Code Number | Course Title | Units |
| :--- | :--- | :--- |
| Complete SIX (6) | units from the following: |  |
| DMA 3 | Digital Illustration | 3 |
| DMA 5 | Graphic Design: Branding | 3 |
| DMA 6 | Graphic Design: Publication \& Production | 3 |
| DMA 15 | Interaction and Web Design | 3 |
| DMA 20 | Digital Animation: 2D | 3 |
| DMA 25 | Motion Graphics | 3 |
| DMA 30 | Digital Animation: 3D | 3 |
| DMA 40 | Multimedia Design | 3 |
| Subtotal Units |  | 6 |

## Drawing and Painting Option

Code Number Course Title Units

| Complete SIX (6) units from the following: |  |  |
| :--- | :--- | :--- |
| ART 16 | Intermediate Drawing | 3 |
| ART 19 | Life Drawing | 3 |
| ART 24 | Watercolor, Beginning | 3 |
| ART 26 | Figure Painting | 3 |
| ART 27 | Intermediate Painting | 3 |
| ART 28 | Portrait Drawing and Painting | 3 |
| Subtotal Units |  | 6 |

## Design Option

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| Complete SIX (6) units from the following: |  |  |
| ART 32 | Intermediate Design | 3 |
| DMA 4 | Introduction to Typography | 3 |
| DMA 5 | Graphic Design: Branding | 3 |
| DMA 6 | Graphic Design: Publication \& Production | 3 |
| DMA 15 | Interaction and Web Design | 3 |
| Subtotal Units |  | 6 |

## Illustration Option

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| Complete SIX (6) units from the following: |  |  |
| ART 17 | Illustration I | 3 |
| ART 18 | Illustration II | 3 |
| ART 19 | Life Drawing | 3 |
| ART 26 | Figure Painting | 3 |
| DMA 3 | Digital Illustration | 3 |
| Subtotal Units |  | 6 |

## Printmaking Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| Complete SIX (6) units from the following: | 6 |  |
| ART 70 | Printmaking, Silkscreen | 3 |
| ART 71 | Printmaking, Intaglio | 3 |
| ART 72 | Advanced Printmaking | 3 |
| Subtotal Units |  | 6 |

## Sculpture Option

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| Complete EIGHT (8) | units from the following: |  |
| ART 61 | Intermediate Sculpture | 4 |
| ART 62 | Metal Fabrication Sculpture | 4 |
| ART 63 | Metal Casting Sculpture | 4 |
| Subtotal Units |  | $\mathbf{8}$ |

## Fine Art Photography Option

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| Complete SEVEN (7) | units from the following: |  |
| PHOT 31 | Intro to B\&W Photography Darkroom | 4 |
| PHOT 32 | Introduction to Digital Photography | 4 |
| PHOT 33 | Professional Studio Lighting | 4 |
| PHOT 35 | Photography for Publication | 3 |
| PHOT 37 | Portrait Photography | 4 |
| PHOT 39 | Photography on Location | 3 |
| PHOT 41 | Professional Photographic Portfolio | 4 |
| PHOT 42 | Experimental \& New Media Photography | 4 |
| PHOT 43 | Photoshop and Lightroom Management | 3 |
| PHOT 281 | Photography Laboratory | 1 |
| Subtotal Units |  | 7 |

# Studio Arts - Associate in Arts Transfer Degree 

Plan Code: 5013B/C

The Associate in Arts in Studio Arts for Transfer degree is designed to prepare students for a major in Studio Arts at four-year institutions. The Studio Art offerings provide a solid foundation in a wide range of visual art disciplines including drawing, painting, photography, digital media, printmaking, jewelry, metal work, sculpture, and ceramics. The Art program provides students with instruction in the visual and media arts whether beginning, advanced or professional. Students pursue their individual interests in Studio Art disciplines at the university level through an array of foundation courses establishing a technical and critical understanding of visual and media language. These courses lead to the development of personal creative expression or to specialized multidisciplinary instruction within the creative and applied arts through the production, analysis, and exhibition of visual and media art works. As a result, students in the Studio Arts Program create and refine their portfolios to meet academic and professional standards as they develop as artists.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Create original artwork using a foundation of skills, craft, traditional and digital technologies.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| ART 2/2H | Art and Civilization | 3 |
| ART 15 | Beginning Drawing | 3 |
| ART 30 | Three Dimensional Design | 3 |
| ART 31 | Two Dimensional Design | 3 |
| Subtotal Units |  | $\mathbf{1 2}$ |

IN ADDITION, complete ONE (1) course from LIST A:
LIST A

| ART $1 / 1 \mathrm{H}$ | Art and Civilization (3) |
| :--- | :--- |
| ART 4 | African, Oceanic, Native American Art (3) |
| ART 5 | History of Asian Art (3) |

Subtotal Units 3

IN ADDITION, complete THREE (3) courses from LIST B:
LIST B

| ART 16 | Intermediate Drawing (3) |
| :--- | :--- |
| or ART 19 | Life Drawing (3) |
| ART 23 | Beginning Painting (3) |
| ART 35 | Beginning Jewelry (3) |
| ART 50 | Ceramics I (3) |
| ART 60 | Beginning Sculpture (3) |
| ART 70 | Printmaking, Silkscreen (3) |
| or ART 71 | Printmaking, Intaglio (3) |
| ART 80 | Elements of Photography (3) |


| or ART 81 | Introduction to Fine Art Photography (3) |
| :---: | :---: |
| or PHOT 31 | Intro to B\&W Photography Darkroom (4) |
| DMA 1 | Introduction to Computer Graphics (3) |
| Subtotal Units | 9-10 |
| Required Subtotal | 24-25 |
| Complete one of the following: ${ }^{1}$ 37-39 |  |
| Plan B |  |
| Plan C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |
| To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements. |  |

## Applied Design in Art: 3D Materials and Processes - Certificate of Achievement

Plan Code: 3279
This program encompasses the fundamental skills needed for threedimensional materials and processes in Art. The certificate is designed to successfully prepare students to apply aesthetic principles and technical skills to wood, metal, clay, and paper/fiber for the construction of functional objects. It encompasses the breadth of design, content and production through essential skills such as fabrication, forming, casting, material study, and techniques of creative problem-solving. It also builds an initial Applied Design portfolio for transfer to 4 -year programs.

## Program Student Learning Outcomes

- Demonstrate knowledge of processes and design skillsets related to applied design.


## Program Requirements

Code Number Course Title Units

## REQUIRED COURSES

| ART 30 | Three Dimensional Design | 3 |
| :--- | :--- | ---: |
| ART 34 | Applied Design/Crafts | 3 |
| ART 35 | Beginning Jewelry | 3 |
| ART 50 | Ceramics I | 3 |
| ART 65 | Introduction to Wood | 3 |
| DMA 1 | Introduction to Computer Graphics | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 8}$ |

# Sculptural Design: 3D Materials and Processes - Certificate of Achievement 

Plan Code: 3281
The Sculptural Design: 3D Materials and Processes Certificate of Achievement encompasses the fundamental skills needed for threedimensional materials and processes in Art. The certificate is designed to successfully prepare students to apply aesthetic principles and technical skills to modeling, mold-making, casting, carving, wood construction, and metal fabrication using both traditional and non-traditional sculptural materials and processes. It encompasses the breadth of design, content and production through essential skills such as fabrication, forming, casting, material study, and techniques of creative problem-solving. It also builds an initial sculpture portfolio for transfer to 4 -year programs. There are no material fees in the courses associated with this program, however, students will be expected to purchase their own metal and supplies.

## Program Student Learning Outcomes

- Demonstrate knowledge of processes and design skillsets as related to sculpture and 3D design.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ART 30 | Three Dimensional Design | 3 |
| ART 60 | Beginning Sculpture | 3 |
| ART 61 | Intermediate Sculpture | 4 |
| ART 62 | Metal Fabrication Sculpture | 4 |
| ART 65 | Introduction to Wood | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 7}$ |

## Jewelry Entrepreneurship Certificate of Achievement

Plan Code: 3280
The Jewelry Entrepreneurship Certificate of Achievement is designed to expand the skills needed for careers in jewelry including studio jewelers, bench jeweler, and independent jewelry design and small metals fabrication contractors. The certificate is designed to successfully prepare students for independent studio practice, self-marketing, clientbased work or commissions, employment in industrial manufacturing, and contracting for other artists. There is a focus on professional development as well as studio and arts business management. It also builds a robust portfolio for transfer to 4 -year programs. There are no material fees in the courses associated with this program, however, students will be expected to purchase their own metal and supplies.

## Program Student Learning Outcomes

- Demonstrate knowledge of processes and design skillsets related to jewelry production, professional skills, and business management.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| ART 35 | Beginning Jewelry | 4 |
| ART 36 | Casting for Jewelry | 4 |
| ART 37 | Metalsmithing |  |
| or ART 38 Advanced Topics in Jewelry <br> ART 90 Special Projects in Art <br> ART 91 Studio Projects in Art <br> ART 292 Professional Skills for Artists <br> or MGMT 80 Small Business Entrepreneurship | $\mathbf{1 . 5}$ |  |
| Total Units |  | $\mathbf{1 8 5}$ |

## AUTOMOTIVE TECHNOLOGY

# Automotive Technology - Associate in Science 

Plan Code: 2941

This program will emphasize introductory general automotive repair, engine repair, automatic and manual drivetrain, wheel alignment, brake systems, electrical system, air conditioning, fuel systems, and automotive light diesel technology. Upon completion students are prepared for all nine areas of the National Automotive Service Excellence (ASE) certifications tests and also will receive one year of work experience toward ASE work experience qualification. The A.S. Degree in Automotive Technology signifies that students are ready for entry-level automotive positions and will signify that students have mastered good ethics and workmanship in an auto shop environment.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Evaluate and identify faults in automotive performance components and perform service to factory specifications.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| AUTO 200 I | Introduction to Automotive Technology | 3 |
| AUTO 211 | Automotive Engine Repair | 3 |
| AUTO 212 | Automotive Automatic Transmission | 3 |
| AUTO 213 | Automotive Manual Transmission | 3 |
| AUTO 214 | Automotive Wheel Alignment | 3 |
| AUTO 215 | Automotive Brake Systems | 3 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 217 | Automotive Air Conditioning | 3 |
| AUTO 218 A | Automotive Fuel Systems | 3 |
| AUTO 219 | Automotive Light Diesel Engines | 3 |
| Required Subtotal |  | 30 |
| Complete one of the fol | ollowing: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Total |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

# Automotive Technology - Certificate of Achievement 

Plan Code: 3941

This program will emphasize introductory general automotive repair, engine repair, automatic and manual drivetrain, wheel alignment, brake systems, electrical system, air conditioning, fuel systems, and automotive light diesel technology. Upon completion students are prepared for all nine areas of the National Automotive Service Excellence (ASE) certifications tests and also will receive one year of work experience toward ASE work experience qualification. The certificate in Automotive Technology signifies that students are ready for entry-level automotive positions and will signify that students have mastered good ethics and workmanship in an auto shop environment.

## Program Student Learning Outcomes

- Evaluate and identify faults in automotive performance components and perform service to factory specifications.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 211 | Automotive Engine Repair | 3 |
| AUTO 212 | Automotive Automatic Transmission | 3 |
| AUTO 213 | Automotive Manual Transmission | 3 |
| AUTO 214 | Automotive Wheel Alignment | 3 |
| AUTO 215 | Automotive Brake Systems | 3 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 217 | Automotive Air Conditioning | 3 |
| AUTO 218 | Automotive Fuel Systems | 3 |
| AUTO 219 | Automotive Light Diesel Engines | 3 |
| Total Units |  | $\mathbf{3 0}$ |

## Automotive Engine and Transmission Service - Certificate of Achievement

Plan Code: 3939
This program prepares students for entry-level employment in the automotive industry such as a service attendant, novice mechanic, assistant technician, mechanic's helper, pre-delivery (PDI) technician, installer, service technician, engine and drive trains service technician, and/or automotive related position in the industry.

## Program Student Learning Outcomes

- Describe and demonstrate automotive shop practice safety and automotive systems' operation fundamentals in order to apply practical service and diagnostic during automotive servicing and repair.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | ---: | ---: |
| REQUIRED COURSES |  |  |
| ADMT 50 | Advanced Manufacturing, Introduction | 3 |


| AUTO 200 | Introduction to Automotive Technology | 3 |
| :--- | :--- | ---: |
| AUTO 201 | Automotive Lubrication Service | 1 |
| AUTO 211 | Automotive Engine Repair | 3 |
| AUTO 212 | Automotive Automatic Transmission | 3 |
| AUTO 213 | Automotive Manual Transmission | 3 |
| Total Units |  | $\mathbf{1 6}$ |

## Automotive Engine Performance Service - Certificate of Achievement

Plan Code: 3940
This program prepares students for entry-level employment in the automotive industry such as a service attendant, novice mechanic, assistant technician, mechanic's helper, pre-delivery (PDI) technician, installer, service technician, engine performance (fuel and electrical) service technician, and/or automotive related position in the industry.
Program Student Learning Outcomes

- Evaluate and identify faults in automotive engine performance components and perform service to factory specifications.

| Program Requirements |  |  |
| :--- | :--- | ---: |
| Code Number | Course Title | Units |
| REQUIRED courses |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 218 | Automotive Fuel Systems | 3 |
| AUTO 219 | Automotive Light Diesel Engines | 3 |
| Total Units |  | $\mathbf{1 2}$ |

## Automotive Maintenance Service Certificate of Achievement

Plan Code: 3926
This program prepares students for entry-level employment in the automotive industry such as a service attendant, novice mechanic, assistant technician, mechanic's helper, pre-delivery (PDI) technician, installer, service technician, brake technician, and/or automotive related position in the industry.

## Program Student Learning Outcomes

- Evaluate and identify faults in automotive undercar and underhood components and perform service to factory specifications.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 214 | Automotive Wheel Alignment | 3 |
| AUTO 215 | Automotive Brake Systems | 3 |
| AUTO 216 | Automotive Electrical Systems | 3 |
| AUTO 217 | Automotive Air Conditioning | 3 |

# AUTO 218 <br> Total Units <br> Automotive Fuel Systems <br> 3 <br> Automotive Quick Service Certificate of Accomplishment 

Plan Code: 4923
This program prepares students with skills and knowledge to obtain entry level employment as Quick Service Technicians in the automotive industry, and/or automotive related position in the industry.

## Program Student Learning Outcomes

- Evaluate and prepare vehicles for quick service according to the manufacturer procedures.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| AUTO 200 | Introduction to Automotive Technology | 3 |
| AUTO 201 | Automotive Lubrication Service | 1 |
| AUTO 202 | Automotive Tire Service | 1 |
| AUTO 203 | Automotive Brake Inspection | 1 |
| Total Units |  | $\mathbf{6}$ |

## Automotive Quick Service Certificate of Completion

## Plan Code: 6033

This program provides instruction in Automotive Quick Service Repair. Topics include composing an estimate for lubrication service, tire repair and brake inspection, communicate effectively with customers, demonstrate proper service procedures, including management of hazardous waste, and research potential job markets in the automotive service industry.

## Program Student Learning Outcomes

- Evaluate and prepare vehicles for quick service according to the manufacturer procedures.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AUTO 600 | Introduction to Automotive Technology | 90 |
| AUTO 601 | Automotive Lubrication Service | 36 |
| AUTO 602 | Automotive Tire Service | 36 |
| AUTO 603 | Automotive Brake Inspection | $\mathbf{3 6}$ |
| Total Hours |  | $\mathbf{1 9 8}$ |

# Light-Duty Diesel Generator Engine Maintenance - Certificate of Completion 

Plan Code: 6030
This noncredit program focuses on the fundamentals of automotive recreational vehicles, diesel-generating equipment, and light-duty diesel engines. The program prepares students for entry-level positions in the automotive diesel engine service and diesel power generators industries areas, such as an intern mechanic, mechanic's helper, assistant technician, generator diesel engine maintenance technician, and for general inspection, adjustment, or overhaul skills for a diesel engine technician in automotive and transportation-related industries.

## Program Student Learning Outcomes

- Synthesize information and demonstrate procedures to perform generator diesel engine maintenance


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AUTO 600 | Introduction to Automotive Technology | 90 |
| AUTO 651 | Diesel Generator Engine Fundamentals | 90 |
| AUTO 652 | Diesel Engine Maint. \& Troubleshooting | 90 |
| Total Hours |  | $\mathbf{2 7 0}$ |

## BAKING \& PASTRY ARTS

The Baking and Pastry Arts program provides students with the fundamental knowledge of Baking and Pastry principles and techniques to prepare our graduates for employment in Retail, Hotel, and Resort Bakery and Pastry kitchens.

## Baking \& Pastry Arts - Associate in Science

Plan Code: 2142
This program provides students with the fundamental knowledge of Baking and Pastry principles and techniques to prepare our graduates for employment in Retail, Hotel, and Resort Bakery and Pastry kitchens. The associate degree will provide students with a broad-based general education which will prepare them for global citizenry.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply production planning, cost control measures, and safety and sanitation procedures to prepare for a career in baking and pastry.
- Apply and demonstrate advanced baking and pastry skills and techniques in the areas of bread, Viennoiserie, pastries, and cakes.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 5 |
| BAKE 241 | Baking Skills and Principles | 5 |
| BAKE 242 | Pastry Skills and Principles | 4 |
| BAKE 243A | Advanced Bakery Operations | 4 |
| BAKE 243B | Advanced Bakery Practicum | 1.5 |
| BAKE 246 | Specialty Cakes and French Pastries | 1.5 |
| BAKE 247 | Cake Decorating | 1.5 |
| BAKE 258 | Artisan Breads | 1.5 |
| BAKE 259 | Viennese Pastries | 3 |
| CULAR 10 | Intro to Hospitality | 2 |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. | 2 |
| CULAR 250 | Culinary Skills for Baking Students | 31 |
| Subtotal Units |  |  |

IN ADDITION, complete ONE AND ONE HALF (1.5) units from the following:

| BAKE 253 | Chocolate, Sugar, and Confections (1.5) |  |
| :--- | :--- | ---: |
| BAKE 255 | Plated Desserts (1.5) |  |
| BAKE 256 | Holiday Desserts (1.5) | $\mathbf{1 . 5}$ |
| Subtotal Units | $\mathbf{3 2 . 5}$ |  |
| Required Subtotal | $19-39$ |  |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
60
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSA 1 | Computer Information Competency | 1 |
| COUNS 49 | College Study Techniques | 2 |
| OR | Learning and Academic Strategies | 3 |
| LEARN 11/11H | Culinary Math | 1 |

## Advanced Baking \& Pastry Arts Certificate of Achievement

Plan Code: 3144

This program provides students with the knowledge of Baking and Pastry principles and techniques to prepare our graduates for employment in Retail, Hotel, and Resort Bakery and Pastry kitchens.

## Program Student Learning Outcomes

- Apply production planning, cost control measures, and safety and sanitation procedures to prepare for a career in baking and pastry.
- Apply and demonstrate advanced baking and pastry skills and techniques in the areas of bread, Viennoiserie, pastries, and cakes.


## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| BAKE 241 | Baking Skills and Principles | 5 |
| BAKE 242 | Pastry Skills and Principles | 5 |
| BAKE 243A | Advanced Bakery Operations | 4 |
| BAKE 243B | Advanced Bakery Practicum | 4 |
| BAKE 246 | Specialty Cakes and French Pastries | 1.5 |
| BAKE 247 | Cake Decorating | 1.5 |
| BAKE 258 | Artisan Breads | 1.5 |
| BAKE 259 | Viennese Pastries | 1.5 |
| CULAR 10 | Intro to Hospitality | 3 |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. | 2 |
| CULAR 250 | Culinary Skills for Baking Students | 2 |
| Subtotal Units |  | 31 |
| IN ADDITION, complete ONE AND A HALF (1.5) units from the following: |  |  |
| BAKE 253 | Chocolate, Sugar, and Confections (1.5) |  |
| BAKE 255 | Plated Desserts (1.5) |  |
| BAKE 256 | Holiday Desserts (1.5) |  |
| Subtotal Units |  | 1.5 |
| Total Units |  | 32.5 |

## RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSA 1 | Computer Information Competency | 1 |
| COUNS 49 | College Study Techniques | 2 |
| OR |  |  |
| LEARN 11/11H | Learning and Academic Strategies | 3 |
| MATH 825 | Culinary Math | 1 |

## Baking \& Pastry Arts - Certificate of Achievement

Plan Code: 3142
This program provides students with the fundamental knowledge of Baking and Pastry principles and techniques to prepare our graduates for employment in Retail, Hotel, and Resort Bakery and Pastry kitchens.

## Program Student Learning Outcomes

- Apply and demonstrate basic baking and pastry skills for entry-level employment.
- Prepare and assemble essential baking and pastry items while applying kitchen safety and sanitation rules according to industry standards.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BAKE 241 | Baking Skills and Principles | 5 |
| BAKE 242 | Pastry Skills and Principles | 5 |
| BAKE 243A | Advanced Bakery Operations | 4 |
| BAKE 243B | Advanced Bakery Practicum | 4 |
| CULAR 10 | Intro to Hospitality | 3 |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. | 2 |
| CULAR 250 | Culinary Skills for Baking Students | 2 |
| Total Units |  | $\mathbf{2 5}$ |

## BIOLOGICAL SCIENCES

The department mission includes (1) transfer preparation; (2) preparing students to attain an associate degree; and (3) helping students satisfy biological science prerequisite for various programs at LBCC and other colleges. Students who have matriculated through the programs will be exposed to the scientific method, gain an appreciation for the environment, and become aware of the vital roles of science in our lives.
The courses will also help students to become better 'consumers' of scientific information.

## Biology - Associate in Science Transfer Degree

Plan Code: 5505B/C

This program provides students with a foundation in core principles of biological sciences, including scientific reasoning, cell/molecular biology, principles of genetics, evolution, organismal, and ecology in preparation for transfer to a baccalaureate degree program in biology at a university. Students at the four-year university have the opportunity to pursue a bachelor's degree specializing in areas such as anatomy and physiology, botany, cell and molecular biology, clinical science, ecology, environmental biology, field biology, marine biology, microbiology, organismal biology, or zoology. A bachelor's degree in biology may lead to opportunities in graduate/professional school or careers in research, biotechnology, dentistry, pharmacy, medicine, and veterinary medicine among many other diverse fields.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Utilize the components of the scientific method to evaluate appropriately designed experiments, analyze scientific data to formulate reasonable conclusions, and properly communicate the results.
- Recognize and evaluate the relationship between structure and function at all levels: molecular, cellular, and organismal (morphological, physiological, and developmental).
- Apply ecological and evolutionary concepts to explain the diversity and interrelationships of organisms on earth, including human impact on the biosphere.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| BIO 1A | Biology for Science Majors | 5 |
| BIO 1B | Biology for Science Majors | $\mathbf{1 0}$ |
| Subtotal Units |  |  |
| IN ADDITION, complete all courses from LIST A: |  |  |
| LIST A |  |  |
| CHEM 1A | General Chemistry (5.5) |  |
| CHEM 1B | General Chemistry (5.5) |  |
| MATH 60 | First Calculus Course $(5)$ |  |



To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CHEM 12A | Organic Chemistry | 5.5 |
| CHEM 12B | Organic Chemistry | 5.5 |
| MATH 70 | Second Calculus Course | 5 |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics | 5.5 |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M | 4.5 |

## Biological Sciences - Associate in Science

Plan Code: 2500
This Associate Degree will provide the student with an introductory education to this field of study, not necessarily career related, but ending with the Associate Degree or a partial lower division preparation for transfer to a Baccalaureate Degree in the biological sciences.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Assimilate information from various sources and apply critical thinking to form evidence-based conclusions (scientific method) to issues in the realm of biology, health, and as a consumer in society.
- Demonstrate an understanding of all levels of organismal biology such as morphological, physiological, and developmental.
- Demonstrate knowledge of the importance of the diversity of organisms on earth and their ecological and evolutionary relationships including human impact on other organisms (or the reciprocal) and ecosystems.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Marine Science Emphasis

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| BIO 11 | Environmental Problems of Man | 3 |
| BIO 20/20H | Marine Biology | 4 |
| BIO 22 | The Marine Environment | 3 |
| GEOL 2 | General Geology, Physical | 3 |
| PGEOG 2 | Weather and Climate | 3 |
| Subtotal Units |  | $\mathbf{1 6}$ |

## Terrestrial and Sustainability Emphasis

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| BIO 5 | Plant Biology | 4 |
| BIO 11 | Environmental Problems of Man | 3 |
| BIO 30 | Wildlife Biology | 4 |
| GEOL 1/1H | General Physical Geology | 4.5 |
| GEOG 10 | Intro to Geographic Information Systems | 3 |
| PGEOG 2 | Weather and Climate | 3 |
| Subtotal Units |  | $\mathbf{2 1 . 5}$ |

## Health Science Emphasis

Code Number Course Title Units

Complete NINE to FOURTEEN (9-14) units from the following:
ANAT $1 \quad$ Human Anatomy (4)

| ANAT 41 | Anatomy \& Physiology (5) |
| :--- | :--- |
| BIO 2 | General Microbiology (5) |
| BIO 60 | Human Biology (4) |
| PHYSI 1 | Human Physiology (5) |
| IN ADDITION, complete SIX to NINE (6-9) units from the following: |  |
| AH 60 | Medical Terminology (3) |
| BIO 25 | Biology and Society (3) |
| BIO 61 | Introduction to Pathophysiology (3) |
| COMM 25 | Elements of Intercultural Communication <br> (3) |
| PSYCH 1/1H | Introduction to Psychology (3) |
| Subtotal Units |  |

15-23

## BUSINESS

The Business program equips our students, through a variety of academic disciplines and in a manner consistent with the mission of the college, with the knowledge and skills needed to transfer to a baccalaureate-degree granting institution, to enter the work force, to update workplace skills, or to achieve personal enrichment in a lifelonglearning environment. Students develop high-level knowledge and criticalthinking skills that will prepare them to make informed and ethicallyresponsible decisions in a complex global environment.

## Business Administration 2.0 Associate in Science Transfer Degree

Plan Code: 5509B/C

This program offers a variety of business and general education courses. Students who complete this degree will receive priority admission with junior status into the CSU system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze the nature, environment, and roles of businesses and their importance to the economy.
- Demonstrate knowledge of theory and skill sets related to the primary elements and terminologies of business as they relate to society.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| ACCTG 1A | Financial Accounting | 5 |
| ACCTG 1B | Managerial Accounting | 5 |
| ECON 1/1H | Macro Economic Analysis | 3 |
| ECON 2/2H | Micro Economic Analysis | 3 |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| MATH 37 or MATH 47 | Finite Mathematics Calculus for Business | 3 |
| STAT 1 <br> or STAT 1H <br> or MATH 21B | Elementary Statistics <br> Honors Elementary Statistics <br> Statistics Pathway B | 4-5 |
| Required Subtotal |  | 29-30 |
| Complete one of the following: ${ }^{1}$ |  | 37-39 |
| Plan B |  |  |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |  |

${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Economics - Associate in Arts Transfer Degree

Plan Code: 5018B/C

The economics major provides systematic knowledge of the nature and scope of economics with a diverse academic regimen and practical application. The study of economic concepts and theories with concentrations that include: Macroeconomic Analysis, Microeconomic Analysis, Contemporary Economic Issues, and The Global Economy. In addition, an economics major is preparation for general education, good citizenship and literate participation in a market-oriented life. The Economics program (AA-T in Economics) offers students a comprehensive education in the theoretical as well as practical applications of the discipline. The degree offers a variety of economics and business courses that aid in familiarizing students with the diverse subfields in the area of Economics. The mission of this program is to provide a definitive course of study in economics to a diverse population of students, ultimately preparing those students for transfer to university. This program in economics is a diverse academic, theoretical and practical, major that is applicable to everyday life, which further fulfills the general requirements of the California State University transfer system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Comprehend the primary elements and language of economics.
- Use creative and critical-thinking strategies in the solution of complex problems in the workplace through the application of economics using equations, graphs and technical skills.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| ECON 1/1H | Macro Economic Analysis | 3 |
| ECON 2/2H | Micro Economic Analysis | 3 |
| MATH 60 | First Calculus Course | 5 |
| STAT 1/1H | Elementary Statistics | 4 |
| Subotal Units |  | 15 |
| IN ADDITION, complete THREE to FIVE (3-5) units from LIST A: |  |  |
| LIST A |  |  |
| ACCTG 1A |  | Financial Accounting (5) |
| ACCTG 1B | Managerial Accounting (5) |  |


| BCOM 20 | Business Writing (3) |  |
| :---: | :---: | :---: |
| MATH 70 | Second Calculus Course (5) |  |
| Subtotal Units |  | 3-5 |
| IN ADDITION, complete THREE to FIVE (3-5) units from LIST B: |  |  |
| LIST B |  |  |
| Any LIST A course not already used |  |  |
| ECON 4 | Contemporary Economic Issues (3) |  |
| ECON 5 | The Global Economy (3) |  |
| Subtotal Units |  | 3-5 |
| Required Subtotal |  | 21-23 |
| Complete one of the | ollowing: ${ }^{1}$ | 37-39 |
| Plan B |  |  |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |  |
| Degree Total |  | 60 |

${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Economics - Certificate of Achievement

## Plan Code: 3019

This program will prepare a student for continuation to an A.A.-T in Economics or for advancement into a school of business or economics at a baccalaureate-degree granting institution and/or for an entry-level position in local government, school system or institution of higher learning, banking, or business as a research assistant or analyst.

## Program Student Learning Outcomes

- Develop a basic understanding of economics, accounting, and business law concepts.
- Apply a knowledge of economics to solve complex problems using equations, graphs, and technical skills.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ACCTG 1A | Financial Accounting | 5 |
| or ACCTG 1B | Managerial Accounting | 3 |
| ECON 1/1H | Macro Economic Analysis | 3 |
| ECON 2/2H | Micro Economic Analysis | 3 |
| ECON 4 | Contemporary Economic Issues |  |
| or ECON 5 | The Global Economy |  |


| LAW 18 <br> or LAW 19 | Fundamentals of Business Law <br> Legal Environment of Business | 3 |
| :---: | :--- | :---: |
| Total Units |  | $\mathbf{1 7}$ |

# Business: Business Economics Certificate of Accomplishment 

Plan Code: 4145

This program will prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in a small/ medium-sized business, in functions such as accounting, finance or budget planning. Additionally, this may prepare the student for a variety of starting positions in government planning.

## Program Student Learning Outcomes

- Develop a basic understanding of microeconomics, managerial accounting and fundamentals of business law.
- Apply a knowledge of microeconomic theory to solve problems using equations, graphs, and technical skills.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ACCTG 1B | Managerial Accounting | 5 |
| ECON 2/2H | Micro Economic Analysis | 3 |
| LAW 19 | Legal Environment of Business | 3 |
| Total Units |  | $\mathbf{1 1}$ |

## Business: Money and Banking Certificate of Accomplishment

Plan Code: 4144

This program will prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in a small/mediumsized business in a financial or banking industry, and in functions such as accounting and budget planning.

## Program Student Learning Outcomes

- Develop a basic understanding of macroeconomics, financial accounting and legal environment of business.
- Apply a knowledge of macroeconomic theory to solve problems using equations, graphs, and technical skills.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| ACCTG 1A | Financial Accounting | 5 |
| :--- | :--- | ---: |
| ECON $1 / 1 \mathrm{H}$ | Macro Economic Analysis | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| Total Units |  | $\mathbf{1 1}$ |

# Business: Accounting Concentration - Associate in Arts 

Plan Code: 1100

This program consists of the prescribed GE requirements, as well as the following accounting and business courses. Students earning this Associate Degree may be prepared to 1) transfer to a baccalaureatedegree granting institution in the field of their concentration and/ or 2) enter into the workforce at an entry-level position relating to their field of emphasis.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Identify and describe the nature, environment, and role of accounting and its importance as the language of business.
- Analyze the economic activities of business entities to calculate and prepare appropriate financial statements.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A | Financial Accounting 1 | 5 |
| ACCTG 1B | Managerial Accounting | 5 |
| ACCTG 205 | Fundamentals of Tax | 3 |
| ACCTG 228 | Computerized Gen Ledger Account Systems | 2 |
| ACCTG 229 | Spreadsheet Accounting | 3 |
| ACCTG 230 | Quickbooks Accounting | 2 |
| Subtotal Units |  | $\mathbf{2 6}$ |

IN ADDITION, complete SIX (6) units from the following:

| ACCTG 200 | Introduction to Accounting (3) |
| :--- | :--- |
| ECON $1 / 1$ H | Macro Economic Analysis (3) |
| ECON $2 / 2$ H | Micro Economic Analysis (3) |
| LAW 19 | Legal Environment of Business (3) |

Subtotal Units ..... 6
Required Subtotal ..... 32
Complete one of the following: ${ }^{2}$ ..... 19-39
Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{3}$Minimum Degree Total60

1 For the Accounting concentration, students must take ACCTG 1A
${ }^{2}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{3}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Business: Accounting - Certificate of Achievement

Plan Code: 3100

This program will prepare a student for advancement into an Associate in Arts Business: Accounting pathway and/or for an entry-level position in the accounting function of a small/medium-sized business.

## Program Student Learning Outcomes

- Identify and describe the nature, environment, and role of accounting and its importance as the language of business.
- Analyze the economic activities of business entities in order to calculate and prepare appropriate financial statements.


## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A | Financial Accounting ${ }^{1}$ | 5 |
| ACCTG 1B | Managerial Accounting | 5 |
| ACCTG 205 | Fundamentals of Tax | 3 |
| ACCTG 228 | Computerized Gen Ledger Account Systems | 2 |
| ACCTG 229 | Spreadsheet Accounting | 3 |
| ACCTG 230 | Quickbooks Accounting | 2 |
| Total Units |  | 26 |
| 1 For the Accounting concentration, students must take ACCTG 1A. |  |  |
| Busine | oundations of Account | nd |

Plan Code: 4200
This program may prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in the accounting function of a small/medium-sized business.

## Program Student Learning Outcomes

- Describe and use the structure of accounting statements as the language of business.
- Recognize the importance of ethical and moral considerations in a business and the credibility of the financial information.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| ACCTG 1A | Financial Accounting | 5 |
| :--- | :--- | ---: |
| ACCTG 1B | Managerial Accounting | 5 |
| ACCTG 228 | Computerized Gen Ledger Account Systems | $2-3$ |
| or ACCTG 229 | Spreadsheet Accounting |  |
| or ACCTG 230 | Quickbooks Accounting | $\mathbf{1 2 - 1 3}$ |

## Business: General Business Concentration - Associate in Arts

Plan Code: 1111
This program consists of the prescribed GE requirements, as well as the following general business courses. Students earning this Associate Degree may be prepared to 1) transfer to a baccalaureate-degree granting institution in the field of their concentration and/ or 2) enter into the workforce at an entry-level position relating to their field of emphasis.

## Program Student Learning Outcomes:

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate a strong, general understanding of the language and theories of large and small businesses.
- Identify the role and challenges that ethics, social responsibility, and diversity play across business structures.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A or ACCTG 200 | Financial Accounting Introduction to Accounting | 3-5 |
| IBUS 1 | Introduction to International Business | 3 |
| GBUS 10 | Personal Finance | 3 |
| GBUS 25 <br> or BCOM 25 <br> or LAW 19 | Digital and Social Media <br> Digital and Social Media <br> Legal Environment of Business | 3 |
| MGMT 49 or MKTG 47 | Introduction to Management Essentials of Marketing | 3 |
| Subtotal Units |  | 21-23 |
| IN ADDITION, complete SIX (6) units from the following: |  |  |
| ECON 1/1H | Macro Economic Analysis (3) |  |
| ECON 4 | Contemporary Economic Issues (3) |  |
| Subtotal Units |  | 6 |
| Required Subtotal |  | 27-29 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree To |  | 60 |
| 1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> 2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

## Business: General Business Certificate of Achievement

Plan Code: 3111

This program will prepare a student for advancement into an Associate in Arts Business: General Business pathway and/or for an entry-level position in a variety of functional areas in a small/medium-sized business.

## Program Student Learning Outcomes

- Demonstrate a strong, general understanding of the language and theories of large and small businesses.
- Identify the role and challenges that ethics, social responsibility, and diversity play across business structures.


## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A or ACCTG 200 | Financial Accounting Introduction to Accounting | 3-5 |
| GBUS 10 | Personal Finance | 3 |
| GBUS 25 <br> or BCOM 25 <br> or LAW 19 | Digital and Social Media <br> Digital and Social Media <br> Legal Environment of Business | 3 |
| IBUS 1 | Introduction to International Business | 3 |
| MGMT 49 or MKTG 47 | Introduction to Management Essentials of Marketing | 3 |
| Total Units |  | 21-23 |

## Business: Foundations of Business Certificate of Accomplishment

Plan Code: 4111

This program may prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in a variety of functional areas in a small/medium-sized business.

## Program Student Learning Outcomes

- Describe the basic terminologies and fundamental concepts of organizations.
- Recognize the impact of globalization and social responsibility on all organizations.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| ACCTG 1A | Financial Accounting | $3-5$ |
| :--- | :--- | :---: |
| or ACCTG 200 | Introduction to Accounting |  |
| GBUS 5 | Introduction to Business | 3 |
| GBUS 10 | Personal Finance | 3 |

# Foundations of Entrepreneurship Certificate of Accomplishment 

Plan Code: 4203
This program is designed to provide students with an understanding of the entrepreneurial elements of starting a small business, with an eventual focus on the traditional management skills necessary to extend the life of the startup business. Major emphasis is placed on the development of a coherent business model. Upon completion of this Certificate, a student will have the skills to plan and control financial resources, communicate with and lead people in the organization, plan and control informational and technological resources and, finally, unite these skills into the development of a strategic business model/business plan that will be designed for success.

## Program Student Learning Outcomes

- Demonstrate a basic understanding of the language and theories of entrepreneurship and small business management.
- Identify the role and challenges that ethics, social responsibility and diversity play within small organizations.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ACCTG 229 | Spreadsheet Accounting | 3 |
| GBUS 25 | Digital and Social Media | 3 |
| or BCOM 25 | Digital and Social Media | 3 |
| MGMT 50 | Human Resource Management | $\mathbf{3}$ |
| MGMT 80 | Small Business Entrepreneurship | $\mathbf{1 2}$ |
| Total Units |  |  |

## Personal Financial Planning Certificate of Accomplishment

Plan Code: 4202

This program will prepare students to learn the concepts of personal financial planning that can be further developed into a career in finance. Students will evaluate various investment products and strategies appropriate for achieving financial goals at different life stages; evaluate the effects of changes in income, deductions, and filing status on an individual's tax liability; and will be able to design and create electronic spreadsheets. Upon completion of this Certificate, a student will have the skills to plan and control financial resources, communicate the most current laws, regulations and forms for tax planning purposes and, finally, unite these skills by creating electronic spreadsheets.

## Program Student Learning Outcomes

- Demonstrate a basic understanding of the language and theories of personal financial planning.
- Identify the role of technology in the world of personal financial planning.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ACCTG 205 | Fundamentals of Tax | 3 |
| COSA 15 | Microsoft Excel for Windows | 3 |
| GBUS 10 | Personal Finance | 3 |
| Total Units |  | $\mathbf{9}$ |

# Business: Global Trade and Logistics Concentration - Associate in Arts 

Plan Code: 1151

This program consists of the prescribed GE requirements, as well as the following general and Global Trade and Logistics courses. Students earning this Associate Degree may be prepared to 1) transfer to a baccalaureate-degree granting institution in the field of their concentration and/ or 2) enter into the workforce at an entry-level position relating to their field of emphasis.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Examine the primary elements of the language and theories of logistics and supply chain management.
- Apply learned concepts to solve complex logistics and supply chain issues.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

## Code Number Course Title Units

 REQUIRED COURSES| GBUS 5 | Introduction to Business | 3 |
| :--- | :--- | ---: |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A | Financial Accounting | $3-5$ |
| or ACCTG 200 | Introduction to Accounting | 3 |
| IBUS 1 | Introduction to International Business | 3 |
| IBUS 20 | Export-Import Business Practices | 3 |
| IBUS 52 | Introduction to Supply Chain Management | 3 |
| IBUS 60 | International Business Law | 3 |
| IBUS 75 | Introduction to Logistics | $\mathbf{3}$ |
| Subtotal Units |  | $\mathbf{2 4 - 2 6}$ |

IN ADDITION, complete SIX (6) units from the following:
ECON 1/1H Macro Economic Analysis (3)
ECON $5 \quad$ The Global Economy (3)
LAW 19 Legal Environment of Business (3)
Subtotal Units 6

Required Subtotal $\quad$ 30-32
Complete one of the following: ${ }^{1} \quad 19-39$
Plan A
Plan B
Plan C

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Business: Global Trade and Logistics <br> - Certificate of Achievement

Plan Code: 3151
This program will prepare a student for advancement into an Associate in Arts Business: Global Trade and Logistics Concentration pathway and/or for an entry-level position in a small/medium-sized business involved in international trade and logistics.

## Program Student Learning Outcomes

- Examine the primary elements of the language and theories of logistics and supply chain management.
- Apply learned concepts to solve complex logistics and supply chain issues.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A | Financial Accounting |  |
| or ACCTG 200 | Introduction to Accounting | 3 |
| IBUS 1 | Introduction to International Business | 3 |
| IBUS 20 | Export-Import Business Practices | 3 |
| IBUS 52 | Introduction to Supply Chain Management | 3 |
| IBUS 60 | International Business Law | 3 |
| IBUS 75 | Introduction to Logistics | $\mathbf{2 4 - 2 6}$ |

## Business: Logistics - Certificate of Accomplishment

Plan Code: 4127
This program may prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in a small/mediumsized business involved in international trade, logistics and supply-chain management.

## Program Student Learning Outcomes

- Describe the basic terminologies and fundamental concepts of logistics and supply chains.
- Recognize the impact of globalization on supply chain management and distribution of goods and services.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| IBUS 1 | Introduction to International Business | 3 |
| IBUS 20 | Export-Import Business Practices | 3 |
| IBUS 52 | Introduction to Supply Chain Management | 3 |
| IBUS 75 | Introduction to Logistics | 3 |

Total Units

## Business: Foundations of International Business - Certificate of Accomplishment

Plan Code: 4151

This program may prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in a small/mediumsized business involved in international trade and logistics.

## Program Student Learning Outcomes

- Describe the basic terminologies and fundamental concepts of businesses across global markets.
- Recognize the impact of ethics, social responsibility, and culture on global organizations.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| IBUS 1 | Introduction to International Business | 3 |
| :--- | :--- | ---: |
| IBUS 20 | Export-Import Business Practices | 3 |
| IBUS 52 | Introduction to Supply Chain Management | 3 |
| IBUS 60 | International Business Law | 3 |
| Total Units |  | $\mathbf{1 2}$ |

## Business: Management Concentration - Associate in Arts

Plan Code: 1143
This program consists of the prescribed GE requirements, as well as the following general business and management courses. Students earning this Associate Degree may be prepared to 1) transfer to a baccalaureatedegree granting institution in the field of their concentration and/ or 2) enter into the workforce at an entry-level position relating to their field of emphasis.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate a strong understanding of the theories and roles that Management functions play within an organization.
- Identify the role that ethics, social responsibility and diversity play in planning and implementing organizational goals.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A or ACCTG 200 | Financial Accounting Introduction to Accounting | 3-5 |
| MGMT 49 or MGMT 50 | Introduction to Management Human Resource Management | 3 |
| MGMT 58 | Leadership and Supervision | 3 |
| MGMT 60 | Management \& Organization Behavior | 3 |
| MGMT 80 | Small Business Entrepreneurship | 3 |
| Subtotal Units |  | 21-23 |
| IN ADDITION, Complete SIX (6) units from the following: |  |  |
| ECON 2/2H | Micro Economic Analysis (3) |  |
| GBUS 10 | Personal Finance (3) |  |
| LAW 19 | Legal Environment of Business (3) |  |
| Subtotal Units |  | 6 |
| Required Subtotal |  | 27-29 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as neede | to reach 60 degree-applicable units) ${ }^{2}$ |  |

## Minimum Degree Total

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Business: Management - Certificate of Achievement

Plan Code: 3143

This program will prepare a student for advancement into an Associate in Arts Business: Management pathway and/or for an entry-level supervisory or human resources position in a small/medium-sized business. Additionally, a student may be able to develop the skills needed for an entrepreneurial startup.

## Program Student Learning Outcomes

- Demonstrate a strong understanding of the theories and roles that Management functions play within an organization.
- Identify the role that ethics, social responsibility, and diversity play in planning and implementing organizational goals.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | $3-5$ |
| ACCTG 1A | Financial Accounting |  |
| or ACCTG 200 | Introduction to Accounting | 3 |
| MGMT 49 | Introduction to Management |  |
| or MGMT 50 Human Resource Management |  |  |
| MGMT 58 | Leadership and Supervision | 3 |
| MGMT 60 | Management \& Organization Behavior | 3 |
| MGMT 80 | Small Business Entrepreneurship | $\mathbf{3}$ |
| Total Units |  | $\mathbf{2 1 - 2 3}$ |

## Business: Foundations of Management - Certificate of Accomplishment

Plan Code: 4143

This program may prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level supervisory or human resources position in a small/medium-sized business. Additionally, a student may be able to develop the skills needed for an entrepreneurial startup.

## Program Student Learning Outcomes

- Describe the basic terminologies and fundamental concepts of the Management function.
- Recognize the impact of managers and the management function on social responsibility and ethics.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| MGMT 49 | Introduction to Management | 3 |
| :--- | :--- | ---: |
| or MGMT 50 | Human Resource Management |  |
| MGMT 58 | Leadership and Supervision | $\mathbf{3}$ |
| MGMT 60 | Management \& Organization Behavior | 3 |
| MGMT 80 | Small Business Entrepreneurship | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 2}$ |

## Business: Marketing Concentration Associate in Arts

Plan Code: 1153

This program consists of the prescribed GE requirements, as well as the following general business and marketing courses. Students earning this Associate Degree may be prepared to 1) transfer to a baccalaureatedegree granting institution in the field of their concentration and/ or 2) enter into the workforce at an entry-level position relating to their field of emphasis.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate a strong understanding of the language and theories of the marketing functions within an organization.
- Identify the role that ethics, social responsibility, and diversity play in developing and implementing marketing objectives.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law | 3 |
| ACCTG 1A or ACCTG 200 | Financial Accounting Introduction to Accounting | 3-5 |
| GBUS 25 <br> or BCOM 25 | Digital and Social Media Digital and Social Media | 3 |
| MKTG 40 | Salesmanship | 3 |
| MKTG 41 | Marketing Communications | 3 |
| MKTG 47 | Essentials of Marketing | 3 |
| Subtotal Units |  | 21-23 |
| IN ADDITION, complete SIX (6) units from the following: |  |  |
| ECON 2/2H | Micro Economic Analysis (3) |  |
| LAW 19 | Legal Environment of Business (3) |  |
| Subtotal Units |  | 6 |
| Required Subtotal |  | 27-29 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree To |  | 60 |
| 1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> 2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

## Business: Marketing - Certificate of Achievement

Plan Code: 3153
This program will prepare a student for advancement into an Associate in Arts Business: Marketing pathway and/or for an entry-level position in a small/medium-sized business, in functions such as sales, advertising or product development.

## Program Student Learning Outcomes

- Demonstrate a strong understanding of the language and theories of the marketing functions within an organization.
- Identify the role that ethics, social responsibility, and diversity play in developing and implementing marketing objectives.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| GBUS 5 | Introduction to Business | 3 |
| LAW 18 | Fundamentals of Business Law |  |
| ACCTG 1A | Financial Accounting | $3-5$ |
| or ACCTG 200 | Introduction to Accounting |  |
| GBUS 25 | Digital and Social Media | 3 |
| or BCOM 25 Digital and Social Media <br> MKTG 40 Salesmanship |  |  |
| MKTG 41 | Marketing Communications | 3 |
| MKTG 47 | Essentials of Marketing | 3 |
| Total Units |  | $\mathbf{2 1 - 2 3}$ |

## Business: Foundations of Marketing Certificate of Accomplishment

Plan Code: 4153

This program may prepare a student to continue toward the attainment of an Associate Degree and/or for an entry-level position in a small/ medium-sized business, in functions such as sales, advertising or product development.

## Program Student Learning Outcomes <br> - Describe the basic terminologies and fundamental concepts of marketing <br> - Recognize the impact of marketers and the marketing function on social responsibility and ethics.

| Program Requirements |  |  |
| :--- | :--- | ---: |
| Code Number Course Title | Units |  |
| REQUIRED courses |  |  |
| GBUS 25 | Digital and Social Media | 3 |
| or BCOM 25 | Digital and Social Media |  |
| MKTG 40 | Salesmanship | 3 |
| MKTG 41 | Marketing Communications | 3 |
| MKTG 47 | Essentials of Marketing | 3 |
| Total Units |  | $\mathbf{1 2}$ |

## Social Media Application Development - Certificate of Accomplishment

Plan Code: 4201

This program will prepare students to develop a social media application that can be further developed into a business. Students will understand basic business concepts and theories; learn the different uses of digital and social media, and will be able to design and develop an app. This certificate will give students a complete understanding of Social and Digital Media application development, in order to compete for entry-level
jobs. Upon completion of this Certificate, a student will have the skills to plan and control business resources, communicate with and lead people in the organization on the functions of different social media platforms, plan and control informational and technological resources and, finally, unite these skills into the development of social media applications for an organization to compete in the New Economy.

## Program Student Learning Outcomes

- Demonstrate a basic understanding of the language and theories of application development.
- Identify the role of technology in the world of personal social media design.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| COSP 201 | Mobile App Development | 1 |
| :--- | :--- | :--- |
| GBUS 5 | Introduction to Business | 3 |
| GBUS 25 | Digital and Social Media | 3 |
| or BCOM 25 | Digital and Social Media | $\mathbf{7}$ |

## Real Estate Broker - Certificate of Accomplishment

Plan Code: 4154

The courses listed in this program, coupled with a minimum of 2 years full-time licensed salesperson experience, will qualify and prepare a student to take the written examination for a Real Estate license. Upon successfully passing the examination, a license will be approved by the CaIBRE. For additional information regarding the Real Estate Salesperson license, refer to http://www.dre.ca.gov.

## Program Student Learning Outcomes

- Demonstrate a basic understanding of the language and theories of real estate brokerage in preparation for the real estate broker license.
- Identify the role and challenges that ethics, social responsibility and diversity play within small organizations.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ACCTG 200 | Introduction to Accounting | 3 |
| LAW 20 | Property Law | 3 |
| REAL 85 | Real Estate Appraisal | 3 |
| REAL 87 | Real Estate Finance | 3 |
| Total Units |  | $\mathbf{1 2}$ |

## Real Estate Salesperson - Certificate of Accomplishment

Plan Code: 4115

The courses listed in this program will qualify and prepare a student to take the written examination for a Real Estate Salesperson license.

Upon successfully passing the examination, a license will be approved by the CalBRE. This license is required to conduct real estate activities while under the supervision of a licensed broker. For additional information regarding the Real Estate Salesperson license, refer to http:// www.dre.ca.gov.

## Program Student Learning Outcomes

- Demonstrate a basic understanding of the language and theories of real estate sales in preparation for the real estate salesperson license.
- Identify the role and challenges that ethics, social responsibility, and diversity play within small organizations.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| REAL 78 | Real Estate Economics | 3 |
| REAL 80 | Real Estate Principles | 3 |
| REAL 81 | Real Estate Practice | 3 |
| REAL 253 | Property Management | 3 |
| Total Units |  | $\mathbf{1 2}$ |

# DRE Exam Preparation - Certificate of Completion 

Plan Code: 6131
This program will prepare students to successfully pass the CA Department of Real Estate Salesperson or Broker's Exam as well as to develop a strong sense of the importance of Personal Money Management.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skill sets related to the financial, economic, and political aspects of Real Estate.
- Construct a knowledge of real estate practices in preparation for a career as a Real Estate Salesperson or Broker.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REAL 600 | DRE Exam Preparation | 54 |
| MONEY 690 | Money Basics and Goal Setting | 9 |
| MONEY 695 | Your Personal Financial Plan | 9 |
| Total Hours |  | 72 |

# BUSINESS INFORMATION WORKER 

The Business Information Worker program at Long Beach City College is a comprehensive offering of courses to prepare students for a wide variety of office positions in the Hospitality and Tourism, Retail, Health Care Services, Financial Services and Real Estate, and Business Services Industries

# Digital and Social Media - Certificate of Achievement 

Plan Code: 3135
This program prepares students to use digital and social media productively and gives students the framework for understanding and evaluating new technology tools and platforms as they are developed Students learn the design and impact of digital and social media technologies, the most updated criteria for evaluating social media platforms and generating branding content, and social media etiquette and ethics.

## Program Student Learning Outcomes

- Evaluate social media platforms to determine suitability for a variety of digital content


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| BCOM 25 | Digital and Social Media | 3 |
| BCOM 263 | Customer Service | 3 |
| Total Units |  | $\mathbf{9}$ |

## Microsoft Essentials - Certificate of Achievement

Plan Code: 3136
This program is a comprehensive offering of courses to give students the information and computer literacy skills necessary to effectively utilize in-demand computer and productivity software required in today's technological society.

## Program Student Learning Outcomes

- Create appropriately formatted deliverables using a variety of Microsoft Office software.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| COSA 5 | Microsoft Windows Operating System | 3 |
| :--- | :--- | :--- |
| COSA 30 | Introduction to Computers | 3 |

## 9

## Telecommuting Fundamentals Certificate of Achievement

Plan Code: 3169
This program provides students with the in-demand knowledge of videoconferencing tools, non-video collaboration, and etiquette required for effectively working remotely.

## Program Student Learning Outcomes

- Utilize web conferencing tools to effectively communicate in a remote work environment.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| BCOM 15 | Business Communications | 3 |
| BCOM 260 | Channels of Business Communication | 1 |
| COSK 200 | Keyboarding and Document Production | 3 |
| BCOM 264 | Business Telecommuting Fundamentals | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 0}$ |

## Telecommuting Fundamentals Certificate of Completion

Plan Code: 6001
This program provides students with the fundamentals skills for effectively working remotely.

## Program Student Learning Outcomes

Apply tools, methodologies, and etiquette to work remotely effectively
Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| BCOM 660 | Channels of Business Communication | 18 |
| BCOM 664 | Business Telecommuting Fundamentals | 54 |
| Total Hours |  | 72 |

## Business Digital Literacy - Certificate of Accomplishment

Plan Code: 4130
This certificate will develop students' current computer information competency skills in this short-term course

## Program Student Learning Outcomes <br> Differentiate and evaluate the uses and standards of computer hardware.

- Create word processing documents, worksheets, presentations and print a deliverable.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 1 | Computer Information Competency | 1 |

## Computer Hardware Technician Certificate of Completion

Plan Code: 6009
Students will learn the basic IT skills involved in computer systems setup, repair, and management. Skills include component replacement of PC systems, operating system installation and configuration, local area network setup and operations, and basic office productivity software operations.

## Program Student Learning Outcomes

- Analyze common software and hardware problems on personal computers.
- Distinguish and explain the introductory core computer and IT concepts and technology that are used personally, in society, in government, and business.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 650 | Intro to IT Concepts \& Applications | 72 |
| COSN 605 | Computer Hardware Fundamentals | $\mathbf{7 2}$ |
| Total Hours |  | $\mathbf{1 4 4}$ |

## Office Technologies - Job Search Skills - Certificate of Completion

Plan Code: 6003
This program will certify that students have developed occupational competence for obtaining desired positions in the workforce. This certificate will serve to verify that students have undergone selfevaluation, researched careers and companies, prepared required documentation (resume, cover letter) needed to get an interview, as well as prepared for interviews and are able to apply necessary follow-up procedures. Students are required to complete the three-course series within this program to receive the certificate of completion. There are no units associated with these noncredit classes, but students are expected to complete a total of 54 hours for completion.

## Program Student Learning Outcomes

- Develop and complete a portfolio that presents the student(s) as the most qualified job applicant(s).


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| BCOM 622 | The Job Search Process | 18 |
| BCOM 623 | Job Search Tools | 18 |
| BCOM 624 | The Interview Process | 18 |
| Total Hours |  | $\mathbf{5 4}$ |

## Office Technologies - Microsoft Access - Certificate of Completion

Plan Code: 6004
Students will learn how to use Microsoft Access to perform database related operations necessary to a small business or organization. Database skills include the ability to create and modify data tables, data entry and lookup forms, summary and detail reports, and select, update, and delete queries. Students are required to complete the entire series of three courses within this program to receive the certificate of completion. There are no units associated with these noncredit classes, but students are expected to complete a total of 54 hours for completion.

## Program Student Learning Outcomes

- Use Microsoft Access to install, configure and manage a business database system.


## Program Requirements

Code Number Course Title Hours REQUIRED COURSES

| COSA 625 | Microsoft Access, Introductory | 18 |
| :--- | :--- | :--- |
| COSA 626 | Microsoft Access, Intermediate | 18 |
| COSA 627 | Microsoft Access, Advanced | 18 |
| Total Hours |  | $\mathbf{5 4}$ |

## Office Technologies - Microsoft Excel - Certificate of Completion

Plan Code: 6005
Students will learn how to use Microsoft Excel for the PC and its editing, formatting, language tools, functions, and arguments to create, format, save, revise, and print various business and personal spreadsheets. Students are required to complete the entire series of three courses within the Office Technologies-Microsoft Excel program to receive the certificate of completion. There are no units associated with these noncredit classes, but students are expected to complete a total of 54 hours for completion.

## Program Student Learning Outcomes

- Use Microsoft Excel to create, customize, and format business and personal spreadsheets.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 615 | Microsoft Excel, Introductory | 18 |
| COSA 616 | Microsoft Excel, Intermediate | 18 |
| COSA 617 | Microsoft Excel, Advanced | 18 |
| Total Hours |  | $\mathbf{5 4}$ |

## Office Technologies - Microsoft Outlook - Certificate of Completion

Plan Code: 6007

This program provides instruction in desktop management using Microsoft Outlook. Students completing the Microsoft Outlook certificate will possess the skills necessary to effectively use Outlook software tools. Topics include sending and receiving e-mail using special features, creating contacts, planning and tracking tasks, scheduling and managing multiple calendar items, creating rules, importing and exporting contacts, archiving and customizing Outlook components.

## Program Student Learning Outcomes

- Students will use Outlook features to create professional emails manage calendar items, and customize the Outlook interface as needed.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSA 628 | Microsoft Outlook, Introductory | 18 |
| COSA 629 | Microsoft Outlook, Intermediate | 18 |
| COSA 630 | Microsoft Outlook, Advanced | $\mathbf{1 8}$ |
| Total Hours |  | $\mathbf{5 4}$ |

Students must log in a minimum of 54 contact hours of laboratory work. The student must complete the required assessment/proficiency exams in Microsoft Outlook with a score of $70 \%$ or above in each required assessment/proficiency exam.

# Office Technologies - Microsoft PowerPoint - Certificate of Completion 

Plan Code: 6008
Students will learn how to use Microsoft PowerPoint for the PC and its editing, formatting, and language tools to create, format, save, revise, and print personal and professional presentations. Students are required to complete the entire series of three courses within this program to receive the certificate of completion. There are no units associated with these noncredit classes, but students are expected to complete a total of 54 hours for completion.

## Program Student Learning Outcomes

- Use Microsoft PowerPoint to create, customize, and format professional presentations.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSA 620 | Microsoft PowerPoint, Introductory | 18 |
| COSA 621 | Microsoft PowerPoint, Intermediate | 18 |
| COSA 622 | Microsoft PowerPoint, Advanced | 18 |
| Total Hours |  | $\mathbf{5 4}$ |

Students must log in a minimum of 54 contact hours of laboratory work. The student must complete the required assessment/proficiency exams in Microsoft PowerPoint with a score of $70 \%$ or above in each required assessment/proficiency exam.

## Office Technologies - Microsoft Word - Certificate of Completion

Plan Code: 6006
Students will learn how to use Microsoft Word for the PC and its editing, formatting, and language tools to create, format, save, revise, and print various business and report documents. Students are required to complete the entire series of three courses within this program to receive the certificate of completion. There are no units associated with these noncredit classes, but students are expected to complete a total of 54 hours for completion.

## Program Student Learning Outcomes

Use Microsoft Word to create, customize, and format business documents

## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSA 610 | Microsoft Word, Introductory | 18 |
| COSA 611 | Microsoft Word, Intermediate | 18 |
| COSA 612 | Microsoft Word, Advanced | 18 |
| Total Hours |  | $\mathbf{5 4}$ |

## CHILD DEVELOPMENT: EARLY CHILDHOOD EDUCATION

The Child Development and Educational Studies Department is committed to enhancing the quality of life for students, children and families throughout the life span. Embracing the diversity each student brings, the Department strives to empower individual learners through personal and professional growth. This department provides general and vocational education at the lower division level.

## Early Childhood Education Associate in Science Transfer Degree

Plan Code: 5501B/C

This program is designed for students who wish to transfer to a fouryear degree program in Child Development or Early Childhood Education. A four-year degree in Child Development or Early Childhood Education is suitable preparation for application to multiple subject (elementary education) teaching credential programs. An AST degree in Early Childhood Education fulfills the state education requirement for a fully qualified teacher in a public or private early childhood setting Students who complete this degree will receive priority admission with junior status into the CSU system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Design, implement, and evaluate environments and activities that support optimum developmental play and learning outcomes for all young children.
- Demonstrate responsive care and teaching practices for young children through the integration of assessment, theory, and practice.
- Apply effective guidance and interaction strategies to support children's social learning, peer relations, and self-confidence.
- Incorporate ethical and professional standards engaging in collaborative learning and reflective practices.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| CDECE 19 | Health, Safety and Nutrition DS7 | 3 |
| CDECE 45 | Child \& Adolescent Development DS1 | 3 |
| CDECE 48 | Child, Family and Community D2 | 3 |
| CDECE 50 | Intro to Curriculum for Young Children | 3 |
| CDECE 53 | Principles and Practices | 3 |
| CDECE 61 | Teaching in a Diverse Society D3 | 3 |
| CDECE 66 | Observation and Assessment DS3 | 3 |
| CDECE 68 | Practicum D3 | 3 |
| Required Subtotal |  | $\mathbf{2 4}$ |
| Complete one of the following: ${ }^{1}$ | $37-39$ |  |

Plan B

Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ Degree Total
${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Child Development: Early Childhood Education - Associate in Arts

Plan Code: 1302

This program is designed for students preparing to work with infants, toddlers, pre-school or school-age children in a group setting as an assistant, teacher, master teacher, site supervisor, or center director. An A.A. degree in Child Development fulfills the state education requirement for a fully qualified teacher in a public or private early childhood setting.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply a variety of effective approaches, strategies, and techniques for teaching in an early childhood classroom.
- Design, implement, and evaluate curriculum and environments based on observation and assessment of young children.
- Analyze personal teaching experiences to guide and inform practices.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

Complete Levels 1, 2, 3, and 4 and choose ONE area of focused study.

## Code Number Course Title Units

REQUIRED COURSES
Level 1

| CDECE 45 | Child \& Adolescent Development DS1 | 3 |
| :--- | :--- | :---: |
| or CDECE 47 | Human Development |  |
| CDECE 48 | Child, Family and Community D2 | 3 |
| CDLL 52 | Fieldwork/Preschool Techniques | 3 |
| Level 2 |  | 3 |
| CDECE 19 | Health, Safety and Nutrition DS7 | 3 |
| CDECE 50 | Intro to Curriculum for Young Children | 3 |
| CDECE 53 | Principles and Practices | 3 |
| CDECE 61 | Teaching in a Diverse Society D3 | 3 |

Level 3


## Child Behavior Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 59 | Guiding Young Children DS3 | 3 |
| CDECE 259 | Challenging Behavior in Early Childhood | 3 |
| Subtotal Units |  | $\mathbf{6}$ |

## Curriculum Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 54 | Art \& Creative Dev. in Early Childhood D3 | 3 |
| CDECE 55 | Music \& Movement in Early Childhood D3 | 3 |
| CDECE 57 | Constructivist STEM Ed Early Childhood | 3 |
| Subtotal Units |  | $\mathbf{9}$ |

## Family Child Care Option

Code Number Course Title
CDFDC 212A Family Child Care Management A 3

Subtotal Units

## Infant/Toddler Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 40 | Infant and Toddler Development D4 | 3 |
| CDECE 41 | Care and Education of Infants and Toddlers | 3 |
|  | D4 | $\mathbf{6}$ |

## Early Literacy Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 34 | Children's Literature DS3 | 3 |
| CDECE 58 | Language \& Literacy in Early Childhood | 3 |
| Subtotal Units |  | $\mathbf{6}$ |

## Special Needs Option

Code Number Course Title Units
CDSED 5 Community Resources/Special Education 3
CDSED 67 Intro to Children with Special Needs ..... 3
CDSED 70 Curriculum for Special Needs ..... 3
Subtotal Units ..... 9
Administration (Advanced Level) Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 31 | Adult Supervision | 2 |
| CDECE 60A | Admin of Child Development Programs D6 | 3 |
| CDECE 60B | Advanced Supervision of ECE D6 | 3 |
| Subtotal Units |  | $\mathbf{8}$ |

## Other Program Requirements for the Associate Degree and Certificate of Achievement

STATE MINIMUM REQUIREMENTS (Title 22): This program satisfies the State of California licensing requirement for employment in early childhood education programs (private, church, industrial, coop). The minimum Title 22 licensing requirement to work as a teacher is that six units be completed before employment and that an additional six units be completed immediately thereafter. It is recommended that the requirement for courses in DS 1* and DS 2* be satisfied with at least three semester units in each category. It is also recommended that a minimum of six semester units be taken in the DS 3* -Program/Curriculum with the option that if the person is working specifically with infants or schoolage children that they should apply three units in DS 4* or DS 5* towards these six units. The DS designation can be found following the course title.

CHILD DEVELOPMENT PERMIT (formerly called Children's Center Permit) (Title 5): The Early Childhood Certificate program, plus 16 units in general education including one course in humanities, social sciences, mathematics, and/or science, and English, and an experience component, satisfies the requirements for a Teacher level Child Development Permit required to teach in subsidized early childhood education programs (State or Headstart preschool programs run by school districts). To apply for your state Child Development Permit call 562-938-4792 or email jfrumkin@lbcc.edu for an appointment.

## Child Development: Early Childhood Education - Certificate of Achievement

Plan Code: 3302

This program is designed for students preparing to work with infants, toddlers, preschool or school-age children in a group setting as an aide, teacher, master teacher, site supervisor, or center director.

## Program Student Learning Outcomes

- Apply a variety of effective approaches, strategies, and techniques for teaching in an early childhood classroom.
- Design, implement, and evaluate curriculum and environments based on observation and assessment of your children
- Analyze personal teaching experiences to guide and inform practices.


## Program Requirements

Complete Levels $1,2,3$, and 4 and choose ONE area of focused study.

| Code Number Level 1 | Course Title | Units |
| :---: | :---: | :---: |
| CDECE 45 or CDECE 47 | Child \& Adolescent Development DS1 Human Development | 3 |
| CDECE 48 | Child, Family and Community D2 | 3 |
| CDLL 52 | Fieldwork/Preschool Techniques | 3 |
| Level 2 |  |  |
| CDECE 19 | Health, Safety and Nutrition DS7 | 3 |
| CDECE 50 | Intro to Curriculum for Young Children | 3 |
| CDECE 53 | Principles and Practices | 3 |
| CDECE 61 | Teaching in a Diverse Society D3 | 3 |
| Level 3 |  |  |
| CDECE 66 | Observation and Assessment DS3 | 3 |
| Level 4 |  |  |
| CDECE 68 | Practicum D3 | 3 |
| Subtotal Units |  | 27 |

IN ADDITION, complete ONE area of focused study from the
following:
Child Behavior Option
Curriculum Option
Family Child Care Option
Infant/Toddler Option
Early Literacy Option
Special Needs Option
Administration (Advanced Level) Option
Subtotal Units
Total Units

## Child Behavior Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 59 | Guiding Young Children DS3 | 3 |
| CDECE 259 | Challenging Behavior in Early Childhood | 3 |
| Subtotal Units |  | $\mathbf{6}$ |

## Curriculum Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 54 | Art \& Creative Dev. in Early Childhood D3 | 3 |
| CDECE 55 | Music \& Movement in Early Childhood D3 | 3 |
| CDECE 57 | Constructivist STEM Ed Early Childhood | 3 |
| Subtotal Units |  | $\mathbf{9}$ |

## Family Child Care Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDFDC 212A | Family Child Care Management A | 3 |
| CDFDC 212B | Family Child Care Management B | 3 |
| Subtotal Units |  | $\mathbf{6}$ |

## Infant/Toddler Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 40 | Infant and Toddler Development D4 | 3 |
| CDECE 41 | Care and Education of Infants and Toddlers | 3 |
|  | D4 |  |

Subtotal Units ..... 6
Early Literacy Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDECE 34 | Children's Literature DS3 | 3 |
| CDECE 58 | Language \& Literacy in Early Childhood | 3 |
| Subtotal Units |  | $\mathbf{6}$ |

## Special Needs Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| CDSED 5 | Community Resources/Special Education | 3 |
| CDSED 67 | Intro to Children with Special Needs | 3 |
| CDSED 70 | Curriculum for Special Needs | 3 |
| Subtotal Units |  | $\mathbf{9}$ |

## Administration (Advanced Level) Option

Code Number Course Title Units
CDECE 31 Adult Supervision 2

CDECE 60A Admin of Child Development Programs D6 3
CDECE 60B Advanced Supervision of ECE D6 3
Subtotal Units 8

## Other Program Requirements for the Associate Degree and Certificate of Achievement

STATE MINIMUM REQUIREMENTS (Title 22): This program satisfies the State of California licensing requirement for employment in early childhood education programs (private, church, industrial, coop). The minimum Title 22 licensing requirement to work as a teacher is that six units be completed before employment and that an additional six units be completed immediately thereafter. It is recommended that the requirement for courses in DS 1* and DS 2* be satisfied with at least three semester units in each category. It is also recommended that a minimum of six semester units be taken in the DS 3*-Program/Curriculum with the option that if the person is working specifically with infants or schoolage children that they should apply three units in DS 4* or DS 5* towards these six units. The DS designation can be found following the course title.

CHILD DEVELOPMENT PERMIT (formerly called Children's Center Permit) (Title 5): The Early Childhood Certificate program, plus 16 units in general education including one course in humanities, social sciences, mathematics, and/or science, and English, and an experience component, satisfies the requirements for a Teacher level Child Development Permit required to teach in subsidized early childhood education programs (State or Headstart preschool programs run by school districts). To
apply for your state Child Development Permit call 562-938-4792 or email jfrumkin@lbcc.edu for an appointment.

## Special Education Paraprofessional Certificate of Achievement

Plan Code: 3301
This program seeks to inspire and prepare students and professionals in the field with the knowledge, skills, and strategies to support all children in special education and general education settings where children with exceptionalities are cared for and educated in inclusive settings. Program curriculum focuses on the origins of special education and legislation and strategies for supporting neurodiverse individuals. Students acquire foundational knowledge, teaching techniques, and strategies for building positive, inclusive classroom environments for all children. A certificate increases students' employment opportunities and salary potential, including employment opportunities as a special education paraprofessional in school districts, residential care centers, Department of Rehabilitation, or private agencies.

## Program Student Learning Outcomes

- Evaluate current policies related to special education law and inclusion.
- Explain the needs of children with disabilities and their families, along with interventions designed to address them.
- Identify community resources serving individuals with special needs.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| CDECE 47 | Human Development | 3 |
| CDECE 48 | Child, Family and Community D2 | 3 |
| CDECE 59 | Guiding Young Children DS3 | 3 |
| CDECE 271WE | ECE Work Experience |  |
| $\quad$ or EDUC 20 | Intro to Elementary Classroom Teaching |  |
| CDSED 5 | Community Resources/Special Education | 3 |
| CDSED 67 | Intro to Children with Special Needs | 3 |
| Subtotal Units |  | $\mathbf{1 8}$ |


| IN ADDITION, complete THREE (3) units from the following: |  |
| :--- | :--- |
| CDECE 61 | Teaching in a Diverse Society D3 (3) |
| CDECE 259 | Challenging Behavior in Early Childhood (3) |
| CDSED 70 | Curriculum for Special Needs (3) |

Subtotal Units
Total Units ..... 21

## CDECE: Assistant Teacher Certificate of Accomplishment

Plan Code: 4055
May assist in the instruction of children under the supervision of an Associate Teacher or above.
Program Student Learning Outcomes

- Describe the socialization of the child focusing on theinterrelationship of family, school, and community.
- Describe development of children from conception through adolescence in the physical, social, emotional, and cognitive domains.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| CDECE 45 | Child \& Adolescent Development DS1 |  |
| or CDECE 47 | Human Development | 3 |
| CDECE 48 | Child, Family and Community D2 | 3 |
| Total Units | $\mathbf{6}$ |  |

## CDECE: Associate Teacher Certificate of Accomplishment

## Plan Code: 4056

May provide instruction and supervise assistant.

## Program Student Learning Outcomes

- Investigate and apply developmentally appropriate principles and teaching strategies to positively influence all young children's development and acquisition of knowledge and skills.
- Analyze preschool environments for quality indicators.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CDECE 45 | Child \& Adolescent Development DS1 | 3 |
| or CDECE 47 | Human Development | 3 |
| CDECE 48 | Child, Family and Community D2 | 3 |
| CDECE 50 | Intro to Curriculum for Young Children | 3 |
| CDLL 52 | Fieldwork/Preschool Techniques | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 2}$ |

## CDECE: Family Development Certificate of Accomplishment

## Plan Code: 4052

The focus of this program of study is on developing the skills and knowledge to effectively work with and support families in a variety of settings. Highly recommended for students interested in working as Head Start Family Service Workers and/or other employment in Human Services fields.

## Program Student Learning Outcomes

- Analyze the core principles underlying the empowerment and the strength-based family support approach to family development.
- Synthesize family development principles.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CDECE 47 | Human Development | 3 |
| CDECE 48 | Child, Family and Community D2 | 3 |
| Total Units |  | $\mathbf{6}$ |

## Child Development: Permit Specialization Area - Child Health and Safety - Certificate of Accomplishment

Plan Code: 4059

The focus of this program of study is on developing an understanding of the laws, regulations, standards, policies, procedures and early childhood curriculum related to child health, safety and nutrition.

## Program Student Learning Outcomes

- Identify and demonstrate regulations, standards, policies, and procedures related to health, safety, and nutrition in early childhood settings.
- Evaluate environments for both positive and negative impacts on children's health and safety including first aid situations and appropriate responses.
- Describe strategies used to promote health, safety, and nutrition of children and adults in early childhood settings.


## Program Requirements

For graduation with a Certificate of Accomplishment - Permit Specialization Area, as defined on the State Child Development Matrix for a master teacher:

1. Complete one specialization area with a minimum grade of " $C$ " in each course.
2. Complete 24 units in Early Childhood Education, including CDECE 45 Child \& Adolescent Development DS1 or CDECE 47 Human Development, and CDECE 48 Child, Family and Community D2, in addition to the six required in the area of specialization (for a total of 30 ECE credits).
3. Fifty percent $(50 \%)$ or more of the six units required for the specialization must be completed in residence (credit earned by exam, where applicable, may be included) at LBCC.
4. Complete 16 general education units.
5. Complete 2 units of Adult Supervision.

During your final semester of course work, complete and submit the online certificate/graduation application form, which is available through the Viking Student Portal. Deadlines for graduation applications are posted at https://www.lbcc.edu/pod/registration-dates (https:// www.lbcc.edu/pod/registration-dates/).

# Child Development: Permit Specialization Area - Children with Exceptional Needs - Certificate of Accomplishment 

Plan Code: 4060

The focus of this program of study is preparation for working with children with special needs in the context of the school, family and community.

## Program Student Learning Outcomes

- Classify service referral options specific to family needs.
- Explain various exceptionalities and conditions of children and identify interventions based on the developmental continuum.
- Design curriculum strategies based on children's individual needs in an inclusive and natural environment.


## Program Requirements

For graduation with a Certificate of Accomplishment - Permit Specialization Area, as defined on the State Child Development Matrix for a master teacher.

1. Complete one specialization area with a minimum grade of " C " in each course.
2. Complete 24 units in Early Childhood Education, including CDECE 45 Child \& Adolescent Development DS1 or CDECE 47 Human Development, and CDECE 48 Child, Family and Community D2, in addition to the six required in the area of specialization (for a total of 30 ECE credits).
3. Fifty percent ( $50 \%$ ) or more of the six units required for the specialization must be completed in residence (credit earned by exam, where applicable, may be included) at LBCC.
4. Complete 16 general education units.
5. Complete 2 units of Adult Supervision.

During your final semester of course work, complete and submit the online certificate/graduation application form, which is available through the Viking Student Portal. Deadlines for graduation applications are posted at https://www.lbcc.edu/pod/registration-dates (https:// www.lbcc.edu/pod/registration-dates/).

## Code Number Course Title Units

REQUIRED COURSES
Complete SIX (6) units from the following:
CDSED 5 Community Resources/Special Education
(3)

CDSED 67 Intro to Children with Special Needs (3)
CDSED $70 \quad$ Curriculum for Special Needs (3)
Total Units 6

Code Number
Course Title
Units REQUIRED COURSES

CDECE 19
Health, Safety and Nutrition DS7

# Child Development: Permit Specialization Area - Curriculum in Early Childhood Education Certificate of Accomplishment 

Plan Code: 4122

The focus of this program of study is on planning, implementing and evaluating curriculum activities for young children in early care and education environments.

## Program Student Learning Outcomes

- Demonstrate skills in analyzing resources and approaches to selecting and developing science and mathematic activities and curriculum for young children.
- Plan and demonstrate developmentally appropriate, culturally relevant, and respectful music and movement activities.
- Develop and organize a comprehensive art and creativity portfolio which includes developmentally appropriate activities to engage children with open-ended materials.


## Program Requirements

For graduation with a Certificate of Accomplishment - Permit Specialization Area, as defined on the State Child Development Matrix for a master teacher.

1. Complete one specialization area with a minimum grade of " C " in each course.
2. Complete 24 units in Early Childhood Education, including CDECE 45 Child \& Adolescent Development DS1 or CDECE 47 Human Development, and CDECE 48 Child, Family and Community D2, in addition to the six required in the area of specialization (for a total of 30 ECE credits).
3. Fifty percent $(50 \%)$ or more of the six units required for the specialization must be completed in residence (credit earned by exam, where applicable, may be included) at LBCC.
4. Complete 16 general education units.
5. Complete 2 units of Adult Supervision.

During your final semester of course work, complete and submit the online certificate/graduation application form, which is available through the Viking Student Portal. Deadlines for graduation applications are posted at https://www.lbcc.edu/pod/registration-dates (https:// www.lbcc.edu/pod/registration-dates/).
Code Number Course Title Units

## REQUIRED COURSES

Complete SIX (6) units from the following:

| CDECE 54 | Art \& Creative Dev. in Early Childhood D3 (3) |  |
| ---: | :--- | ---: |
| CDECE 55 | Music \& Movement in Early Childhood D3 (3) |  |
| CDECE 57 | Constructivist STEM Ed Early Childhood (3) |  |
| Total Units |  | $\mathbf{6}$ |

# Child Development: Permit Specialization Area - Early Literacy Certificate of Accomplishment 

Plan Code: 4066

The focus of this program of study is on developing the skills and knowledge to support young children's language acquisition and literacy skills.

## Program Student Learning Outcomes

- Integrate research-based strategies for language and literacy development into the development of appropriate activities and environments for both first and second language learning young children.
- Evaluate and integrate children's development, characteristics, and needs into literature selection and presentation of books and book related activities.


## Program Requirements

For graduation with a Certificate of Accomplishment - Permit Specialization Area, as defined on the State Child Development Matrix for a master teacher.

1. Complete one specialization area with a minimum grade of " C " in each course.
2. Complete 24 units in Early Childhood Education, including CDECE 45 Child \& Adolescent Development DS1 or CDECE 47 Human Development, and CDECE 48 Child, Family and Community D2, in addition to the six required in the area of specialization (for a total of 30 ECE credits).
3. Fifty percent $(50 \%)$ or more of the six units required for the specialization must be completed in residence (credit earned by exam, where applicable, may be included) at LBCC.
4. Complete 16 general education units.
5. Complete 2 units of Adult Supervision.

During your final semester of course work, complete and submit the online certificate/graduation application form, which is available through the Viking Student Portal. Deadlines for graduation applications are posted at https://www.lbcc.edu/pod/registration-dates (https:// www.lbcc.edu/pod/registration-dates/).

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| CDECE 34 | Children's Literature DS3 | 3 |
| CDECE 58 | Language \& Literacy in Early Childhood | $\mathbf{3}$ |
| Total Units |  | $\mathbf{6}$ |

## Child Development: Permit Specialization Area - Family Child Care - Certificate of Accomplishment

[^3]The focus of this program of study is preparation for setting up a developmentally appropriate, viable child care business from home.

## Program Student Learning Outcomes

- Design and diagram a developmentally appropriate learning centered room arrangement in family child care.
- Design and evaluate the environment and day to day policies and procedures for implementing a family childcare program.


## Program Requirements

For graduation with a Certificate of Accomplishment - Permit Specialization Area, as defined on the State Child Development Matrix for a master teacher:

1. Complete one specialization area with a minimum grade of " C " in each course.
2. Complete 24 units in Early Childhood Education, including CDECE 45 Child \& Adolescent Development DS1 or CDECE 47 Human Development, and CDECE 48 Child, Family and Community D2, in addition to the six required in the area of specialization (for a total of 30 ECE credits).
3. Fifty percent $(50 \%)$ or more of the six units required for the specialization must be completed in residence (credit earned by exam, where applicable, may be included) at LBCC.
4. Complete 16 general education units.
5. Complete 2 units of Adult Supervision.

During your final semester of course work, complete and submit the online certificate/graduation application form, which is available through the Viking Student Portal. Deadlines for graduation applications are posted at https://www.lbcc.edu/pod/registration-dates (https:// www.lbcc.edu/pod/registration-dates/).

Course Title
Units
Code Number
REQUIRED COURSES

| CDFDC 212A | Family Child Care Management A | 3 |
| :--- | :--- | :--- |
| CDFDC 212B | Family Child Care Management B | 3 |
| Total Units |  | $\mathbf{6}$ |

## Child Development: Permit Specialization Area - Infant/Toddler Certificate of Accomplishment

Plan Code: 4062

The focus of this program of study is on developing the skills and knowledge in preparation for working with young children ages $0-3$ in a group setting.

## Program Student Learning Outcomes

- Demonstrate knowledge of developmental concepts and theories pertaining to children birth to 36 months in the physical, cognitive, language, social, and emotional domains.
- Summarize the essential policies and practices of quality infant and toddler programs.


## Program Requirements

For graduation with a Certificate of Accomplishment - Permit Specialization Area, as defined on the State Child Development Matrix for a master teacher.

1. Complete one specialization area with a minimum grade of " C " in each course.
2. Complete 24 units in Early Childhood Education, including CDECE 45 Child \& Adolescent Development DS1 or CDECE 47 Human Development, and CDECE 48 Child, Family and Community D2, in addition to the six required in the area of specialization (for a total of 30 ECE credits).
3. Fifty percent $(50 \%)$ or more of the six units required for the specialization must be completed in residence (credit earned by exam, where applicable, may be included) at LBCC.
4. Complete 16 general education units.
5. Complete 2 units of Adult Supervision.

During your final semester of course work, complete and submit the online certificate/graduation application form, which is available through the Viking Student Portal. Deadlines for graduation applications are posted at https://www.lbcc.edu/pod/registration-dates (https:// www.lbcc.edu/pod/registration-dates/).

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CDECE 40 | Infant and Toddler Development D4 | 3 |
| CDECE 41 | Care and Education of Infants and Toddlers | 3 |

Total Units

## Family Child Care Management Certificate of Completion

## Plan Code: 6112

Students completing this certificate will develop the skills and competencies to set up and manage a small or large family child care business in their own home or residence. Licensing regulations, business practices and basics of developmentally appropriate child development practices will be explored.

## Program Student Learning Outcomes

- Design and evaluate the environment and day to day policies and procedures for implementing a family child care program.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CDFDC 612A | Family Child Care Management A | 54 |
| CDFDC 612B | Family Child Care Management B | $\mathbf{5 4}$ |
| Total Hours |  | $\mathbf{1 0 8}$ |

## Parent Educator - Certificate of Completion

## Plan Code: 6111

This program is designed for parents and professionals seeking a supportive and stimulating educational environment to gain researchbased knowledge and skills in positive parenting, relationship-driven guidance, and effective communication strategies to provide the foundation for a career in parenting best practices. Created as noncredit coursework for everyone from parents looking for support to professionals in the field, when taken in totality, this free, two-course program, leads to a non-credit pathway to a potential career as a Parent Educator in your community.

## Program Student Learning Outcomes

- Examine and apply principles of effective parenting and child development within families.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CDPE 601A | Intentional Parenting Practices | 54 |
| CDPE 601B | Behavior as Communication in Parenting | 54 |
| Total Hours |  | 108 |

## CHILD DEVELOPMENT: SPECIAL EDUCATION ASSISTANT

The Child Development and Educational Studies Department is committed to enhancing the quality of life for students, children and families throughout the life span. Embracing the diversity each student brings, the Department strives to empower individual learners through personal and professional growth. This department provides general and vocational education at the lower division level.

## Child Development: Special Education Assistant - Associate in Arts

Plan Code: 1310

Students prepare to work as a classroom assistant with children who have special needs. An A.A. Degree increases employment opportunities, salary potential and prepares students for transfer. Employment opportunities include: Teacher Assistant in School Districts, Residential Care Centers, Department of Rehabilitation, or Private Agencies

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Design, implement, and evaluate environments and activities that support optimum developmental play and learning outcomes in an inclusive environment for all children.
- Demonstrate responsive care and teaching practices for all children through the integration of assessment, theory, and practice.
- Apply effective guidance and interaction strategies to support all children's social learning, peer relations, and self-confidence.
- Incorporate ethical and professional standards engaging in collaborative learning and reflective practices.


## Program Requirements

This degree requires the completion of General Education coursework plus the following

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ASL 1 | American Sign Language 1 | 4 |
| CDECE 47 | Human Development | 3 |
| CDECE 59 | Guiding Young Children DS3 | 3 |
| CDSED 5 | Community Resources/Special Education | 3 |
| CDSED 67 | Intro to Children with Special Needs | 3 |
| CDSED 69 | Special Education Practicum | 3 |
| CDSED 70 | Curriculum for Special Needs | 3 |
| Subtotal Units |  | $\mathbf{2 2}$ |

IN ADDITION, complete SIX (6) units from the following:

| ASL 2 | American Sign Language 2 (4) |
| :--- | :--- |
| ASL 3 | American Sign Language 3 (4) |
| ASL 4 | American Sign Language 4 (4) |


| CDECE 19 | Health, Safety and Nutrition DS7 (3) |  |
| :--- | :--- | ---: |
| CDECE 61 | Teaching in a Diverse Society D3 (3) | $\mathbf{6}$ |
| Subtotal Units | 28 |  |
| Required Subtotal | $19-39$ |  |
| Complete one of the following: |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) |  |  |

Minimum Degree Total

RECOMMENDED: A valid Red Cross First Aid and CPR Certificate.

1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Child Development: Special Education Assistant - Certificate of Achievement

Plan: Code 3310
Students prepare to work as an assistant with children who have special needs. Employment opportunities include: Teacher Assistant in School Districts, Residential Care Centers, Department of Rehabilitation, or Private Agencies.

## Program Student Learning Outcomes

- Explain various exceptionalities and conditions of children and identify interventions based on the developmental continuum.
- Identify ways to collaborate with families and community members in supporting inclusion of children with special needs.
- Design, implement, and evaluate curriculum activities that are based on research, observation, and assessment of children with special needs.


## Program Requirements

## Code Number Course Title Units

 REQUIRED COURSES| ASL 1 | American Sign Language 1 | 4 |
| :--- | :--- | ---: |
| CDECE 47 | Human Development | 3 |
| CDECE 59 | Guiding Young Children DS3 | 3 |
| CDSED 5 | Community Resources/Special Education | 3 |
| CDSED 67 | Intro to Children with Special Needs | 3 |
| CDSED 69 | Special Education Practicum | 3 |
| CDSED 70 | Curriculum for Special Needs | 3 |
| Subtotal Units |  | 22 |
| IN ADDITION, complete SIX (6) units from the following: |  |  |
| ASL 2 | American Sign Language 2 (4) |  |
| ASL 3 | American Sign Language 3 (4) |  |
| ASL 4 | American Sign Language 4 (4) |  |
| CDECE 19 | Health, Safety and Nutrition DS7 (3) |  |

CDECE 61 Teaching in a Diverse Society D3 (3)
Subtotal Units 6
Total Units 28

RECOMMENDED: A valid Red Cross First Aid and CPR Certificate.

## COMMUNICATION STUDIES

The Communication Studies Department firmly believes that experiential learning is the most effective means of achieving the lessons of human communication and is dedicated to ensuring that students enter the world better prepared to meet future communication challenges and opportunities.

## Communication Studies 2.0 Associate in Arts Transfer Degree

Plan Code: 5016B/C

Communication Studies is a diverse field of academic and experiential study that explores how messages are created and shared in an increasingly complex and mediated global environment. Effective communication skills positively impact students' self-confidence enabling them to advocate for themselves and others, contribute to their communities, strengthen their relationships, and thrive in their chosen careers. The Associate of Arts in Communication Studies for Transfer Degree (ADT) is a broad-based discipline that focuses on a theoretical and practical understanding of the communication process. Emphasis is placed on the development of students' understanding of self and others, speaking, writing, and the analytical thinking skills necessary in constructing and conveying multiple modes of communication across a spectrum of contexts and cultures. Students who complete this degree will receive priority admission with junior status into the CSU system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Examine theories fundamental to the Communication Studies discipline.
- Demonstrate critical thinking.
- Communicate competently in various settings.
- Construct and deliver effective oral presentations.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| COMM 10/10H | Elements of Public Speaking | 3 |
| COMM 20 | Elements of Interpersonal Communication | 3 |
| Subtotal Units |  | 6 |
| IN ADDITION, select three courses from the following: |  |  |
| COMM 25 | Elements of Intercultural Communication |  |
|  | (3) |  |
| COMM 30 | Elements of Group Communication (3) |  |
| COMM 31 | Elements of Leadership Communication (3) |  |
| COMM 40 | Elements of Communication Theory (3) |  |
| COMM 45 | Elements of Persuasion (3) |  |
| COMM 50 | Elements of Oral Interpretation (3) |  |
| COMM 60 | Elements of Argumentation and Debate (3) |  |
| JOURN 10 | Intro to Global Media Communications (3) |  |


| Subtotal Units | 9 |
| :---: | :---: |
| IN ADDITION, select one course from the following: |  |
| ANTHR 2/2H | Cultural Anthropology (3) |
| PSYCH 1/1H | Introduction to Psychology (3) |
| SOCIO 1/1H | Introduction to Sociology (3) |
| ENGL 2 <br> or ENGL 3 <br> or ENGL 3H | Introduction to Literature/Composition (4) Argumentative and Critical Writing (4) Honors Argumentative \& Critical Writing (4) |
| JOURN 20 | Beginning Newswriting and Reporting (4) |
| Subtotal Units | 3-4 |
| Required Subtotal | 18-19 |
| Complete one of the following: ${ }^{1}$ |  |
| PLAN B |  |
| PLAN C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |
| To earn an associate semester units that either the IGETC pat units. Students mus coursework to receiv in the major must be associate degree for local graduation req | degree for transfer, a student must complete 60 re eligible for transfer to a CSU that consist of ern or CSU GE breadth and a major of at least 18 have a minimum GPA of 2.0 in all CSU-transferable an associate degree for transfer and all courses completed with a C or better. Students earning an transfer will not be required to complete any other irements. |

## Communication Studies - Associate in Arts

Plan Code: 1240

Students are provided with a general education in the principles, concepts and methodologies of interpersonal/intercultural/group/ leadership communication and informative/persuasive/argumentative/ interpretive speaking.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Examine theories fundamental to the Communication Studies discipline.
- Engage in critical thinking.
- Communicate competently in various settings.
- Construct and deliver effective oral presentations.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| COMM 10/10H | Elements of Public Speaking | 3 |
| COMM 20 | Elements of Interpersonal Communication | 3 |
| COMM 25 | Elements of Intercultural Communication | 3 |
| COMM 30 | Elements of Group Communication | 3 |
| COMM 60 | Elements of Argumentation and Debate | 3 |
| Subtotal Units |  | 15 |
| IN ADDITION, complete THREE (3) units from the following: |  |  |
| COMM 31 | Elements of Leadership Communication (3) |  |
| COMM 40 | Elements of Communication Theory (3) |  |
| COMM 45 | Elements of Persuasion (3) |  |
| COMM 50 | Elements of Oral Interpretation (3) |  |
| Subtotal Units |  | 3 |
| Required Subtotal |  | 18 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Total 60 |  |  |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ANTHR 2 | Cultural Anthropology | 3 |
| MGMT 49 | Introduction to Management | 3 |
| MGMT 50 | Human Resource Management | 3 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| PSYCH 11 | Social Psychology | 3 |
| SOCIO 1/1H | Introduction to Sociology | 3 |
| R_TV 40 | On-Camera Performance | 3 |
| TART 1 | Acting 1-Introduction to Acting | 3.5 |

## COMPUTER AIDED DESIGN MECHANICAL

The Computer Aided Design - Mechanical program creates an educational environment where students can achieve their individual goals by providing the knowledge and skills to enter the design field of their choice by using the latest technologies and industry trends.

## Computer Aided Design - Mechanical - Associate in Science

Plan Code: 2913
In this program, students learn entry-level job skills in mechanical drafting and design. The program will prepare students for a mechanical design-related career, and appropriate course selection will facilitate transfer to a professional degree program at a four-year university.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Construct engineering detail and working drawings incorporating tolerances and fits for manufacturing.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| CAD 2 | Intro to Computer Aided Design AutoCAD | 3 |
| CAD 3 | Intro to Computer Aided Design CATIA | 3 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| CAD 5 | Intro to CAD/CAM MasterCAM | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| Required Subtotal |  | 20 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Total |  | 60 |
| ${ }^{1}$ Units for the major IGETC; see counse <br> ${ }^{2}$ Elective units from degree-applicable | may be double-counted for LBCC GE, CSU G or for limitations. course(s) numbered 1-599, if needed, to rea nits. |  |

## Computer Aided Design - Mechanical

- Certificate of Achievement

This program will prepare students for an entry-level position as a Computer Aided Design (CAD) technician and or mechanical drafter/ technician trainee in a variety of professional design settings and will serve as a foundation for specialization.

## Program Student Learning Outcomes

- Construct engineering detail and working drawings incorporating tolerances and fits for manufacturing.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| CAD 2 | Intro to Computer Aided Design AutoCAD | 3 |
| CAD 3 | Intro to Computer Aided Design CATIA | 3 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| CAD 5 | Intro to CAD/CAM MasterCAM | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| Total Units |  | $\mathbf{2 0}$ |

## COMPUTER SCIENCE

Students receive the foundation to succeed in the next step in their education path with the recommended Association of Computer Machines (ACM) foundation knowledge in computer science principles of program design and analysis, mathematical maturity, and a good physics foundation.

## Computer Science - Associate in Science

Plan Code: 2119
This degree prepares a student for an entry-level job in the computer software and hardware related fields by teaching them to apply the foundational skills and theory of Computer Science to a variety of problem domains, as well as a broad-based general education to prepare the students for global citizenship. This degree may help students succeed after transferring to a CSU or UC School Computer Science major program. Students wishing for a bachelor's degree (transfer program) should meet with a counselor to discuss the transferability of courses. Each CS course meets the California C-ID content standards for Computer Science.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate a knowledge of common algorithms, their performance, and what applications to use them for
- Create computer programs with object-oriented design principles, and demonstrate a solid understanding of the practice of programming.
- Articulate the basic structures of a processor and their relation to each other and performance, and demonstrate an understanding of assembly language.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CS 11 | Introduction to Computer Science- C++ | 3 |
| or CS 21 | Introduction to Computer Science-Java |  |
| or CS 31 | Introduction to Computer Science-Python |  |
| Subtotal Units |  | 3 |
| IN ADDITION, complete the following: |  |  |
| CS 22 | Data Structures and Algorithms | 3 |
| CS 51 | Introduction to Computer Architecture | 3 |
| CS 61 | Discrete Structures | 3 |
| MATH 60/60H | First Calculus Course | 5 |
| MATH 70/70H | Second Calculus Course | 5 |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics | 5.5 |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M | 4.5 |
| Subtotal Units |  | 29 |
| Required Subtotal |  | 32 |
| Complete one of the following: ${ }^{1}$ | $19-39$ |  |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Computer Science - Certificate of Achievement

Plan Code: 3119

This certificate prepares a student for an entry-level job in the computer software and hardware related fields by teaching them to apply the foundational skills and theory of Computer Science to various domains. This series of courses is designed to place emphasis on problem solving with a balance of skill acquisition and fundamental theory. Each CS course meets the California C-ID content standards for Computer Science.

## Program Student Learning Outcomes

- Demonstrate a knowledge of common algorithms, their performance, and what applications to use them for.
- Create computer programs with object-oriented design principles and demonstrate a solid understanding of the practice of programming.
- Articulate the basic structures of a processor and their relation to each other and performance and demonstrate an understanding of assembly language.


## Program Requirements

## Code Number Course Title <br> Units

REQUIRED COURSES

| CS 11 | Introduction to Computer Science- C++ | 3 |
| :---: | :--- | :--- |
| or CS 21 | Introduction to Computer Science-Java |  |
| or CS 31 | Introduction to Computer Science-Python |  |

Subtotal Units 3
IN ADDITION, complete the following:
CS $22 \quad$ Data Structures and Algorithms
CS 51 Introduction to Computer Architecture 3

CS 61 Discrete Structures 3
MATH 60/60H First Calculus Course 5
MATH 70/70H Second Calculus Course 5

PHYS 3A Physics for Sci. \& Eng. - Mechanics 5.5
PHYS 3B Physics for Sci. \& Eng. - E \& M 4.5
Subtotal Units 29

Total Units 32

## Android App Developer - Certificate of Accomplishment

Plan Code: 4119
Students will learn programming skills in Java or C++, Android App
Development, and Database hands-on concepts.

## Program Student Learning Outcomes

- Demonstrate the ability to create, design, and implement java-based Android applications (apps) using the Android API.
- Show the skills to create, manage, and use databases and SQL for Android applications (apps).
- Be able to complete the full development process for Android Applications (apps).


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| CS 11 | Introduction to Computer Science- C++ | 3 |
| or CS 21 | Introduction to Computer Science-Java |  |
| or CS 31 | Introduction to Computer Science-Python |  |
| COSP 230 | Android App Development in Java | 3 |
| Total Units |  | $\mathbf{6}$ |

# COMPUTER SECURITY AND NETWORKING 

The Computer Security and Networking curriculum skillfully trains students by providing strategically designed courses to meet their academia, transferable, and career needs.

## Cloud Computing - Associate in Science

Plan Code: 2132
This program provides the student with the industry skills to understand, build, and maintain cloud applications. These skills include the technical principles of the hardware and software requirements to run systems in the cloud, including storage, database management, and software systems, while maintaining secure access.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Create Infrastructure as a Service (laaS) solutions by provisioning computing instances, establishing virtual private networks, and managing databases, and storage within a secure online environment.
- Analyze performance metrics of cloud architecture to respond dynamically to information and computing technology workloads and optimize service costs.
- Create Infrastructure as a Service using automated code scripts (Infrastructure As Code).


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| COSN 10 | Networking Fundamentals | 4 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 230 | Microsoft Windows Server | 3 |
| COSN 250 | Cloud Computing in Amazon Web Services | 3 |
| COSN 251 | Database Essentials in Amazon Web Svcs | 3 |
| COSN 252 | App Development in Amazon Web Services | 3 |
| COSN 253 | Security in Amazon Web Services | 3 |
| COSS 71 | Network Security Fundamentals | 3 |
| Subtotal Units |  | $\mathbf{2 6}$ |
| IN ADDITION, complete ONE (1) course from the following: |  |  |
| CS 11 | Introduction to Computer Science- C++ (3) |  |
| CS 21 | Introduction to Computer Science-Java (3) |  |
| CS 31 | Introduction to Computer Science-Python |  |
| (3) | $\mathbf{3}$ |  |
| Subtotal Units |  | $\mathbf{2 9}$ |
| Required Subtotal |  |  |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |

Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Cloud Computing - Certificate of Achievement

Plan Code: 3132

This program provides the student with the industry skills to understand, build, and maintain cloud applications. These skills include the technical principles of the hardware and software requirements to run systems in the cloud, including storage, database management, and software systems, while maintaining secure access.

## Program Student Learning Outcomes

- Create Infrastructure as a Service (laaS) solutions by provisioning computing instances, establishing virtual private networks, and managing databases, and storage within a secure online environment.
- Analyze performance metrics of cloud architecture to respond dynamically to information and computing technology workloads and optimize service costs.
- Create Infrastructure as a Service using automated code scripts (Infrastructure As Code).


## Program Requirements

## Code Number Course Title

REQUIRED COURSES
COSN $10 \quad$ Networking Fundamentals 3

COSN 205 UNIX/LINUX Fundamentals 4
COSN 230 Microsoft Windows Server 4
COSN $250 \quad$ Cloud Computing in Amazon Web Services 3
COSN 251 Database Essentials in Amazon Web Svcs 3
COSN 252 App Development in Amazon Web Services 3
COSN 253 Security in Amazon Web Services 3
COSS 71 Network Security Fundamentals 3
Subtotal Units 26
IN ADDITION, complete ONE (1) course from the following:

| CS 11 | Introduction to Computer Science- C++ (3) |
| :--- | :--- |
| CS 21 | Introduction to Computer Science-Java (3) |
| CS 31 | Introduction to Computer Science-Python |
|  | (3) |

Subtotal Units
3
Total Units 29

## Computer Security and Networking Associate in Science

Plan Code: 2125

The degree is designed to provide students with a professional, current, and strategically designed set of classes to secure entry level employment in IT, networking, wireless, and security administration or to benefit them in the transfer to related four-year degree program.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Install, configure, manage and troubleshoot a small office or home office network (wired or wireless).
- Secure wired and wireless networks.
- Install, configure and manage client and server operating systems.
- Harden servers against intrusion.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 225 | Microsoft Windows Client | 3 |
| COSN 299 | Security and Networking Capstone | 4 |
| COSS 71 | Network Security Fundamentals | 3 |
| Subtotal Units |  | 28 |


| IN ADDITION, complete ONE (1) course from the following: |  |
| :--- | :--- |
| BCOM 222 | Job Search Skills (3) |
| COSA 210 | Intro to Project Management for IT (3) |
| COSE 271WE | Work Experience-Comp \& Office Studies <br> $(1-4)$ |
| COSN 200 | Wireless and Mobile Devices (3) |
| COSN 210 | LINUX Server Administration (4) |
| COSN 215 | LINUX Networking and Security (4) |
| COSN 230 | Microsoft Windows Server (4) |
| COSN 250 | Cloud Computing in Amazon Web Services <br> $(3)$ |
| COSP 8 | Visual Basic Programming (4) |
| COSS 272 | Computer Forensics and Investigation (3) |
| COSS 273 | Ethical Hacking and Countermeasures (4) |
| CS 11 | Introduction to Computer Science- C++ (3) |
| CS 21 | Introduction to Computer Science-Java (3) |


| Subtotal Units | $\mathbf{1 - 4}$ |
| :--- | ---: |
| Required Subtotal | $\mathbf{2 9 - 3 2}$ |
| Complete one of the following: $^{1}$ | $\mathbf{1 9 - 3 9}$ |

Plan A

Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Computer Security and Networking Certificate of Achievement

Plan Code: 3125

This program provides learners with the necessary skills to enter the Computer Networking and Security field.

## Program Student Learning Outcomes

- Install, configure, manage, and troubleshoot a small office/home office network (wired or wireless).
- Secure wired and wireless networks.
- Install, configure, and manage client and server operating systems.
- Harden servers against intrusion.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 225 | Microsoft Windows Client | 3 |
| COSN 299 | Security and Networking Capstone | 4 |
| COSS 71 | Network Security Fundamentals | 3 |
| Subtotal Units |  | $\mathbf{2 8}$ |

IN ADDITION, complete ONE (1) course from the following:

| BCOM 222 | Job Search Skills (3) |
| :--- | :--- |
| COSA 210 | Intro to Project Management for IT (3) |
| COSE 271WE | Work Experience-Comp \& Office Studies <br> $(1-4)$ |
| COSN 200 | Wireless and Mobile Devices (3) |
| COSN 210 | LINUX Server Administration (4) |
| COSN 215 | LINUX Networking and Security (4) |
| COSN 230 | Microsoft Windows Server (4) |
| COSN 250 | Cloud Computing in Amazon Web Services <br> $(3)$ |
| COSP 8 | Visual Basic Programming (4) |
| COSS 272 | Computer Forensics and Investigation (3) |
| COSS 273 | Ethical Hacking and Countermeasures (4) |
| CS 11 | Introduction to Computer Science- C++ (3) |
| CS 21 | Introduction to Computer Science-Java (3) |

# Subtotal Units 1-4 <br> Total Units 29-32 <br> Computer Networking Technician Certificate of Accomplishment 

Plan Code: 4125
Students learn the in-demand skills for running wired and wireless networks and prepare for a career in IT.

## Program Student Learning Outcomes

- Distinguish the differences between local area networks and wide area networks from a hardware and protocol point of view.
- Compare and contrast various wired and wireless networking technologies.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| Total Units |  | 7 |

## Information Technology Cybersecurity - Associate in Science

## Plan Code: 2105

This program combines systems administration fundamentals with the requisite security concepts and effective practices required to implement, administer, and harden operating systems.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate the ability to install, configure, manage and troubleshoot a small office or home office network (wired or wireless).
- Demonstrate the ability to secure wired and wireless networks.
- Demonstrate the ability to install, configure and manage client and server operating systems.
- Demonstrate the ability to harden servers against intrusion.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 206 | Scripting Fundamentals | 3 |
| COSN 253 | Security in Amazon Web Services | 3 |
| COSS 71 | Network Security Fundamentals | 3 |


| COSS 272 | Computer Forensics and Investigation | 3 |
| :---: | :---: | :---: |
| COSS 273 | Ethical Hacking and Countermeasures | 4 |
| Required Subtotal |  | 27 |
| Complete one of the | ollowing ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Tot |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units |  |  |

## Information Technology Cybersecurity - Certificate of Achievement

Plan Code: 3105
This program combines systems administration fundamentals with the requisite security concepts and effective practices required to implement, administer, and harden operating systems.

## Program Student Learning Outcomes

- Demonstrate the ability to install, configure, manage and troubleshoot a small office or home office network (wired or wireless).
- Demonstrate the ability to secure wired and wireless networks.
- Demonstrate the ability to install, configure and manage client and server operating systems.
- Demonstrate the ability to harden servers against intrusion.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 206 | Scripting Fundamentals | 3 |
| COSN 253 | Security in Amazon Web Services | 3 |
| COSS 71 | Network Security Fundamentals | 3 |
| COSS 272 | Computer Forensics and Investigation | 3 |
| COSS 273 | Ethical Hacking and Countermeasures | $\mathbf{4}$ |
| Total Units |  | $\mathbf{2 7}$ |

## Computer Hardware Technician Certificate of Achievement

Plan Code: 3133
This program is designed to provide students with the fundamentals of computer hardware, operating systems, computer networking infrastructures, and the certification process. This Certificate will prepare
students to pursue entry-level employment in computer technical support or network administration positions.

## Program Student Learning Outcomes

- Analyze common software and hardware problems on personal computers.
- Distinguish and explain the introductory core computer and IT concepts and technology that are used personally, in society, in government, and in business.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 5 | Computer Hardware Fundamentals | 4 |

Total Units 8

## Cyber Security - Certificate of Achievement

Plan Code: 3106
Students will learn the skills to investigate cyber-attacks or stop them before they even begin.

## Program Student Learning Outcomes

- Demonstrate the ability to install, configure, manage and troubleshoot a small office or home office network (wired or wireless).
- Demonstrate the ability to secure wired and wireless networks.
- Demonstrate the ability to install, configure and manage client and server operating systems.
- Demonstrate the ability to harden servers against intrusion.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| COSS 71 | Network Security Fundamentals | 3 |
| COSS 272 | Computer Forensics and Investigation | 3 |
| COSS 273 | Ethical Hacking and Countermeasures | $\mathbf{4}$ |
| Total Units |  | $\mathbf{1 7}$ |

## Microsoft Windows Networking <br> Technician - Certificate of Achievement

Plan Code: 3137
This certificate verifies solid foundational skills managing, configuring, and securing a Windows network environment and prepares students for entry level work as a Microsoft administrator.

## Program Student Learning Outcomes

- Demonstrate the ability to set up and construct a secure peer-to-peer and client server network.
- Recognize and comprehend operating system configurations.
- Recognize and comprehend server roles.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSN 10 | Networking Fundamentals | 3 |
| COSN 225 | Microsoft Windows Client | 3 |
| COSN 230 | Microsoft Windows Server | 4 |
| Total Units |  | $\mathbf{1 4}$ |

## UNIX Network Administrator Certificate of Achievement

Plan Code: 3139
This certificate prepares students with no prior experience for an entrylevel job installing, configuring, and securing a UNIX/LINUX network server.

## Program Student Learning Outcomes

- Demonstrate the ability to install, configure, and secure a Linux server.
- Demonstrate the ability to install, configure and secure a Linux network and services.
- Demonstrate the ability to describe and document a Linux network in relation to the OSI model.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSN 10 | Networking Fundamentals | 3 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 210 | LINUX Server Administration | 4 |
| COSN 215 | LINUX Networking and Security | $\mathbf{4}$ |
| Total Units |  | $\mathbf{1 5}$ |

## COMPUTER TECHNOLOGY

This program prepares students for careers in a variety of computer technology related fields and enhances skills for those who are currently employed in that area.

## Computer Technology - Associate in Science

Plan Code: 2126
This degree is designed to prepare students for employment in a variety of computer-related fields. Students wishing a bachelor's degree (transfer program) should meet with a counselor to discuss how this program fully articulates with Cal State Dominquez Hills' Computer Technology Program

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Prepare students for transfer to baccalaureate-granting institutions.
- Provide educational and career opportunities in the computer technology field.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

## Code Number <br> Course Title <br> Units

REQUIRED COURSES

| CS 21 | Introduction to Computer Science-Java | 3 |
| :--- | :--- | ---: |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSP 7 | Programming Concepts and Methodologies | 4 |
| COSP 8 | Visual Basic Programming | 4 |
| COSW 20 | Front End Website Development | 4 |
| MATH 50 | Precalculus Math | 5 |
| STAT 1/1H | Elementary Statistics | 4 |
| Required Subtotal |  | 32 |
| Complete one of the following: | $19-39$ |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) |  |  |

Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Computer Technology - Certificate of Achievement 

Plan Code: 3126

This program is designed to provide students with a broad base of software development skills to prepare them for software engineering and web-development careers. Students gain practical skills in Java and Visual Basic programming and the development of dynamic web services. Students will also study software design, computer usage and computer hardware to ensure broad-based competencies.

## Program Student Learning Outcomes

- Provide educational and career opportunities in the computer technology field.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CS 21 | Introduction to Computer Science-Java | 3 |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 5 | Computer Hardware Fundamentals | 4 |
| COSP 7 | Programming Concepts and Methodologies | 4 |
| COSP 8 | Visual Basic Programming | 4 |
| COSW 20 | Front End Website Development | 4 |
| MATH 50 | Precalculus Math | 5 |
| STAT 1/1H | Elementary Statistics | 4 |
| Total Units |  | 32 |

## Cryptocurrency Fundamentals Certificate of Accomplishment

Plan Code: 4133
Students will learn the concepts and technologies behind cryptocurrency and blockchain and the software applications and platforms commonly used to research, analyze, invest, and manage Cryptocurrency assets.

## Program Student Learning Outcomes

- Explain cryptocurrencies and how they function on a technical and financial level.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| COSA 240 | Introduction to Cryptocurrency | 1 |
| :--- | :--- | :--- |
| COSA 241 | Cryptocurrency Financial Software | 1 |
| Total Units |  | $\mathbf{2}$ |

## Cryptocurrency Fundamentals Certificate of Completion

[^4]Students will learn the concepts and technologies behind cryptocurrency and blockchain and the software applications and platforms commonly used to research, analyze, invest, and manage Cryptocurrency assets.

## Program Student Learning Outcomes

- Explain cryptocurrencies and how they function on a technical and financial level.


## Program Requirements

Code Number Course Title Hours REQUIRED COURSES

| COSA 640 | Introduction to Cryptocurrency | 18 |
| :--- | :--- | :--- |
| COSA 641 | Cryptocurrency Financial Software | 18 |
| Total Hours |  | 36 |

## Computer Information Competency Certificate of Completion

Plan Code: 6002

Students will develop proper typing technique and build speed and accuracy. Students will also learn the basics of hardware, Internet knowledge, word processing, spreadsheet, digital data presentations, and communications applications.

## Program Student Learning Outcomes

- Comprehension and application of a broad range of computer and Internet concepts and effectively create word processing documents, workbooks, and digital presentations.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSA 601 | Computer Information Competency | 36 |
| COSK 633 | Computer Keyboarding Skills | 36 |
| Total Hours |  | $\mathbf{7 2}$ |

## CONSTRUCTION TECHNOLOGY

## Construction Technology - Associate in Science

## Plan Code: 2948

This program is designed to give students a broad knowledge of the construction industry. Coursework includes job safety, construction skills, work ethics and hands-on laboratory courses to provide trade-related skills.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Interpret residential building codes.
- Utilize safe techniques when using hand and power tools.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:
Code Number Course Title Units

| CONST 15 | Blueprint Reading for Construction Trade | 3 |
| :---: | :---: | :---: |
| CONST 70 | Cost Estimating | 3 |
| CONST 200 | Construction Apprenticeship Readiness | 7 |
| CONST 205 | Forklift Fundamentals | 0.5 |
| CONST 230 | Carpentry Fundamentals | 3 |
| CONST 235 | Residential Roof Framing | 3 |
| CONST 240 | Finish Carpentry | 3 |
| CONST 245 | Residential Stairs | 3 |
| CONST 275 | Contracting Laws and Management | 3 |
| COSA 1 | Computer Information Competency | 1 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| Required Subtotal |  | 31.5 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed | to reach 60 degree-applicable units) ${ }^{2}$ |  |

Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Construction Technology - Certificate of Achievement

## Plan Code: 3948

This program is designed to give students a broad knowledge of the construction industry. Coursework includes job safety, construction skills,
work ethics and hands-on laboratory courses to provide trade-related skills.

## Program Student Learning Outcomes

- Interpret residential building codes.
- Utilize safe techniques when using hand and power tools


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CONST 15 | Blueprint Reading for Construction Trade | 3 |
| CONST 70 | Cost Estimating | 3 |
| CONST 200 | Construction Apprenticeship Readiness | 7 |
| CONST 205 | Forklift Fundamentals | 0.5 |
| CONST 230 | Carpentry Fundamentals | 3 |
| CONST 235 | Residential Roof Framing | 3 |
| CONST 240 | Finish Carpentry | 3 |
| CONST 245 | Residential Stairs | 3 |
| CONST 275 | Contracting Laws and Management | 3 |
| COSA 1 | Computer Information Competency | 1 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| Total Units |  | $\mathbf{3 1 . 5}$ |

## Construction Apprenticeship Readiness - Certificate of Achievement

Plan Code: 3953
This program provides career opportunities in various aspects of construction, a variety of sub-crafts, and contracting. By completing the certificate requirements, students acquire proficiency in basic construction techniques and in analyzing, evaluating, and providing solutions for a variety of job site situations. Students will be able to interpret blueprints, estimate materials, layout, and construct a basic residential structure in accordance with Uniform Building Code requirements. Competencies are assessed regularly by student performance in the construction technology laboratory. will provide essential skills that will enable students to gain entry-level employment in the field of Home Remodeling and Repair in the construction industry. By completing the certificate requirements, students acquire proficiency in basic construction techniques required to provide solutions for a variety of job site situations. The program provides career opportunities in various aspects of construction, including carpentry, plumbing, electrical, HVAC, concrete masonry and other construction crafts.

## Program Student Learning Outcomes

- Demonstrate the technical and organization employability skills required by the construction industry.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| BCOM 262 | Soft Skills for the Workplace | 1 |
| :--- | :--- | :--- |
| CONST 200 | Construction Apprenticeship Readiness | 7 |



Plan Code: 6034
This program provides instruction in tools and material, CPR and First Aid, OSHA 10, blueprint reading, basic math for construction, heritage of American worker, diversity awareness and sexual harassment, job search skills, construction laboratory, physical agility, Microsoft Office, operating systems, and working online.

## Program Student Learning Outcomes

- Demonstrate the technical and organization employability skills required by the construction industry.
- Demonstrate knowledge of safety techniques when operating construction tools and equipment.
- Differentiate and evaluate the uses and standards of computer hardware and software.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CONST 600 | Construction Apprenticeship Readiness | 180 |
| COSA 601 | Computer Information Competency | $\mathbf{3 6}$ |
| Total Hours |  | $\mathbf{2 1 6}$ |

## Home Remodeling - Certificate of Achievement

Plan Code: 3949
This program will provide essential skills that will enable students to gain entry-level employment in the field of Home Remodeling and Repair in the construction industry. By completing the certificate requirements, students acquire proficiency in basic construction techniques required to provide solutions for a variety of job site situations. The program provides career opportunities in various aspects of construction, including carpentry, plumbing, electrical, HVAC, concrete masonry and other construction crafts.

## Program Student Learning Outcomes

- Interpret residential building codes.
- Utilize safe techniques when using hand and power tools.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CONST 15 | Blueprint Reading for Construction Trade | 3 |
| CONST 70 | Cost Estimating | 3 |
| CONST 205 | Forklift Fundamentals | 0.5 |
| CONST 250 | Home Remodeling Fundamentals | 2 |
| CONST 255 | Home Remodeling-Basic Carpentry | 2 |
| CONST 260 | Home Remodeling-Interior Construction | 2 |


| CONST 265 | Home Remodeling-Exterior Construction | 2 |
| :--- | :--- | ---: |
| CONST 275 | Contracting Laws and Management | 3 |
| COSA 1 | Computer Information Competency | $\mathbf{1}$ |
| Total Units |  | $\mathbf{1 8 . 5}$ |

## Home Remodeling - Certificate of Completion

Plan Code: 6032
This program will certify that students have received the basic skills needed in tiling, painting, drywall as well as job readiness skills needed to be successful in this chosen field. Further, this certificate will verify that students have demonstrated skill achievements in safety, waterproofing, tiling floors, counter tops, and walls in ceramic, porcelain, marble, and granite and mortar floating, all necessary for pursuing entry-level positions within the construction field. Students will need no prerequisite skills prior to enrolling in these series of classes and they will, with completion of courses, receive certification in OSHA.

## Program Student Learning Outcomes

- Demonstrate the technical and organizational employability skills required by the construction industry.
- Develop and complete a tiling project that adheres to industry standards utilizing proper tools and techniques.
- Apply, understand and evaluate the techniques, tools and materials used for cutting, hanging, taping and texturing drywall techniques.
- Develop and prepare surfaces for the application of paint to specified industry requirements.

| Program Requirements |  |  |
| :--- | :--- | :---: |
| Code Number | Course Title | Hours |
| REQUIRED COURSES |  |  |
| CONST 606 | Workplace Competency Skills | 18 |
| CONST 616 | Home Remodeling-Drywall | 27 |
| CONST 617 | Home Remodeling-Tiling | 27 |
| CONST 618 | Home Remodeling-Painting | 27 |
| Total Hours |  | 99 |

## Forklift Fundamentals - Certificate of Completion

Plan Code: 6031
This program will provide basic safety and operation of the forklift, including lifting principles, load rating, stability, and operation techniques. Students will gain experience using: Class II (Narrow Aisle Electric Lift Trucks), Class III (Electric Motor Hand Truck - Pellet Jack), and Class IV (Internal Combustion Engine Truck - Counterbalance Lift Truck). Upon successful completion, students will receive a Certificate of Training and a Wallet Card. Job opportunities for Forklift Operators include: warehouse shipping and receiving, construction sites, ports and docks, retail stores and all other business's that require material handling.

## Program Student Learning Outcomes

- Demonstrate the ability to operate a forklift so that the overall operation of this equipment is within the Occupational Safety Health Administration (OSHA) standards.
- Identify and develop tools needed to obtain a job in construction (resume, cover letter, application).


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| CONST 605 | Forklift Fundamentals | 18 |
| CONST 606 | Workplace Competency Skills | 18 |
| Total Hours |  | $\mathbf{3 6}$ |

## COUNSELING AND STUDENT DEVELOPMENT

## Adult Learning Skills - Certificate of Competency

Plan Code: 6591
This program provides courses necessary to enhance employability skills of students with suspected learning disabilities. It offers an opportunity for undiagnosed students to identify areas of learning deficits and develop a plan for success in their college and career pathway.

## Program Student Learning Outcomes

- Appraise the strengths and weaknesses of various learning styles and strategies.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| EDEV 604 | Adult Learning Assessment | 9 |
| EDEV 649A | College Study Techniques | $\mathbf{1 8}$ |
| Total Hours |  | $\mathbf{2 7}$ |

## Social Competency Skills Certificate of Completion

Plan Code: 6191
This program provides courses necessary to enhance employability and independent living skills of students with intellectual, developmental and learning disabilities. Students will develop social competencies that contribute to the foundation of basic skills needed for positive academic, work and life outcomes.

## Program Student Learning Outcomes

- Demonstrate understanding of social competency skills, effective communication, and job interview skills.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| EDEV 602 | Social Skills Development | 36 |
| EDEV 603 | Receptive/Expressive Language Dev. | 36 |
| Total Hours |  | $\mathbf{7 2}$ |

## Transitioning to Higher Learning Certificate of Completion

Plan Code: 6192

This program is designed to give students with intellectual, developmental, and learning disabilities the necessary knowledge and skills to be successful in their college career and future employment.

Students will become familiar with college rules and guidelines as well as demonstrate an ability to address and meet their needs. Students will be able to identify the difference between high school and college roles, responsibilities, and academic rigor. These courses will furthermore enhance students' ability to self-advocate for themselves to improve academic, work, and life outcomes. These courses will equip adults with disabilities with the support needed to complete a certificate or degree program and enter the workforce.

## Program Student Learning Outcomes

- Identify and analyze the roles, responsibilities, and academic expectations needed to transition to college life and expectations.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| EDEV 610 | Transition to Higher Learning | 36 |
| EDEV 611 | Communication and Self-Advocacy | 36 |
| Total Hours |  | 72 |

## CULINARY ARTS

The Culinary Arts program provides students with standard, occupational, entry-level skills in the Culinary Arts, and improves the understanding of culinary fundamentals with hands-on training using traditional and state-of-the-art techniques and equipment, with an emphasis on industrystandard safety and sanitation practices.

## Culinary Arts - Associate in Science

Plan Code: 2147
Students learn skills for positions in food preparation for institutional, restaurant, airlines, catering, convention center, cruise line, supermarket, and hotel foodservice operations. The associate degree will provide students with a broad and advanced-based general education, which will prepare them for global citizenry. Students will enhance their skills in a variety of coursework including International Cuisines and Cost Control for Hospitality.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Organize and develop Front-of-the-House (FOH) procedures and explain Cost Control measures for foodservice operations.
- Apply and demonstrate the cooking ability of various techniques in a commercial kitchen environment with the enhancement of basic baking and pastry skill.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| CULAR 10 | Intro to Hospitality | 3 |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. | 2 |
| CULAR 30 | Cost Control in Hospitality | 3 |
| CULAR 90 | Intro to Culinary Skills \& Principles | 4 |
| CULAR 211 | Intermed. Culinary Skills \& Principles | 3 |
| CULAR 215 | Buffets and Catering | 2 |
| CULAR 222A | Advanced Restaurant Operations | 4 |
| CULAR 222B | Advanced Restaurant Practicum | 4 |
| CULAR 225 | Product and Menu Development | 2 |
| BAKE 230 | Baking \& Pastry Skills for CUL Students | 3 |
| Subtotal Units |  | 30 |
| IN ADDITION, complete FIVE to SIX (5-6) units from the following: |  |  |
| CULAR 216 | World Cuisines: American Regional (3) |  |
| CULAR 217 | Vegetarian \& Specialty Cuisine (2) |  |
| CULAR 218 | World Cuisines: Asian (3) |  |
| CULAR 219 | World Cuisines: Mediterranean (3) |  |
| Subtotal Units |  | 5-6 |
| Required Subtotal |  | 35-36 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |

Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSA 1 | Computer Information Competency | 1 |
| LEARN 11 | Learning and Academic Strategies | $2-3$ |
| or LEARN 11H | Honors Learning and Academic Strategies |  |
| or COUNS 49 | College Study Techniques |  |
| MATH 825 | Culinary Math | 1 |

## Culinary Arts - Certificate of Achievement

Plan Code: 3147

The program provides students the fundamental culinary skill for positions in the foodservice industry such as restaurants, catering, airline food operation, institutional, cruise lines, supermarket, and hotel food operation. Students will gain hands-on knowledge of classic and contemporary cooking techniques.

## Program Student Learning Outcomes

- Prepare and assemble essential menu items in foodservice operations using proper knife skills and accurate cooking methods while applying safety \& sanitation rules according to industry standards.
- Identify the various employment opportunities in the Culinary Arts and Hospitality industries.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CULAR 10 | Intro to Hospitality | 3 |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. | 2 |
| CULAR 90 | Intro to Culinary Skills \& Principles | 4 |
| CULAR 211 | Intermed. Culinary Skills \& Principles | 3 |
| CULAR 215 | Buffets and Catering | 2 |
| CULAR 222A | Advanced Restaurant Operations | 4 |
| CULAR 222B | Advanced Restaurant Practicum | 4 |
| BAKE 230 | Baking \& Pastry Skills for CUL Students | 3 |
| Total Units |  | $\mathbf{2 5}$ |

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSA 1 | Computer Information Competency | 1 |
| LEARN 11 | Learning and Academic Strategies | $2-3$ |
| $\quad$ or LEARN 11H | Honors Learning and Academic Strategies |  |

or COUNS 49 College Study Techniques
MATH 825
Culinary Math
1

## DANCE

Students completing this program should be fully prepared to move on to the next level of dance education.

## Dance - Associate in Arts

Plan Code: 1260
Throughout this program students learn an appreciation of dance as an art form as well as instruction in dance technique, choreography, and aesthetics. Students are also provided partial-lower division preparation for transfer to a baccalaureate degree in this field. This Associate Degree will prepare students for careers in the teaching of dance, performance, choreography, dance studio operation/management, and dance therapy practices.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop a basic knowledge and experience of live performance synthesizing dance technique and creativity.
- Develop a respect for dance as a means of personal, cultural, or social expression.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


| DANCE 13 | Turns (2) |  |
| :---: | :---: | :---: |
| DANCE 16 | Modern Dance 3 (2) |  |
| DANCE 17 | Modern Dance 4 (2) |  |
| DANCE 18A | Folk and Ethnic Dance-African (2) |  |
| DANCE 18B | Folk and Ethnic Dance-Belly Dance (2) |  |
| DANCE 19 | Hip Hop Dance History (3) |  |
| DANCE 28 | Ballet 3 (2) |  |
| DANCE 29 | Ballet 4 (2) |  |
| DANCE 33 | Dance Choreography Workshop (2) |  |
| DANCE 46 | Ballroom/Social Dance (2) |  |
| TART 25 | Introduction to Theatre (3) |  |
| Subtotal Units |  | 2-3 |
| Required Subtotal |  | 26.5-27.5 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |

Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## DATABASE MANAGEMENT

Provide students with a strong foundation in the design and management of database systems in a business environment. In-depth practice of Structured Query Language (SQL) is provided in the context of businessrelated case studies. The Database Management program covers advanced database concepts, including database administration, database technology, database web programming and selection and acquisition of database management systems. Supporting courses allow students to gain a thorough understanding of necessary business communication skills, operating systems, programming logic and system design.

## Database Management - Associate in Science

Plan Code: 2127
The Database Management Systems concentration includes coursework in the design, development and maintenance of relational databases. The program is designed to prepare students for employment in a computer field following graduation. Students wishing a Bachelors' degree (transfer program) should meet with a counselor or advisor to discuss transferability of courses.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze the data needs an organization or company and determine how to best organize and store the data in logical, secure, and accessible structures.
- Design web applications to access and manipulate data using MS Access, MySQL, MS SQL Server and PHP.
- Understand the roles and responsibilities of a database administrator and how to diagnose and troubleshoot systems.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| BCOM 15 | Business Communications | 3 |
| COSA 25 | Microsoft Access for Windows | 4 |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 205 | UNIX/LINUX Fundamentals | 3 |
| COSN 251 | Database Essentials in Amazon Web Svcs | 4 |
| COSP 38 | Database Concepts | 4 |
| COSP 237 | Database Programming with SQL | $\mathbf{2 5}$ |
| Required Subtotal |  | $19-39$ |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) |  |  |

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Database Management - Certificate of Achievement

Plan Code: 3127

This program provides the knowledge and skills required of data management professionals. This certificate will prepare students for a variety of roles suitable for an entry-level position in database-related employment. The program provides students with hands-on experiences in enterprise standard database management systems. Students learn to use the SQL database programming language, create database objects, plan, and organize a database around a business need, normalize a relational database system, and provision in-house and cloud-based database solutions. Students may earn industry certificates as part of this certificate.

## Program Student Learning Outcomes

- Analyze the data needs an organization or company, and determine how to best organize and store the data in logical, secure and accessible structures.
- Design web applications to access and manipulate data using MS access, MySQL, MS SQL Server and PHP.
- Understand the roles and responsibilities of a database administrator, and how to diagnose and troubleshoot systems.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 15 | Business Communications | 3 |
| COSA 25 | Microsoft Access for Windows | 3 |
| COSA 50 | Intro to IT Concepts and Applications | 4 |
| COSN 205 | UNIX/LINUX Fundamentals | 4 |
| COSN 251 | Database Essentials in Amazon Web Svcs | 3 |
| COSP 38 | Database Concepts | $\mathbf{4}$ |
| COSP 237 | Database Programming with SQL | $\mathbf{4}$ |
| Total Units |  | $\mathbf{2 5}$ |

## Database Administrator Specialist Certificate of Accomplishment

## Plan Code: 4080

This certificate verifies a strong foundation in the design and management of modern database systems including Microsoft SQL Server, MySQL, and Oracle.

## Program Student Learning Outcomes

- Demonstrate the ability to install database software on a computer system and configure it for use.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 25 | Microsoft Access for Windows | 3 |
| COSP 38 | Database Concepts | 4 |
| Total Units |  | 7 |

## SQL Programmer Specialist Certificate of Accomplishment

Plan Code: 4158

This certificate features instructor-led exercises and practice in designing and running programs in ANSI/ISO standard Structured Query Language. Types of commands studied include DDL, DML, DQL, DCL, administration and transactional. Students may earn industry certificate of completion as part of this certificate.

## Program Student Learning Outcomes

- Design, run, and analyze new and existing SQL programs according to commonly practiced industry standards.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSP 237 | Database Programming with SQL | 4 |
| Total Units |  | $\mathbf{4}$ |

## DESIGN MANAGEMENT

## Design Management- Associate in Science

Plan Code: 2903
This field of concentration is designed to provide foundational knowledge of the practice of construction and design management with the option of maximizing the number of lower division transfer units. This Associate Degree will prepare students for a construction management-related career, and appropriate course selection will facilitate transfer to a professional degree program.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze methods, materials, and equipment used to construct projects.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 5 |
| ACCTG 1A | Financial Accounting | 4 |
| ARCHT 61 | Fundamental Design Studio | 3 |
| ARCHT 92 | Building Construction | 3 |
| CONST 15 | Blueprint Reading for Construction Trade | 3 |
| CONST 50 | Concrete Fundamentals | 3 |
| CONST 70 | Cost Estimating | 3 |
| DSGN 10 | Survey and Mapping | 2 |
| DSGN 11 | Design Management Trends | 1.5 |
| ENGR 35 | Statics | 3 |
| ENGR 50 | Introduction to Engineering | 1 |
| LAW 18 | Fundamentals of Business Law | 3 |
| MATH 60/60H | First Calculus Course | 5 |
| PHYS 2A | General Physics | 4.5 |
| PHYS 2B | General Physics | 4.5 |
| Total Units |  | 45.5 |

RECOMMENDED but not required General Education courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ETHST $1 / 1 \mathrm{H}$ | Introduction to Ethnic Studies | 3 |
| HIST $10 / 10 \mathrm{H}$ | Hist./Early America (Colonial-Reconstr) | 3 |
| POLSC $1 / 1 \mathrm{H}$ | Introduction to Government | 3 |

## DIAGNOSTIC MEDICAL IMAGING (RADIOLOGIC TECHNOLOGY)

Radiologic Technologists make up the third-largest group of health care professionals-surpassed in number only by physicians and nurses. A primary responsibility of many technologists is to create images of patients' bodies using medical equipment. This helps doctors diagnose and treat diseases and injuries.

The Diagnostic Medical Imaging program (DMI) is dedicated to providing high-quality education and clinical practicum to qualified students. It is responsive to the diverse needs of the local medical community. It specializes in the education and training that lead to entry-level employment as a Radiologic Technologist and an Associate in Science Degree. The program emphasizes the necessity of professional development and life-long learning as a competent and ethical health care professional.

This program requires the student to participate in clinical experience concurrent with DMI classroom courses. Clinical responsibilities will be arranged by the Diagnostic Medical Imaging program faculty and will include day, evening, and/or weekend assignments. The student receives no salary for this clinical experience but will receive course credit toward program completion.

## Successful DMI program completion requires the following:

1. Completion of all required radiologic technology courses as outlined in the catalog, and
2. Completion of approximately 1,900 clinical hours, and
3. Completion of all requirements for an Associate in Science degree as required by Long Beach City College (Plan Code: 2612), or possess an associate degree or higher.

Eligibility for the American Registry of Radiologic Technologists (ARRT) Radiography registry exam and California Department of Public Health - Radiological Health Branch (CDPH-RHB) CRT and Fluoroscopic permit examination are dependent upon meeting these requirements. Successful applicants have the right to use the title "Registered Radiologic Technologist" R.T. (R) CRT.

## LBCC College Application Procedures

LBCC College applications to become a student are accepted on a continuous basis.

1. Apply for admission to the college through the Admissions Office (applications are available online at http://www.lbcc.edu/admissions (http://www.lbcc.edu/admissions/))
2. Submit transcripts from high school and previous college work to the Admissions Office and the School of Health Sciences and Kinesiology.

## DMI Program Application Requirements and Placement on the DMI Program Waitlist

Prospective students must apply to the college (see above) and become a registered LBCC College student first.

## DMI Program Applications and placement on the DMI Program waitlist are not accepted until the following prerequisites are met:

1. Graduation from an accredited high school, or the equivalent.
2. Cumulative grade point average of 2.5 or higher in all college coursework.
3. Completion of AH 60 Medical Terminology, AH 61 Integration of Patient Care, and ANAT 41 Anatomy \& Physiology within five years of the DMI application date with a letter grade of " C " or better.
4. Students must attend one of the DMI program monthly information sessions prior to application submission.
5. Complete the Diagnostic Medical Imaging program application form (in person only) and bring the completed application form and documentation to the School of Health Sciences and Kinesiology, Room C100 at the Liberal Arts Campus.
6. Students must keep the Admissions and Records office and the School of Health Sciences and Kinesiology advised of their current email address, home address, and telephone number and any name changes. All changes must be submitted in writing.
7. All applicants will be notified by email regarding the status of their applications.

DMI program applications are accepted on a continual basis.
The DMI program typically has a waitlist of applicants. We highly suggest that the candidate complete the application requirements and apply to the DMI program first. Placement on the DMI waitlist is based upon application submission date. While the candidate is on the waitlist, we suggest that they complete their associate degree courses and take the ATI TEAS exam.

## Information Session

The Diagnostic Medical Imaging program (DMI) holds monthly information sessions from September to June (except January). Please look up times, days, and locations of the information sessions on the LBCC website under "explore our programs" then "Health" and then "DMI Program/Radiology." You may also contact the Allied Health Office, DMI program director, Allied Health Coordinator, or the counseling office.

1. Students must attend one of the DMI program information sessions before their DMI application is accepted. If a student submits a DMI application prior to attending one of the information sessions, their application submission date will be changed to the date when they attended the DMI information session. Placement on the DMI waitlist is based upon application submission date.
2. Students who need additional information about the DMI program are welcome to attend.

## DMI Program Waitlist

Candidates are placed on a waitlist based upon completed application submission date. Applicants who do not attempt the TEAS exam within
one year of the application date will have their applications removed off the waitlist.

## ATI TEAS Exam (Test of Essential Academic Skills)

At the time of applying to the DMI program in person at the Allied Health Office (Building C, room 100), applicants will have the opportunity to acquire information on the TEAS Exam, TEAS help, and TEAS examination dates. TEAS exams must be scheduled through the Allied Health Office and are offered 4 times per year. The applicant has 3 attempts to pass the TEAS exam with a score of $62 \%$ or higher. The cost per exam is about $\$ 60.00$. If the applicant does not attempt the TEAS exam within one year of the application date, the applicant's application will be removed. If the candidate wishes to re-enter the waitlist, they would have to re-apply to the DMI program and be placed on the waitlist based on their new application date.

## General Information Items

1. A strong command of the English language, both written and verbal, is essential for successful completion of the program.
2. Evidence of physical and emotional fitness by medical examination and personal interview. This is submitted in the summer of the 1 st year of the DMI program.
3. A current and clear background check, AHA BLS Provider CPR card, vaccinations, flu shot, TB test, LBCC physical health form, drug test, and malpractice insurance are required also during the summer of the 1 st year. (An unclear background may prevent the student from completing clinical requirements and jeopardize ARRT and CDPH certification.)
4. The program is 30 months in length, beginning each spring semester. Each student must complete approximately 1,900 hours of clinical practicum and approximately 1,800 hours of didactic courses. Most courses are conducted Monday through Saturday. Most courses are between 6 AM and 10 PM .

## DMI Program Admission Requirements and Selection Process

The following is considered in the selection process during the month of November for the following spring DMI program class:

1. Date of DMI program application.
2. Either completion of the LBCC General Education requirements for an Associate Degree Plan A, B, or C or possess an associate degree or higher.
3. Must pass within three attempts and within 3 years of the DMI application date the ATI TEAS (Test of Essential Academic Skills) exam with a score of $62 \%$ or higher. Older TEAS versions are not accepted.
4. Provisionally accepted students must attend the mandatory DMI advisory meeting, scheduled in December, prior to the DMI program starting in the spring semester in order to progress in the DMI program. ${ }^{1,2}$
${ }^{1}$ Due to their service to our country and time away from public life, up to 2 veterans per year are given immediate placement into the next available DMI Program class, upon completion of the following:
5. DMI program application submission
6. Completion of items \# 2, 3, and 4 under "DMI Program Admission Requirements and Selection Process"
${ }^{2}$ The DMI program participates with the Promised Pathways Program for Long Beach Unified High School District. Placement into the DMI promise pathway is awarded based upon specific criteria (Contact DMI program Director for details).

## Upon Acceptance to the DMI Program

Every accepted applicant must provide a current criminal background check, complete vaccinations, obtain an AHA Healthcare Provider BLS CPR card, obtain liability insurance, complete a drug test, complete the health evaluation form, be able to perform essential physical functions, and complete a latex allergy form. Additional information regarding this is provided at program acceptance. The background check will include criminal offense, criminal history, sex offender check, and social security trace. (An unclear background may prevent the student from being accepted into one of our affiliated clinical facilities as well as completing clinical requirements.)

## Upon Completion of the DMI Program

Upon program completion, the DMI program graduate is eligible to take the American Registry of Radiologic Technologists (ARRT) national certification exam. Through the California Department of Public Health -Radiological Health Branch (CDPH-RHB), California State CRT certification is awarded upon passing the ARRT Radiography exam, applying for the CRT certification, and making payment for the CRT certificate. Once obtaining the CRT certification, graduates are eligible to take the CDPH Fluoroscopy permit exam. When the above is completed, the DMI program graduate will have the right to use the title "Registered Radiologic Technologist" R.T. (R) CRT and may pursue further education through an educational institute or on-the-job training in Ultrasound, Nuclear Medicine, Radiation Therapy, Interventional Radiology, Cardiac Cath Lab, Mammography, MRI, CT, Management, or Radiography education. Information about graduate courses/schools may be obtained at www.arrt.org (http://www.arrt.org) or www.asrt.org (http://www.asrt.org) or the California Department of Public Health at www.cdph.ca.gov (http://www.cdph.ca.gov).

## Accreditation and Program Approvals

Long Beach City College is accredited by the Accrediting Commission of Community and Junior Colleges of the Western Association of Schools and Colleges. The Diagnostic Medical Imaging (DMI) program is approved by the American Registry of Radiologic Technologists (ARRT) and the California Department of Public Health - Radiologic Health Branch (CDPH-RHB).

## Eligibility for the ARRT Exam

Eligibility for the ARRT examination requires the candidate to complete an ARRT approved Radiology program, possess a minimum of an associate degree, and be of good moral character. Conviction of a misdemeanor or felony may disqualify the candidate. An Ethics pre-application review may be pursued by contacting the ARRT at www.ARRT.org (http://www.ARRT.org). There are specific parameters regarding the charge or conviction of a felony or misdemeanor. An applicant may contact the ARRT to determine if he/she will be disqualified due to legal circumstances. The process to determine
eligibility is titled "ETHICS PRE- APPLICATION REVIEW" and the cost is approximately $\$ 100.00$.

## LBCC Advanced Medical Imaging Programs - CT and MRI

Entry into either the CT (Computed Tomography) or MRI (Magnetic Resonance Imaging) program requires that applicants possess their ARRT credentials in an ARRT Primary Certification (Radiography, Nuclear Medicine, Radiation Therapy, or Ultrasound) and possess an associate degree or higher. ARMRIT certification is not accepted.

## Diagnostic Medical Imaging (Radiologic Technology) - Associate in Science

Plan Code: 2612

This program is designed to prepare the student for Certification by the California Department of Public Health, Radiological Health Branch (CRT), California Fluoroscopy Permit, and Registration by the American Registry of Radiological Technologists (ARRT) after testing. The ARRT is the national testing/registration body (www.ARRT.org (http://www.ARRT.org)). The end objective is to prepare students for employment as practicing medical imaging professionals in acute care hospitals, medical clinics and/or private offices.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Diagram the photographic and digital process and define the technical factors utilized in medical image formation.
- Distinguish the fundamental structure of matter, diagram the production of x-rays, and examine how different radiographic techniques affect the resulting image on a radiograph.
- Assess how radiation affects body systems, differentiate between different types of radiation and their effects on human tissue, and formulate ways to decrease exposure.
- Manage proper patient positioning of the skeletal system, cranium, and viscera to achieve industry standard radiograph.
- Demonstrate ability to properly use all equipment required to produce a diagnostic radiograph; produce an industry standard and diagnostic radiograph.
- Demonstrate understanding of the knowledge and skills necessary to function as professional, ethical, accurate, and reliable members of the Radiology health care team.


## Prerequisite Courses

The following prerequisite courses must be completed within five years prior to the first spring semester of the program:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ANAT 41 | Anatomy \& Physiology | 5 |
| AH 60 | Medical Terminology | 3 |
| AH 61 | Integration of Patient Care | 2 |
| Total Prerequisite Units | $\mathbf{1 0}$ |  |

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| DMI PROGRAM COURSE SCHEDULE |  |  |
| FIRST YEAR |  |  |
| Spring Semester REQUIRED COURSES: |  |  |
| DMI 10 | Introduction of Radiologic Technology | 3 |
| DMI 403 | Cross-Sectional Anatomy | 3 |
| Summer Session REQUIRED COURSES: |  |  |
| DMI 20 | Introduction to Radiologic Physics | 3 |
| Fall Semester REQUIRED COURSES: |  |  |
| DMI 11 | Radiographic Techniques | 1 |
| DMI 12 | Contrast Fluoroscope/Radiographic Proced. | 3 |
| DMI 21 | Applied Radiological Physics | 2 |
| DMI 30 | Positioning for General Diagnostic Rad | 3 |
| Winter Session REQUIRED COURSES: |  |  |
| DMI 40A | Clinical Radiology | 2.5 |
| Spring Semester REQUIRED COURSES: |  |  |
| DMI 24 | Radiation: Biology and Protection | 3 |
| DMI 31 | Positioning for Cranial Radiography | 3 |
| DMI 40B | Clinical Radiology | 7.5 |
| DMI 60 | Radiologic Pathology | 3 |

SECOND YEAR
Summer Session REQUIRED COURSES:
DMI 40C Clinical Radiology 6

Fall Semester REQUIRED COURSES:
DMI 15 Computer Applications in Radiology 3
DMI 40D Clinical Radiology 11
DMI $222 \quad$ Venipuncture for Medical Imaging 0.5
Winter Session REQUIRED COURSES:
DMI $61 \quad$ Fluoroscopy

Spring Semester REQUIRED COURSES:
DMI 14 Trends and Self-Assessment in Rad Tech 3
DMI 40E Clinical Radiology 11
Required Subtotal 73.5
Complete one of the following: ${ }^{1}$ 19-39

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| DMI 462 | Mammography | 3.5 |
| LEARN 11 | Learning and Academic Strategies | 3 |

## Diagnostic Medical Imaging (Radiologic Technology) - Certificate of Achievement

Plan Code: 3612
This program will prepare the student for Certification by the California Department of Public Health, Radiological Health Branch (CRT), California Fluoroscopy Permit, and Registration by the American Registry of Radiological Technologists (ARRT) after testing.The ARRT is the national testing/registration body (www.ARRT.org (http://www.ARRT.org)). The end objective is to prepare students for employment as practicing medical imaging professionals in acute care hospitals, medical clinics and/or private offices.

## Program Student Learning Outcomes

- Diagram the photographic and digital process and define the technical factors utilized in medical image formation.
- Distinguish the fundamental structure of matter, diagram the production of x -rays, and examine how different radiographic techniques affect the resulting image on a radiograph.
- Assess how radiation affects body systems, differentiate between different types of radiation and their effects on human tissue, and formulate ways to decrease exposure.
- Manage proper patient positioning of the skeletal system, cranium, and viscera to achieve industry-standard radiograph.
- Demonstrate ability to properly use all equipment required to produce a diagnostic radiograph; produce an industry standard and diagnostic radiograph.
- Demonstrate understanding of the knowledge and skills necessary to function as professional, ethical, accurate, and reliable members of the Radiology health care team.


## Prerequisite Courses

The following prerequisite courses must be completed within five years prior to the first spring semester of the program:

Code Number
ANAT 41
AH 60

## AH 61

 Course Title UnitsAnatomy \& Physiology

Total Prerequisite Units
Medical Terminology3

## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| DMI PROGRAM COURSE SCHEDULE |  |  |
| FIRST YEAR |  |  |
| Spring Semester REQUIRED COURSES: |  |  |
| DMI 10 | Introduction of Radiologic Technology | 3 |
| DMI 403 | Cross-Sectional Anatomy | 3 |


| DMI 20 | Introduction to Radiologic Physics | 3 |
| :---: | :---: | :---: |
| Fall Semester REQUIRED COURSES: |  |  |
| DMI 11 | Radiographic Techniques | 1 |
| DMI 12 | Contrast Fluoroscope/Radiographic Proced. | 3 |
| DMI 21 | Applied Radiological Physics | 2 |
| DMI 30 | Positioning for General Diagnostic Rad | 3 |
| Winter Session REQUIRED COURSES: |  |  |
| DMI 40A | Clinical Radiology | 2.5 |
| Spring Semester REQUIRED COURSES: |  |  |
| DMI 24 | Radiation: Biology and Protection | 3 |
| DMI 31 | Positioning for Cranial Radiography | 3 |
| DMI 40B | Clinical Radiology | 7.5 |
| DMI 60 | Radiologic Pathology | 3 |
| SECOND YEAR |  |  |
| Summer Session REQUIRED COURSES: |  |  |
| DMI 40C | Clinical Radiology | 6 |
| Fall Semester REQUIRED COURSES: |  |  |
| DMI 15 | Computer Applications in Radiology | 3 |
| DMI 40D | Clinical Radiology | 11 |
| DMI 222 | Venipuncture for Medical Imaging | 0.5 |
| Winter Session REQUIRED COURSES: |  |  |
| DMI 61 | Fluoroscopy | 2 |
| Spring Semester REQUIRED COURSES: |  |  |
| DMI 14 | Trends and Self-Assessment in Rad Tech | 3 |
| DMI 40E | Clinical Radiology | 11 |
| Total Units |  | 73.5 |
| Students who possess an associate degree or higher are eligible for the Certificate of Achievement option. Students who choose this option must still follow the DMI program application and waitlist process listed above in "DMI Program Application Requirements and Placement on the DMI Program Waitlist." Students who choose this option are selected from the waitlist in the same manner as all other DMI program applicants. |  |  |
| RECOMMENDED but not required courses: |  |  |
| Code Number | Course Title | Units |
| DMI 462 | Mammography | 3.5 |
| LEARN 11 | Learning and Academic Strategies | 3 |

## Computed Tomography - Certificate of Accomplishment

Plan Code: 4045
The courses within the Certificate of Accomplishment in CT will qualify the student to be eligible to take the ARRT post-primary examination in Computerized Tomography.

## Program Student Learning Outcomes

- Demonstrate competent computerized tomography examinations for specific anatomical structures, patient symptoms, or pathology.


## Prerequisite

Entry into the CT (Computed Tomography) program requires that applicants possess their ARRT credentials in an ARRT Primary

Certification (Radiography, Nuclear Medicine, Radiation Therapy, or Ultrasound) and possess an associate degree or higher.

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| DMI 403 | Cross-Sectional Anatomy | 3 |
| DMI 404 | MRI/CT Pathology | 3 |
| DMI 405A | MRI Clinical Practicum | 2.5 |
| DMI 405B | MRI Clinical Practicum | 2.5 |
| DMI 406 | Computerized Tomography Physics | 3 |
| DMI 407 | Computerized Tomography Procedures | 3 |
| Total Units |  | $\mathbf{1 7}$ |

## Magnetic Resonance Imaging <br> Technologist - Certificate of Accomplishment

Plan Code: 4613
The course within the Certificate of Accomplishment in MRI will qualify the student to be eligible to take the ARRT Post-Primary examination in MRI.

## Program Student Learning Outcomes

- Demonstrate a mastery of medical-imaging skills in MRI.


## Prerequisite

Entry into the MRI (Magnetic Resonance Imaging) program requires that applicants possess their ARRT credentials in an ARRT Primary Certification (Radiography, Nuclear Medicine, Radiation Therapy, or Ultrasound) and possess an associate degree or higher. ARMRIT certification is not accepted.

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| DMI 401 | Physical Principles of MRI | 3 |
| DMI 402 | Magnetic Resonance Imaging Procedure | 3 |
| DMI 403 | Cross-Sectional Anatomy | 3 |
| DMI 404 | MRI/CT Pathology | 3 |
| DMI 405A | MRI Clinical Practicum | 2.5 |
| DMI 405B | MRI Clinical Practicum | $\mathbf{2 . 5}$ |
| Total Units |  | $\mathbf{1 7}$ |

## DIGITAL MEDIA ARTS

The Digital Media Arts program explores the synergy between art, design and technology while providing a fundamental understanding of theoretical concepts and technical skills in digital image-making. It begins by introducing beginning skills for making art with the computer, and as it progresses, students can begin to explore more specific areas of interest in fields such as: digital illustration, comics and animation, game design, visual effects, information graphics, data visualization, and interactive design for web, mobile and immersive environments.

Upon completing the DMA program of study, students will have built a strong foundation to pursue further specialized studies at four-year institutions, or explore and experiment with digital art in their own practice. As multimedia experiences become increasingly common in day-to-day life DMA finds itself at the intersection of commerce and culture with new iterations and applications being pioneered in the art world and beyond.

## Photography - Associate in Arts

## Plan Code: 1256

This program prepares students for entry and mid-level employment in digital media production. Students will be able to create advanced photography and digital media using still and motion images, new media and sound, installation and performance, exhibition and publication, and history of photography.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate an understanding of pre-production, production and post-production photography processes.
- Demonstrate creativity and original thinking in the production of photography media.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number <br> REQUIRED COURSES | Course Title | Units |
| :--- | :--- | ---: |
| PHOT 32 | Introduction to Digital Photography | 4 |
| PHOT 33 | Professional Studio Lighting | 4 |
| PHOT 43 | Photoshop and Lightroom Management | 3 |
| Subtotal Units |  | 11 |
| IN ADDITION, complete FOUR (4) courses from the following: |  |  |
| ART 81 | Introduction to Fine Art Photography (3) |  |
| FILM 25 | Introduction to Digital Cinematography (3) |  |
| PHOT 10 | History of Photography (3) |  |
| PHOT 34 | Advanced Photography and Digital Media |  |
| PHOT 35 | Photography for Publication (3) |  |
| PHOT 37 | Portrait Photography (4) |  |
| PHOT 39 | Photography on Location (3) |  |
| PHOT 41 | Professional Photographic Portfolio (4) |  |

PHOT 42 Experimental \& New Media Photography (4)
Subtotal Units 12-16
Required Subtotal 23-27

Complete one of the following: ${ }^{1}$
Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Photography - Certificate of Achievement

Plan Code: 3256

This program prepares students for entry and mid-level employment in digital media production. Students completing this certificate will be able to create advanced photography and digital media using still and motion images, new media and sound, installation and performance, exhibition and publication, and history of photography.

## Program Student Learning Outcomes

- Demonstrate creativity and original thinking in the production of a photography production.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| PHOT 32 | Introduction to Digital Photography | 4 |
| PHOT 33 | Professional Studio Lighting | 4 |
| PHOT 43 | Photoshop and Lightroom Management | 3 |

Subtotal Units 11

IN ADDITION, complete FOUR (4) courses from the following:

| ART 81 | Introduction to Fine Art Photography (3) |  |
| :--- | :--- | :--- |
| FILM 25 | Introduction to Digital Cinematography (3) |  |
| PHOT 10 | History of Photography (3) |  |
| PHOT 34 | Advanced Photography and Digital Media <br> $(4)$ |  |
| PHOT 35 | Photography for Publication (3) |  |
| PHOT 37 | Portrait Photography (4) |  |
| PHOT 39 | Photography on Location (3) |  |
| PHOT 41 | Professional Photographic Portfolio (4) |  |
| PHOT 42 | Experimental \& New Media Photography (4) |  |
| Subtotal Units |  | $\mathbf{1 2 - 1 6}$ |
| Total Units |  | $\mathbf{2 3 - 2 7}$ |

## Digital Media: Comics \& Animation Certificate of Achievement

Plan Code: 3258
This certificate prepares students for entry-level or self-employment in comics production and the animation fields. Students will explore aspects of 2 D and 3 D animation, storyboarding, character design, title creation and publication.

## Program Student Learning Outcomes

- Examine printed and digital applications of visual narrative in preproduction, production, and post-production.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| DMA 2 | Introduction to Digital Media Arts | 3 |
| DMA 3 | Digital Illustration | 3 |
| DMA 4 | Introduction to Typography | 3 |
| DMA 6 | Graphic Design: Publication \& Production | 3 |
| DMA 20 | Digital Animation: 2D | 3 |
| DMA 30 | Digital Animation: 3D | 3 |
| DMA 25 | Motion Graphics |  |

IN ADDITION, complete ONE (1) course from the following:

| ART 17 | Illustration I (3) |  |
| :--- | :--- | :--- |
| ART 18 | Illustration II (3) |  |
| ART 19 | Life Drawing (3) |  |
| DMA 90 | Special Studies: Design \& Multimedia (3) |  |
| FILM 20 | Fundamentals of Digital Film Production (3) |  |
| Total Units |  | $\mathbf{2 4}$ |

## Digital Media: Graphic Design Certificate of Achievement

Plan Code: 3195

This program prepares students for entry-level graphic design positions in branding, packaging, and publication for traditional print and online media. This certificate is designed for both beginning students and for returning designers that are updating to current tools and techniques in fundamental design skills.

## Program Student Learning Outcomes

- Produce professional quality graphic design projects that demonstrate comprehension of visual design, digital production skills and an understanding of multi-disciplinary collaboration.

IN ADDITION, complete TWO (2) courses from the following:

| DMA 2 | Introduction to Digital Media Arts (3) |  |
| :--- | :--- | :--- |
| DMA 3 | Digital Illustration (3) |  |
| DMA 25 | Motion Graphics (3) |  |
| PHOT 43 | Photoshop and Lightroom Management (3) |  |
| DMA 90 | Special Studies: Design \& Multimedia (3) |  |
| Total Units |  | $\mathbf{2 1}$ |

## Digital Media: Multimedia Interaction \& Game Design - Certificate of Achievement

## Plan Code: 3255

This certificate is designed to prepare students for entry-level and selfemployment in interactive media design fields including: web and mobile design, augmented and virtual reality, games and game engines, motion graphics, special effects, and experiential multimedia.

## Program Student Learning Outcomes

- Demonstrate the ability to apply the core principles of User Interface and User Experience for interaction and gamification in various multimedia applications.
- Possess the necessary technical knowledge to design and implement graphic user interfaces for print, web, mobile apps, and multimedia.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| DMA 2 | Introduction to Digital Media Arts | 3 |
| DMA 10 | Introduction to Game Design | 3 |
| DMA 15 | Interaction and Web Design | 3 |
| DMA 20 | Digital Animation: 2D | 3 |
| DMA 25 | Motion Graphics | 3 |
| DMA 40 | Multimedia Design | 3 |
| Subtotal Units |  | $\mathbf{1 8}$ |
| IN ADDITION, complete TWO (2) courses from the following: |  |  |
| DMA 1 | Introduction to Computer Graphics | 3 |
| DMA 3 | Digital Illustration | 3 |
| DMA 5 | Graphic Design: Branding | 3 |
| DMA 30 | Digital Animation: 3D | 3 |
| DMA 90 | Special Studies: Design \& Multimedia | 3 |
| Subtotal Units |  | $\mathbf{6}$ |
| Total Units |  | $\mathbf{2 4}$ |

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| DMA 1 | Introduction to Computer Graphics | 3 |
| DMA 4 | Introduction to Typography | 3 |
| DMA 5 | Graphic Design: Branding | 3 |
| DMA 6 | Graphic Design: Publication \& Production | 3 |

## ELECTRICAL TECHNOLOGY

The Electrical Department educates its students in all areas of Industrial Electrical Technology in response to the needs of industry National Electrical Code standards.

## Admission Procedures

Students interested in the Electrical Technology program are required to enroll in and complete an ELECT 600 Electrical Program \& Safety Preparation course prior to registering for any classes. Exceptions to this requirement are made for students in Sheet Metal, Construction, or other non-electrical trades programs who want to enroll in ELECT 202 Electrical Mathematics and/or ELECT 253 OSHA Standards for Construction Safety; these students may contact Suzanne Engelhardt sengelhardt@lbcc.edu for the Prerequisite Waiver form. During the ELECT 600 class, students will have the opportunity to complete a 50 question online electrical math test that will be used as an advisory tool for choosing the appropriate electrical math class. Students who have completed any college math classes should provide unofficial transcripts so that their classes can be evaluated as substitutes for the Electrical math classes. Students are allowed to switch from the day or evening programs with instructor and Department Head approvals. Faculty recommend that students who are eligible enroll in READ 881 Reading Essentials before joining the program. In addition, it is recommended that students have a valid CPR card or are concurrently enrolled in a CPR class while enrolled in Electricity courses.

## Electrical Apprenticeship Preparation - Certificate of Achievement

Plan Code: 3954
This program will prepare students for entry into union electrical apprenticeship programs. Emphasis is placed on successful electrical calculations, safety, and the ability to document testing procedures. This is a stand-alone Certification of Achievement and is not part of the Certificates of Achievement required for the Electrical Technology Certificate of Achievement. Limitation on Enrollment - New students must enroll in and complete an ELECT 600 course prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Student Learning Outcomes

- Demonstrate the ability to solve basic electrical calculations and communicate results in detailed summary reports.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 4 |
| ELECT 204 | First Semester Fundamentals of DC <br>  <br>  <br> Electricity | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 275 | Electrical Pipe Bending | 1 |

Total Units

# Electrical Program Preparation Certificate of Completion 

Plan Code: 6036

This program is designed to provide students an orientation into the Electrical Program where expectations and program safety are covered, to provide time to work on math skills until necessary concepts are learned in order to increase success in the program of choice, and to learn specific computer applications needed in order to develop and build an industry standard lab report.

## Program Student Learning Outcomes

- Recognize basic safety and technical requirements for the Electrical Technology Program.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 600 | Electrical Program \& Safety Preparation | 9 |
| ELECT 601 | Computer Applications for Tech Reports | 54 |
| ELECT 602 | Electrical Mathematics | 54 |
| Total Hours |  | $\mathbf{1 1 7}$ |

## IPC-620 Wire Harness Assembly and Inspection - Certificate of Completion

Plan Code: 6037

Students enrolling in ELECT 620A and ELECT 620B will be learning cable harness assembly, testing and inspection skills completed per IPC/WHMA-A-620 industry standards. Students will learn the proper use of the requisite tools and assembly methods. Completion of these two classes provides students with an employment pathway in the Aerospace and Electrical Cable Harness Assembly positions. There are no prerequisite skills required to enter ELECT 620A.

## Program Student Learning Outcomes

- Demonstrate the ability to assemble, test, and inspect cable harnesses.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 620A | Electric Cable Termination IPC-620C | 72 |
| ELECT 620B | Electric Cable Inspection IPC-620C | 36 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## FCC Amateur Radio Technician Preparation - Certificate of Completion

## Plan Code: 6050

This program provides the skills and knowledge to successfully pass the Federal Communications Commission (FCC) Amateur Radio Technician

Licensing Exam. Students will gain hands-on experience covering basic electronics, electronic assembly, soldering techniques, and kit assembly. They will be introduced to schematic reading, basic circuit analysis, and will learn the elements contained in the licensing exam using the latest test banks as directed by the FCC. Students will learn through lecture topics, computer aided material, hands-on examples, and participation in example exams.

## Program Student Learning Outcomes

- Demonstrate the knowledge and skills necessary for a career as an FCC Amateur Radio Technician.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 630A | Intro to Electronics | 27 |
| ELECT 619B | FCC Amateur Radio Technician Lic. Prep. | 36 |
| Total Hours |  | 63 |

## Power Generation Technician Electrical - Certificate of Completion

## Plan Code: 6051

This program consists of a two-course sequence introducing motor generator power systems, covering operation, electrical control systems. In addition, students are provided with hands-on experience troubleshooting possible faults and operational problems and proper methods of troubleshooting and repair. Test procedures, service schedules and general maintenance are also covered. ELECT 602 Electrical Mathematics is recommended for program preparation.

## Program Student Learning Outcomes

- Analyze the operation of a motor generator set to ensure proper function.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 632A | Electrical Power Generation | 72 |
| ELECT 632B | Power Generation Troubleshooting | $\mathbf{7 2}$ |
| Total Hours |  | $\mathbf{1 4 4}$ |

## Robotics Exploration - Certificate of Completion

## Plan Code: 6052

This program provides hands-on experience covering basic electronics and electronic assembly. Electronic components are covered as well as soldering techniques and kit assembly. Students are introduced to schematic reading, basic circuit analysis as well. Students will also be introduced to the fundamentals of programming Omon Industrial Robots as well as piloting and learning the systems involved with underwater robotics.

## Program Student Learning Outcomes

- Demonstrate the ability to program an industrial robot to pick up parts from one location and drop them off at a specified second location.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 630A | Intro to Electronics | 27 |
| ELECT 630B | Introductory Robotics Camp | $\mathbf{2 7}$ |
| Total Hours |  | $\mathbf{5 4}$ |

## ELECTRICAL TECHNOLOGY, AUTOMATION TECHNICIAN

## Electrical Technology, Automation Technician - Associate in Science

Plan Code: 2991

This program will prepare students for entry-level employment in the automation systems maintenance and troubleshooting industry. This includes work in Advanced Manufacturing Facilities and companies that use underwater robots. The techniques used in both industries are similar and there is significant crossover between the two. Upon completion the student will be able to install, maintain, and repair automation systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop procedures for the successful installation, maintenance and troubleshooting of robotic, PLC and automation control systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 204 | First Semester Fundamentals of DC <br>  <br>  <br> Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | 28.5 |
| IN ADDITION, complete the following: |  |  |
| ELECT 227 | Variable Speed Drive Fundamentals | 2 |
| ELECT 230A | Robotics Technology - Design | 2 |
| ELECT 230B | Robotics Technology - Integration | 2 |
| ELECT 231 | Electro-Hydraulics and Pneumatic Systems | 2 |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 435B | Programmable Logic Controllers (PLC) 1 | 2 |
| Subtotal Units |  | $\mathbf{1 1}$ |
| Required Subtotal |  | 39.5 |
| Complete one of the following: |  |  |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Electrical Technology, Automation Technician - Certificate of Achievement

## Plan Code: 3991

This program will prepare students for entry-level employment in the automation systems maintenance and troubleshooting industry. This includes work in Advanced Manufacturing Facilities and companies that use underwater robots. The techniques used in both industries are similar and there is significant crossover between the two. Upon completion of the Electrical Technology Certificate of Achievement and the Automation Technician Certificate of Achievement, the student will be able to install, maintain, and repair automation systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of robotic, PLC and automation control systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 4 |
| ELECT 204 | First Semester Fundamentals of DC | 4 |
|  | Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | 28.5 |
| IN ADDITION, complete the following: |  |  |
| ELECT 227 | Variable Speed Drive Fundamentals | 2 |
| ELECT 230A | Robotics Technology - Design | 2 |
| ELECT 230B | Robotics Technology - Integration | 2 |
| ELECT 231 | Electro-Hydraulics and Pneumatic Systems | 2 |


| ELECT 256 | High Voltage Safety Awareness | 1 |
| :--- | :--- | ---: |
| ELECT 435B | Programmable Logic Controllers (PLC) 1 | 2 |
| Subtotal Units |  | $\mathbf{1 1}$ |
| Total Units |  | $\mathbf{3 9 . 5}$ |

## Automation Technician - Certificate of Achievement

## Plan Code: 3931

This program will prepare students for entry-level employment in the automation systems maintenance and troubleshooting industry. This includes work in Advanced Manufacturing Facilities and companies that use underwater robots. The techniques used in both industries are similar and there is significant crossover between the two. Upon completion the student will be able to install, maintain, and repair automation systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of robotic, PLC and automation control systems.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 227 | Variable Speed Drive Fundamentals | 2 |
| ELECT 230A | Robotics Technology - Design | 2 |
| ELECT 230B | Robotics Technology - Integration | 2 |
| ELECT 231 | Electro-Hydraulics and Pneumatic Systems | 2 |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 435B | Programmable Logic Controllers (PLC) 1 | 2 |
| Total Units |  | $\mathbf{1 1}$ |

# ELECTRICAL TECHNOLOGY, CISCO CERTIFIED NETWORK INSTALLATION ASSOCIATE 

Electrical Technology, CISCO Certified Network Installation Associate - Associate in Science

Plan Code: 2992

This program will prepare students for entry-level employment in the networking installation and troubleshooting industry. This includes industries that implement internet protocol for factory automation and residential automation control systems. Upon completion the student will be able to install, maintain, and repair CISCO networking equipment and systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 4 |
| ELECT 204 | First Semester Fundamentals of DC |  |
|  | Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | $\mathbf{2 8 . 5}$ |
| IN ADDITION, complete the following: |  |  |
| CISCO 250 | Communications Cabling Installation | 2 |
| CISCO 251 | Introduction to Networks | 2 |
| CISCO 252 | Switching Routing Wireless Essentials | 2 |
| CISCO 253 | Enterprise Network Security Automation | 2 |
| Subtotal Units |  | $\mathbf{8}$ |
| Required Subtotal |  | $\mathbf{3 6 . 5}$ |

Complete one of the following: ${ }^{1} \quad 19-39$
Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or
IGETC; see counselor for limitations.

2 | Elective units from course(s) numbered 1-599, if needed, to reach 60 |
| :--- |
| degree-applicable units. |

# Electrical Technology, CISCO Certified Network Installation Associate - Certificate of Achievement 

Plan Code: 3992

This program will prepare students for entry-level employment in the networking installation and troubleshooting industry. This includes industries that implement internet protocol for factory automation and residential automation control systems. Upon completion of the Electrical Technology Certificate of Achievement and the CISCO Certified Network Installation Associate Certificate of Achievement, the student will be able to install, maintain, and repair CISCO networking equipment and systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| ELECT 204 | First Semester Fundamentals of DC <br> Electricity | 4 |
| :--- | :--- | ---: |
|  | Second Sem Fund of Motors/Generators | 4 |
| ELECT 209 | Third Semester Fund of AC Electricity | 4 |
| ELECT 212 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 214 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 225 | Introduction to National Electrical Code | 3 |
| ELECT 240 | Electrical Code-Grounding | 1.5 |
| ELECT 242 | OSHA Standards for Construction Safety | 2 |
| ELECT 253 | Motor Control Wiring and Troubleshooting | 2 |
| ELECT 435A |  | 28.5 |
| Subtotal Units |  |  |
| IN ADDITION, complete the following: | 2 |  |
| CISCO 250 | Communications Cabling Installation | 2 |
| CISCO 251 | Introduction to Networks |  |


| CISCO 252 | Switching Routing Wireless Essentials | 2 |
| :--- | :--- | ---: |
| CISCO 253 | Enterprise Network Security Automation | 2 |
| Subtotal Units |  | $\mathbf{8}$ |
| Total Units |  | $\mathbf{3 6 . 5}$ |

## CISCO Certified Network Installation Associate - Certificate of Achievement

Plan Code: 3932
This program will prepare students for entry-level employment in the networking installation and troubleshooting industry. This includes industries that implement internet protocol for factory automation and residential automation control systems. Upon completion of the Electrical Technology Certificate of Achievement and the CISCO Certified Network Installation Associate Certificate of Achievement, the student will be able to install, maintain, and repair CISCO networking equipment and systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CISCO 250 | Communications Cabling Installation | 2 |
| CISCO 251 | Introduction to Networks | 2 |
| CISCO 252 | Switching Routing Wireless Essentials | 2 |
| CISCO 253 | Enterprise Network Security Automation | 2 |
| Total Units |  | $\mathbf{8}$ |

## Network Cabling Specialist Certificate of Accomplishment

## Plan Code: 4089

Students earning this CISCO award have demonstrated knowledge and understanding of national cabling installation standards and best practices. This CISCO award is intended for vocational students preparing for immediate employment as a low-voltage communications cabling installer.

## Program Student Learning Outcomes

- Build a fiber and copper corporate backbone network between a Main Telecommunications closet and a Distributed Telecom closet and test all connectivity by placing data hosts at both ends and run connectivity tests between them.
- Provide a completed documentation system that will be usable by any industry professional in the data and telephony field, for the service of any moves, adds and changes on that same infrastructure.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | ---: | ---: |
| REQUIRED COURSES |  |  |
| CISCO 250 | Communications Cabling Installation | 2 |
| Total Units |  | $\mathbf{2}$ |

# ELECTRICAL TECHNOLOGY, GENERAL INDUSTRIAL ELECTRICIAN 

## Electrical Technology, General Industrial Electrician - Associate in Science

Plan Code: 2993
This program will prepare students for entry-level employment in the electrical maintenance and troubleshooting industry. Upon completion the student will be able to install, maintain, and repair electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop procedures for the successful installation, maintenance and troubleshooting of electrical systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| ELECT 204 | First Semester Fundamentals of DC Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | 28.5 |
| IN ADDITION, complete the following: |  |  |
| ELECT 245 | Electrical Code-Commercial | 3 |
| ELECT 250 | Electrical Code-Industrial | 3 |
| ELECT 271 | Electrical Cost Estimating 1 | 3 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 277 | Blueprint Reading for Electricians | 3 |
| Subtotal Units |  | 13 |
| Required Subtotal |  | 41.5 |
| Complete one of the | ollowing: ${ }^{1}$ |  |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
60
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Electrical Technology, General Industrial Electrician - Certificate of Achievement

Plan Code: 3993

This program will prepare students for entry-level employment in the electrical maintenance and troubleshooting industry. Upon completion the student will be able to install, maintain, and repair electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of electrical systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| ELECT 204 | First Semester Fundamentals of DC | 4 |
| :--- | :--- | ---: |
|  | Electricity |  |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | $\mathbf{2 8 . 5}$ |
| IN ADDITION, complete the following: |  |  |
| ELECT 245 | Electrical Code-Commercial | 3 |
| ELECT 250 | Electrical Code-Industrial | 3 |
| ELECT 271 | Electrical Cost Estimating 1 | 3 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 277 | Blueprint Reading for Electricians | 3 |
| Subtotal Units |  | $\mathbf{1 3}$ |
| Total Units |  | $\mathbf{4 1 . 5}$ |

## General Industrial Electrician Certificate of Achievement

Plan Code: 3933
This program will prepare students for entry-level employment in the electrical maintenance and troubleshooting industry. Upon completion, the student will be able to install, maintain, and repair electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of electrical systems.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 245 | Electrical Code-Commercial | 3 |
| ELECT 250 | Electrical Code-Industrial | 3 |
| ELECT 271 | Electrical Cost Estimating 1 | 3 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 277 | Blueprint Reading for Electricians | 3 |
| Total Units |  | $\mathbf{1 3}$ |

# ELECTRICAL TECHNOLOGY, HIGH VOLTAGE TEST TECHNICIAN 

## Electrical Technology, High Voltage Test Technician - Associate in Science

## Plan Code: 2995

This program will prepare students for entry-level employment in the high voltage testing and certification industry. NETA (InterNational Electrical Testing Association) is a group of member companies that specialize in the testing and certification of high voltage power distribution equipment. Upon completion of the Electrical Technology Certificate of Achievement and the High Voltage Test Technician Certificate of Achievement, the student will be able to test, maintain, and repair high voltage electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over-current protection and power distribution systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| ELECT 204 | First Semester Fundamentals of DC Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | 28.5 |
| IN ADDITION, complete the following: |  |  |
| ELECT 250 | Electrical Code-Industrial | 3 |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 265 | Conductors | 2 |
| ELECT 266 | Circuit Breakers | 2 |

ELECT 267 Switchgear and Switchboards ..... 2
ELECT 268 Transformers ..... 2
Subtotal Units ..... 12
Required Subtotal ..... 40.5
Complete one of the following: ${ }^{1}$ ..... 19-39
Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total60
1 Units for the major may be double-counted for LBCC GE, CSU GE, orIGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Electrical Technology, High Voltage Test Technician - Certificate of Achievement

## Plan Code: 3995

This program will prepare students for entry-level employment in the high voltage testing and certification industry. NETA (InterNational Electrical Testing Association) is a group of member companies that specialize in the testing and certification of high voltage power distribution equipment. Upon completion of the Electrical Technology Certificate of Achievement and the High Voltage Test Technician Certificate of Achievement, the student will be able to test, maintain, and repair high voltage electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over-current protection and power distribution systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| ELECT 204 | First Semester Fundamentals of DC | 4 |
| :--- | :--- | ---: |
| Electricity |  |  |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | $\mathbf{2 8 . 5}$ |


| IN ADDITION, complete the following: |  |  |
| :--- | :--- | ---: |
| ELECT 250 | Electrical Code-Industrial | 3 |
| ELECT 256 | High Voltage Safety Awareness | $\mathbf{1}$ |
| ELECT 265 | Conductors | 2 |
| ELECT 266 | Circuit Breakers | 2 |
| ELECT 267 | Switchgear and Switchboards | $\mathbf{2}$ |
| ELECT 268 | Transformers | $\mathbf{2}$ |
| Subtotal Units |  | $\mathbf{1 2}$ |
| Total Units | $\mathbf{4 0 . 5}$ |  |

## High Voltage Test Technician Certificate of Achievement

Plan Code: 3935

This program will prepare students for entry-level employment in the high voltage testing and certification industry. NETA (InterNational Electrical Testing Association) is a group of member companies that specialize in the testing and certification of high voltage power distribution equipment. Upon completion of the Electrical Technology Certificate of Achievement and the High Voltage Test Technician Certificate of Achievement, the student will be able to test, maintain, and repair high voltage electrical systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over-current protection and power distribution systems.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 250 | Electrical Code-Industrial | 3 |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 265 | Conductors | 2 |
| ELECT 266 | Circuit Breakers | 2 |
| ELECT 267 | Switchgear and Switchboards | 2 |
| ELECT 268 | Transformers | 2 |
| Total Units |  | $\mathbf{1 2}$ |

# ELECTRICAL TECHNOLOGY, SOLAR INSTALLATION AND MAINTENANCE 

## Electrical Technology, Solar Installation and Maintenance Associate in Science

Plan Code: 2994
This program will prepare students for entry-level employment in the solar electrical industry. Upon completion the student will be able to install, maintain, and repair solar electrical equipment and systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze various types of solar power generation systems and demonstrate the ability to properly size systems to meet demand.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 4 |
| ELECT 204 | First Semester Fundamentals of DC | 4 |
|  | Electricity |  |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | $\mathbf{2 8 . 5}$ |
| IN ADDITION, complete the following: |  |  |
| ELECT 247 | Electrical Code-Solar | 1 |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 262 | Solar 1-Grid-Tied Solar Photovoltaics | 3 |
| ELECT 263 | Solar 2-Advanced Solar Photovoltaics | 3 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 277 | Blueprint Reading for Electricians | 3 |
| Subtotal Units |  | $\mathbf{1 2}$ |
| Required Subtotal |  | $\mathbf{4 0 . 5}$ |

Complete one of the following: ${ }^{1}$
Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or
IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60
degree-applicable units.

## Electrical Technology, Solar Installation and Maintenance Certificate of Achievement

## Plan Code: 3994

This program will prepare students for entry-level employment in the solar electrical industry. Upon completion of the Electrical Technology Certificate of Achievement and the Solar Installation and Maintenance Certificate of Achievement, the student will be able to install, maintain, and repair solar electrical equipment and systems in a safe and workmanlike manner

## Program Student Learning Outcomes

- Analyze various types of solar power generation systems and demonstrate the ability to properly size systems to meet demand.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 4 |
| ELECT 204 | First Semester Fundamentals of DC |  |
|  | Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | 28.5 |
| IN ADDITION, complete the following: |  |  |
| ELECT 247 | Electrical Code-Solar | 1 |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 262 | Solar 1-Grid-Tied Solar Photovoltaics | 3 |
| ELECT 263 | Solar 2-Advanced Solar Photovoltaics | 3 |
| ELECT 275 | Electrical Pipe Bending | 1 |


| ELECT 277 | Bueprint Reading for Electricians |
| :---: | :---: |
| Total Units |  |
| Solar I Certific | ation and Maintenance f Achievement |

Plan Code: 3934
This program will prepare students for entry-level employment in the solar electrical industry. Upon completion of the Electrical Technology Certificate of Achievement and the Solar Installation and Maintenance Certificate of Achievement, the student will be able to install, maintain, and repair solar electrical equipment and systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Analyze various types of solar power generation systems and demonstrate the ability to properly size systems to meet demand.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 247 | Electrical Code-Solar | $\mathbf{1}$ |
| ELECT 256 | High Voltage Safety Awareness | $\mathbf{1}$ |
| ELECT 262 | Solar 1-Grid-Tied Solar Photovoltaics | 3 |
| ELECT 263 | Solar 2-Advanced Solar Photovoltaics | 3 |
| ELECT 275 | Electrical Pipe Bending | $\mathbf{1}$ |
| ELECT 277 | Blueprint Reading for Electricians | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 2}$ |

## ELECTRICAL TECHNOLOGY, TRAFFIC SIGNAL TECHNICIAN

## Electrical Technology, Traffic Signal Technician - Associate in Science

## Plan Code: 2996

This program will prepare students for entry-level employment in the traffic signal maintenance and troubleshooting industry. Most of this work is done by technicians employed by cities where the traffic signal systems are located. Upon completion the student will be able to install, maintain, and repair traffic signal systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop procedures for the successful installation, maintenance and troubleshooting of Traffic Signal systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

This degree requires the completion of General Education coursework plus the following

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| ELECT 204 | First Semester Fundamentals of DC Electricity | 4 |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | 28.5 |
| IN ADDITION, complete the following: |  |  |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 280 | Traffic Signal Systems 1 | 3 |
| ELECT 284 | Traffic Signal Controllers \& Digital Systems | 3 |
| ELECT 285 | Traffic Signal Inspection and Safety | 2 |
| Subtotal Units |  | 10 |
| Required Subtotal |  | 38.5 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |

Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
60
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Electrical Technology, Traffic Signal Technician - Certificate of Achievement 

Plan Code: 3996
This program will prepare students for entry-level employment in the traffic signal maintenance and troubleshooting industry. Most of this work is done by technicians employed by cities where the traffic signal systems are located. Upon completion the student will be able to install, maintain, and repair traffic signal systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of Traffic Signal systems.


## Program Admission Requirement

New students must attend an Electrical orientation prior to enrollment. The program requisite is in place to ensure the safety and health awareness of LBCC electrical students.

## Program Requirements

## Code Number Course Title Units

## REQUIRED COURSES

| ELECT 204 | First Semester Fundamentals of DC | 4 |
| :--- | :--- | ---: |
| Electricity |  |  |
| ELECT 209 | Second Sem Fund of Motors/Generators | 4 |
| ELECT 212 | Third Semester Fund of AC Electricity | 4 |
| ELECT 214 | Fourth Semester AC Principles \& Pract | 4 |
| ELECT 225 | Algebra and Trigonometry for Technicians | 4 |
| ELECT 240 | Introduction to National Electrical Code | 3 |
| ELECT 242 | Electrical Code-Grounding | 1.5 |
| ELECT 253 | OSHA Standards for Construction Safety | 2 |
| ELECT 435A | Motor Control Wiring and Troubleshooting | 2 |
| Subtotal Units |  | $\mathbf{2 8 . 5}$ |
| IN ADDITION, complete the following: |  |  |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 280 | Traffic Signal Systems 1 | 3 |
| ELECT 284 | Traffic Signal Controllers \& Digital Systems | 3 |
| ELECT 285 | Traffic Signal Inspection and Safety | 2 |
| Subtotal Units |  | $\mathbf{1 0}$ |
| Total Units |  | $\mathbf{3 8 . 5}$ |

## Traffic Signal Technician - Certificate of Achievement

## Plan Code: 3936

This program will prepare students for entry-level employment in the traffic signal maintenance and troubleshooting industry. Most of this work is done by technicians employed by cities where the traffic signal systems are located. Upon completion of the Electrical Technology Certificate of Achievement and the Traffic Signal Technician Certificate of Achievement, the student will be able to install, maintain, and repair traffic signal systems in a safe and workmanlike manner.

## Program Student Learning Outcomes

- Develop procedures for the successful installation, maintenance and troubleshooting of Traffic Signal systems.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ELECT 256 | High Voltage Safety Awareness | 1 |
| ELECT 275 | Electrical Pipe Bending | 1 |
| ELECT 280 | Traffic Signal Systems 1 | 3 |
| ELECT 284 | Traffic Signal Controllers \& Digital Systems | 3 |
| ELECT 285 | Traffic Signal Inspection and Safety | 2 |
| Total Units |  | $\mathbf{1 0}$ |

## ELEMENTARY TEACHER EDUCATION

# Elementary Teacher Education Associate in Arts Transfer Degree 

Plan Code: 5019B/C

The cross-disciplinary courses that are part of this AA-T seek to inspire and prepare students, future educators, to teach in urban classrooms, to learn essential professional knowledge including professional teaching standards and ethics, to conduct fieldwork in order to learn how to meet the diverse needs of students and roles of the teacher, and to gain a broad foundation of knowledge across the disciplines that will be necessary for teaching elementary students. Students also develop critical reading, writing, and thinking skills that are pertinent to working in the era of standards-based classroom instruction.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate introductory subject matter competency and knowledge of integrated studies found in liberal studies.
- Summarize practical knowledge of the teaching profession after completing 45 hours of fieldwork in a public elementary classroom.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| BIO 41/41H | Contemporary Biology | 3 |
| BIO 41L | Contemporary Biology Laboratory | 1 |
| CDECE 45 | Child \& Adolescent Development DS1 | 3 |
| CHEM 4 or PHYS 4 | Survey of Chemistry and Physics Survey of Chemistry and Physics | 4 |
| COMM 10/10H | Elements of Public Speaking | 3 |
| EDUC 20 | Intro to Elementary Classroom Teaching | 3 |
| ENGL 1 <br> or ENGL 1H <br> or ENGL 1S <br> or ESL 1S | Reading and Composition <br> Honors Reading and Composition <br> Reading and Composition with Support <br> College Writing for Non-Native Speakers | 4-5 |
| ENGL 2 | Introduction to Literature/Composition | 4 |
| GEOL 10 | Earth Science for Educators | 4 |
| GEOG 40 | World Regional Geography | 3 |
| HIST 2B | World History to 1500 | 3 |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) | 3 |
| MATH 28 | Mathematics for Elementary Teaching I | 3 |
| POLSC 1/1H | Introduction to Government | 3 |
| Subtotal Units |  | 44-45 |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |
| ENGL 3/3H | Argumentative and Critical Writing (4) |  |



To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Educational Aide I - Certificate of Achievement

Plan Code: 3618

This program is designed to prepare students for a variety of entrylevel positions in today's education industry such as teacher assistants, instructional aides, and tutors. Upon completion, students will have developed knowledge of the teaching profession, qualities of effective teachers, tutors, and teaching assistants, foundations of the American education system, and critical issues in diverse contemporary classrooms in accordance with the California Standards for the Teaching Profession. Students will develop knowledge and practice with contextualized application of grade TK-12 state content standards such as Next Generation Science Standards, Common Core State Standards in English and mathematics, and technology standards.

## Program Student Learning Outcomes

- Demonstrate introductory subject matter competency and knowledge of integrated studies found in liberal studies.
- Summarize practical knowledge of the teaching profession after completing 45 hours of fieldwork in a public elementary classroom.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CDECE 45 | Child \& Adolescent Development DS1 | 3 |
| COMM 10/10H | Elements of Public Speaking | 3 |
| Subtotal Units |  | 6 |

IN ADDITION, complete TWO (2) of the following courses:

| EDUC 10 | Introduction to Teaching and Learning (1) |  |
| :--- | :--- | ---: |
| EDUC 20 | Intro to Elementary Classroom Teaching (3) |  |
| EDUC 40 | Introduction to Educational Technology (1) |  |
| EDUC 130 | Intro to Secondary Classroom Teaching (2) |  |
| EDUC 271WE | Career Work Experience in Teacher Ed (1-4) |  |
| Subtotal Units |  | $\mathbf{2 - 7}$ |
| Total Units |  | $\mathbf{8 - 1 3}$ |

## Educational Aide II - Certificate of Achievement

## Plan Code: 3617

This program is designed to prepare students for a variety of entrylevel positions in today's education industry such as teacher assistants, instructional aides, after school program assistants, and tutors. Upon completion, students will have developed knowledge of the teaching profession, qualities of effective teachers, tutors, and teaching assistants, foundations of the American education system, and critical issues in diverse contemporary classrooms in accordance with the California Standards for the Teaching Profession. Students will develop knowledge and practice with contextualized application of grade TK-12 state content standards such as Next Generation Science Standards, Common Core State Standards in English and mathematics, and technology standards.

## Program Student Learning Outcomes

- Demonstrate introductory subject matter competency and knowledge of integrated studies found in liberal studies.
- Summarize practical knowledge of the teaching profession after completing 45 hours of fieldwork in a public elementary classroom.


## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| CDECE 45 | Child \& Adolescent Development DS1 | 3 |
| MATH 28 | Mathematics for Elementary Teaching I | 3 |
| GEOL 10 | Earth Science for Educators | 4 |
| EDUC 40 | Introduction to Educational Technology | 1 |
| Subtotal Units |  | 11 |
| IN ADDITION, complete ONE (1) course from the following: |  |  |
| EDUC 10 | Introduction to Teaching and Learning (1) |  |
| EDUC 20 | Intro to Elementary Classroom Teaching (3) |  |
| EDUC 130 | Intro to Secondary Classroom Teaching (2) |  |
| Subtotal Units |  | 1-3 |
| IN ADDITION, complete FOUR (4) units from the following: |  |  |
| $\begin{aligned} & \mathrm{BIO} 41 / 41 \mathrm{H} \\ & \& \mathrm{BIO} 41 \mathrm{~L} \end{aligned}$ | Contemporary Biology (3) and Contemporary Biology Laboratory (1) |  |
| CHEM/PHYS 4 | Survey of Chemistry and Physics (4) |  |
| Subtotal Units |  | 4 |
| IN ADDITION, complete THREE (3) units from the following: |  |  |
| MUSIC 40/40H | Appreciation of Music (3) |  |
| TART 25 | Introduction to Theatre (3) |  |
| Subtotal Units |  | 3 |
| Total Units |  | 19-21 |

# Educator Workforce Preparation Certificate of Competency 

Plan Code: 6613

This program is designed to prepare students for effective entry into and advancement in the public school and educator workforce. This program prepares students for satisfactory completion of education course required fieldwork including a program clearance overview, fieldwork placement and a basic fieldwork training related to job expectations/ rules and observation protocols. It offers additional preparation in career planning, time management, job search and resume development as well as other supports for entry into and advancement in the educator workforce.

## Program Student Learning Outcomes

- Create an action plan to ensure successful completion of EDUC course fieldwork in a public school classroom.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| EDUC 650 | Teacher Preparation Orientation | 9 |
| COUNS 650 | Career Planning and College Success | 54 |
| Total Hours |  | 63 |

## ENGINEERING

The Engineering program is to foster an environment that both challenges and supports its students. The department is committed to continuous revisions and improvements of the curriculum, making real world connections, and incorporating technology. The department employs an assortment of assessment techniques, provides a variety of teaching styles, and maintains intervention plans for students who might be having difficulty.

## Engineering - Associate in Science

Plan Code: 2520
This program provides a student with an introductory education to a range of concepts in various fields of engineering. A student will gain knowledge pertaining to Electrical, Mechanical, Civil, and Computer Engineering studies. This program may also facilitate transfer for a fouryear engineering degree.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- To serve students for the fulfillment of their own personal goals.
- To serve students to meet career/transfer requirements.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| CHEM 1A | General Chemistry | 5.5 |
| ENGL 1 | Reading and Composition | 4-5 |
| or ENGL 1H | Honors Reading and Composition |  |
| or ENGL 1S | Reading and Composition with Support |  |
| or ESL 1S | College Writing for Non-Native Speakers |  |
| ENGR 3B | Advanced Engr Graphics \& 3D CAD Drafting | 3 |
| ENGR 17 | Electrical Engineering Circuits | 3 |
| ENGR 17L | Electrical Engineering Circuits Lab | 1 |
| ENGR 44 | Materials Science and Engineering | 3 |
| ENGR 35 | Statics | 3 |
| ENGR 50 | Introduction to Engineering | 1 |
| ENGR 54 | Computer Methods | 3.5 |
| MATH 80 | Third Calculus Course | 5 |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics | 5.5 |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M | 4.5 |
| Required Subtotal |  | 42-43 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## ENGINEERING TECHNOLOGY

The Engineering Technology program provides students with the fundamentals of manufacturing and engineering technology. The courses are designed for the purpose of creating technical talent to meet tomorrow's needs in a highly competitive and automated industrial workforce. Students will have the necessary manufacturing and engineering technical skills, knowledge, and attitude to succeed in this rapidly changing field. The program has three specializations; aerospace, industrial and electrical technologies. Aerospace Engineering Technology, teaches the fundamentals of engineering design, manufacturing for the aerospace industry, and engineering design for the production of new technologies. Industrial Engineering Technology teaches the fundamentals of engineering design, machine tool technology, and advanced metal fabrication technologies. Electrical Engineering Technology teaches the fundamentals of engineering design, electronics and electrical automation.

## Engineering Technology - Associate in Science

Plan Code: 2521
This program provides students with a fundamental knowledge of the, engineering technology field, engineering design and principles of engineering technology. This degree program develops students' critical thinking skills through application of principles of engineering to solve design, manufacturing and automation problems in the field. Students will be able to design and create products by selecting appropriate materials and tools while applying tolerancing standards for quality products This program prepares students for transfer to a California State University.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply principles of engineering technology to design problems and constraints.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| PHYS 2A | General Physics | 4.5 |
| PHYS 2B | General Physics | 4.5 |
| MATH 60/60H | First Calculus Course | 5 |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| Subtotal Units |  | $\mathbf{2 2}$ |

IN ADDITION, complete THREE (3) units from the following:

| CAD 1 | Intro Computer Aided Design SolidWorks (3) |
| :--- | :--- |
| CAD 2 | Intro to Computer Aided Design AutoCAD (3) |
| CAD 3 | Intro to Computer Aided Design CATIA (3) |

Subtotal Units

## Required Subtotal

Complete one of the following: ${ }^{1}$ ..... 19-39
Plan A

Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Engineering Technology - Certificate of Achievement

Plan Code: 3521

This program provides students with a fundamental knowledge of the, engineering technology field, engineering design, and principles of engineering technology. This certificate program develops students' critical thinking skills through applying the principles of engineering to solve design, manufacturing and automation problems in the field. Students will be able to create and innovate on products and manufacturing processes by, recognizing, analyzing real world processes to improve process to eliminate waste in lean manufacturing settings.

## Program Student Learning Outcomes

- Apply principles of engineering technology to design problems and constraints.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| PHYS 2A | General Physics | 4.5 |
| PHYS 2B | General Physics | 4.5 |
| MATH 60/60H | First Calculus Course | 5 |
| ETEC 60 | Material Science for Engineering Tech | $\mathbf{3}$ |
| CAD 4 | Geometric Dimensioning and Tolerancing | $\mathbf{3}$ |
| Subtotal Units |  | $\mathbf{2 2}$ |
| IN ADDITION, complete THREE (3) units from the following: |  |  |
| CAD 1 | Intro Computer Aided Design SolidWorks (3) |  |
| CAD 2 | Intro to Computer Aided Design AutoCAD (3) |  |
| CAD 3 | Intro to Computer Aided Design CATIA (3) |  |
| Subtotal Units |  | $\mathbf{3}$ |
| Total Units |  | $\mathbf{2 5}$ |

## Engineering Technology Advanced Certificate of Achievement

[^5]engineering technology and digital electronics. This program develops students' critical thinking skills through application of principles of engineering technology to solve design, manufacturing and automation problems in the field. Students will be able to design, create and innovate products by selecting appropriate materials and tools while applying engineering technology principles for quality products.

## Program Student Learning Outcomes

- Apply advanced principles of engineering technology to design problems and constraints
- Create and design robotic tools using automated equipment.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ETEC 10 | Introduction to Engineering Technology | 2 |
| ETEC 20 | Introduction to Engineering and Design | 3 |
| ETEC 30 | Principles of Engineering Technology | 3 |
| ETEC 40 | Electronics for Engineering Technology | 3 |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| PHYS 2A | General Physics | 4.5 |
| PHYS 2B | General Physics | 4.5 |
| MATH 60/60H | First Calculus Course | 5 |
| CAD 4 | Geometric Dimensioning and Tolerancing | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| Subtotal Units |  | 34 |

IN ADDITION, complete THREE (3) units from the following:

| CAD 1 | Intro Computer Aided Design SolidWorks | 3 |
| :--- | :--- | :--- |
| or CAD 2 | Intro to Computer Aided Design AutoCAD |  |
| or CAD 3 | Intro to Computer Aided Design CATIA |  |

Total Units

## Engineering Automation Technology Certificate of Achievement

Plan Code: 3522
This program provides students the knowledge and training they need to enter a specialized career or enhance their skills for advancement in their job. Coursework completed while earning a Certificate can also be applied to an Associate Degree. The Engineering Automation Certificate provides a student the necessary skills for an entry level/internship opportunity in the automation field with a focus design, production and control of automation tools and equipment.

## Program Student Learning Outcomes

- Create and design robotic tools using automated equipment.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ADMT 50 | Advanced Manufacturing, Introduction | 3 |
| CAD 6 | Computer Aided Design Advanced | 3 |
| ELECT 230A | Robotics Technology - Design | 2 |
| ELECT 230B | Robotics Technology - Integration | 2 |


| ELECT 231 | Electro-Hydraulics and Pneumatic Systems | 2 |
| :--- | :--- | ---: |
| ETEC 60 | Material Science for Engineering Tech | 3 |
| MTFAB 280 | Introduction to Robotic Welding | 2.5 |
| Total Units |  | $\mathbf{1 7 . 5}$ |

## ENGLISH

The English Department affirms the college's commitment to the belief that reading and writing are central to any student's education. Writing is a fundamental means of developing critical thinking, communicating ideas, comparing cultures, understanding experience, arguing positions, reevaluating beliefs, celebrating creativity, and exploring the limits of the self. The aim is to offer students not only a chance to build specific skills, but also the opportunity to experience the value of those skills in a context of challenging academic dialogue.

## English - Associate in Arts Transfer Degree

Plan Code: 5003B/C

This program is designed to prepare students for upper division study in critical reading, writing, and thinking with possible emphases in English or comparative literature, create writing, rhetoric, and/or teacher preparation. The skills obtained through this degree will also prepare students for upper division study in other humanities-based disciplines such as film and video culture, philosophy, humanistic endeavors in the social sciences and history, and in media studies and journalism. Additionally, the intent of an ADT is to assist students in seamlessly transferring to a CSU. This degree requires students to demonstrate a wide range of reading and writing skills. These skills have a wide applicability for students, not only those interested in the Associate in Arts in English for Transfer Degree, but also for those with interests in any upper-level or graduate study.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Write academic prose with a clear purpose and effective logical, relevant support from sources.
- Develop and sustain a coherent interpretation of literature that acknowledges historical and cultural contexts.
- Compose poems and short works of fiction using various forms and techniques.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| Choose Option 1 or Option 2 from the following: |  |  |
| Option 1 |  |  |
| ENGL 2 | Introduction to Literature/Composition (4) |  |
| ENGL 3/3H | Argumentative and Critical Writing (4) |  |
| Subtotal Units |  | 8 |
| OR |  |  |
| Option 2 |  |  |
| ENGL 4 | Critical Analysis of Literature (4) |  |
| Subtotal Units |  | 4 |
| IN ADDITION, complete TWO (2) courses from LIST A: |  |  |
| LIST A |  |  |


| ENGL 41 | American Literature I (4) |
| :--- | :--- |
| ENGL 42 | American Literature II (4) |
| ENGL 44/44H | World Literature I (4) |
| ENGL 45/45H | World Literature II (4) |
| ENGL 46 | Survey of British Literature I (4) |
| ENGL 47 | Survey of British Literature II (4) |
| Subtotal Units |  |
| IN ADDITION, if Option 1 was selected for the REQUIRED CORE, |  |
| complete ONE (1) course from LIST B. Or, if Option 2 was selected <br> for the REQUIRED CORE, complete TWO (2) courses from LIST B: |  |
| LIST B |  |
| Any LIST A course not already used |  |
| ENGL 26 | Creative Writing 1 (3) |
| ENGL 33/33H | Mythology (4) |
| ENGL 35 | Interpreting the Short Story (3) |
| ENGL 43A | Introduction to Shakespeare (4) |
| ENGL 43B | Introduction to Shakespeare (4) |
| ENGL 48/48H | Modern \& Contemporary Literature (3) |
| ENGL 50A | Introduction to Poetry Writing (3) |
| ENGL 51A | Introduction to Fiction Writing (3) |
| Subtotal Units if Option 1 was selected | $\mathbf{3 - 4}$ |
| Subtotal Units if Option 2 was selected |  |

IN ADDITION, complete ONE (1) course from LIST C:
LIST C
Any LIST A or LIST B course not already used
ENGL $24 \quad$ College Grammar (4)
ENGL 32 Masterpieces/Asian Literature (in English)
(3)

ENGL $34 \quad$ Literature for Children and Young Adults (4)
ENGL $36 \quad$ The Novel (3)
ENGL 37 Science Fiction, Fantasy and Horror (3)
ENGL $38 \quad$ The Bible as Lit: The Old Testament (3)
ENGL 39 The Bible as Lit: Apocrypha/New Testament
(3)

ENGL 49/49H Film and Literature (3)
ENGL 52A Introduction to Novel Writing (3)
Subtotal Units 3-4
Required Subtotal 21-24
Complete one of the following: ${ }^{1}$ 37-39
Plan B
Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$
Degree Total
60

1 Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses
in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## English, Creative Writing - Associate in Arts

Plan Code: 1396
This degree prepares students for the development and publication of poetry, short fiction, novels, and non-fiction. Students earning this degree are primed for the upper division study of Creative Writing and related majors such as film, literature, and journalism. The benefits of a Creative Writing degree translate into a wide range of careers: author, technical writer, editor, copywriter, educator, business writer, freelance writer, and careers in marketing and advertising.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Compose poems and short works of fiction using various forms and techniques.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| ENGL 2 <br> or ENGL 3 <br> or ENGL 3H <br> or ENGL 4 <br> or ENGL 4H | Introduction to Literature/Composition <br> Argumentative and Critical Writing <br> Honors Argumentative \& Critical Writing <br> Critical Analysis of Literature <br> Honors Critical Analysis of Literature | 4 |
| ENGL 26 | Creative Writing 1 | 3 |
| Subtotal Units |  | 7 |
| IN ADDITION, complete NINE (9) units from the following: |  |  |
| ENGL 50A | Introduction to Poetry Writing (3) |  |
| ENGL 50B | Intermediate Poetry Writing (3) |  |
| ENGL 50C | Advanced Poetry Writing (3) |  |
| ENGL 50D | Writing and Publishing Poetry (3) |  |
| ENGL 51A | Introduction to Fiction Writing (3) |  |
| ENGL 51B | Intermediate Fiction Writing (3) |  |
| ENGL 51C | Advanced Fiction Writing (3) |  |
| ENGL 51D | Writing and Publishing Fiction (3) |  |
| ENGL 52A | Introduction to Novel Writing (3) |  |
| ENGL 52B | Intermediate Novel Writing (3) |  |
| ENGL 52C | Advanced Novel Writing (3) |  |
| ENGL 52D | Writing and Publishing The Novel (3) |  |
| ENGL 53A | Introduction to Creative Nonfiction (3) |  |
| Subtotal Units |  | 9 |
| IN ADDITION, complete THREE to FOUR (3-4) units from the following: |  |  |
| ENGL 24 | College Grammar (4) |  |
| ENGL 32 | Masterpieces/Asian Literature (in English) (3) |  |


| ENGL 33/33H | Mythology (4) |  |
| :---: | :---: | :---: |
| ENGL 34 | Literature for Children and Young Adults (4) |  |
| ENGL 35 | Interpreting the Short Story (3) |  |
| ENGL 36 | The Novel (3) |  |
| ENGL 37 | Science Fiction, Fantasy and Horror (3) |  |
| ENGL 38 | The Bible as Lit: The Old Testament (3) |  |
| ENGL 39 | The Bible as Lit: Apocrypha/New Testament (3) |  |
| ENGL 41 | American Literature I (4) |  |
| ENGL 42 | American Literature II (4) |  |
| ENGL 43A | Introduction to Shakespeare (4) |  |
| ENGL 43B | Introduction to Shakespeare (4) |  |
| ENGL 44/44H | World Literature I (4) |  |
| ENGL 45/45H | World Literature II (4) |  |
| ENGL 46 | Survey of British Literature I (4) |  |
| ENGL 47 | Survey of British Literature II (4) |  |
| ENGL 48/48H | Modern \& Contemporary Literature (3) |  |
| ENGL 49/49H | Film and Literature (3) |  |
| Subtotal Units |  | 3-4 |
| Required Subtotal |  | 19-20 |
| Complete one of the | ollowing: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as neede | to reach 60 degree-applicable units) ${ }^{2}$ |  |
| Minimum Degree To |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. |  | or $60$ |

## English, Language and Literature Associate in Arts

## Plan Code: 1395

This degree in the Language and Literature sequence prepares the student for baccalaureate study in English, Comparative Literature, and Liberal Arts.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop and sustain a coherent interpretation of literature that acknowledges historical and cultural contexts.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ENGL 1 | Reading and Composition | $4-5$ |
| or ENGL 1H | Honors Reading and Composition |  |


| or ENGL 1 S or ESL 1S | Reading and Composition with Support College Writing for Non-Native Speakers |  |
| :---: | :---: | :---: |
| ENGL 2 <br> or ENGL 4 <br> or ENGL 4H | Introduction to Literature/Composition <br> Critical Analysis of Literature <br> Honors Critical Analysis of Literature | 4 |
| Subtotal Units |  | 8-9 |
| IN ADDITION, complete TWELVE (12) units from the following courses, of which EIGHT (8) units must be a year's survey sequence (English, American or World): |  |  |
| ENGL 41 | American Literature I (4) |  |
| ENGL 42 | American Literature II (4) |  |
| ENGL 44/44H | World Literature I (4) |  |
| ENGL 45/45H | World Literature II (4) |  |
| ENGL 46 | Survey of British Literature I (4) |  |
| ENGL 47 | Survey of British Literature II (4) |  |
| Subtotal Units |  | 12 |
| IN ADDITION, complete SIX to SEVEN (6-7) units from the following: |  |  |
| ENGL 3/3H | Argumentative and Critical Writing (4) |  |
| ENGL 24 | College Grammar (4) |  |
| ENGL 32 | Masterpieces/Asian Literature (in English) (3) |  |
| ENGL 33 | Mythology (4) |  |
| ENGL 34 | Literature for Children and Young Adults (4) |  |
| ENGL 35 | Interpreting the Short Story (3) |  |
| ENGL 36 | The Novel (3) |  |
| ENGL 37 | Science Fiction, Fantasy and Horror (3) |  |
| ENGL 38 | The Bible as Lit: The Old Testament (3) |  |
| ENGL 39 | The Bible as Lit: Apocrypha/New Testament (3) |  |
| ENGL 43A | Introduction to Shakespeare (4) |  |
| ENGL 43B | Introduction to Shakespeare (4) |  |
| ENGL 48/48H | Modern \& Contemporary Literature (3) |  |
| ENGL 49/49H | Film and Literature (3) |  |
| Subtotal Units |  | 6-7 |

IN ADDITION, complete SIX (6) units from any of the courses listed in the Creative Writing Degree:

| ENGL 50A | Introduction to Poetry Writing (3) |
| :--- | :--- |
| ENGL 50B | Intermediate Poetry Writing (3) |
| ENGL 50C | Advanced Poetry Writing (3) |
| ENGL 50D | Writing and Publishing Poetry (3) |
| ENGL 51A | Introduction to Fiction Writing (3) |
| ENGL 51B | Intermediate Fiction Writing (3) |
| ENGL 51C | Advanced Fiction Writing (3) |
| ENGL 51D | Writing and Publishing Fiction (3) |
| ENGL 52A | Introduction to Novel Writing (3) |
| ENGL 52B | Intermediate Novel Writing (3) |
| ENGL 52C | Advanced Novel Writing (3) |
| ENGL 52D | Writing and Publishing The Novel (3) |
| Subtotal Units |  |
| Required Subtotal |  |
| Complete one of the following: ${ }^{1}$ | $\mathbf{6 2 - 3 4}$ |

Plan A

Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## ENGLISH AS A SECOND LANGUAGE

Long Beach City College offers certificates of competency in the noncredit program for adults seeking to learn English as a Second Language (ESL).

## Workplace Language Skills for ESL

The Department of ESL and Linguistics is committed to enriching the quality of life for students and their families. The Workplace Language Skills Program is a 6-course series designed to prepare low to high intermediate-level ESL students for career success. The program focuses on the oral and written language skills students need to attain employment and advance in their careers. For more information on the English as a Second Language (ESL) Department, call 562-938-3037.

## English for Everyday - Level 1 Certificate of Competency

Plan Code: 6511
Students completing English for Everyday certificates will possess the English language skills necessary for most daily activities. They will have sufficient speaking, listening, reading, and writing skills for a wide variety of occupations such as retail, hospitality, transportation, or manufacturing.

## Program Student Learning Outcomes

- Create written communication utilizing the grammatical structures introduced at this level.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| ESL 640 | English for Everyday 0 | 108 |
| ESL 641 | English for Everyday 1 | 108 |
| Total Hours |  | $\mathbf{2 1 6}$ |

## English for Everyday - Level 2 Certificate of Competency

Plan Code: 6512
Students completing English for Everyday certificates will possess the English language skills necessary for most daily activities. They will have sufficient speaking, listening, reading, and writing skills for a wide variety of occupations such as retail, hospitality, transportation, or manufacturing.

## Program Student Learning Outcomes

- Create written communication utilizing the grammatical structures introduced at this level.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 642 | English for Everyday 2 | 108 |
| ESL 643 | English for Everyday 3 | 108 |
| Total Hours |  | $\mathbf{2 1 6}$ |

## English for Everyday - Level 3 Certificate of Competency

Plan Code: 6513

Students completing English for Everyday certificates will possess the English language skills necessary for most daily activities. They will have sufficient speaking, listening, reading, and writing skills for a wide variety of occupations such as retail, hospitality, transportation, or manufacturing.

## Program Student Learning Outcomes

- Create written communication utilizing the grammatical structures introduced at this level.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| ESL 644 | English for Everyday 4 | 108 |
| ESL 645 | English for Everyday 5 | 108 |
| Total Hours |  | $\mathbf{2 1 6}$ |

Students must master $70 \%$ or higher of the course concepts in order to be promoted into the next course in the sequence.

## ESL Literacy - Certificate of Competency

Plan Code: 6500
The program provides students with the basic English literacy skills needed to enter the first level of the English as Second Language classes at LBCC. Students will learn sound/letter relationships for pronunciation, spelling, reading and writing

## Program Student Learning Outcomes

- Identify, decode and produce basic list of 220 sight words.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 628 | Literacy for English Language Learners 1 | $\mathbf{2 7}$ |
| ESL 629 | Literacy for English Language Learners 2 | $\mathbf{2 7}$ |
| Total Hours |  | $\mathbf{5 4}$ |

# ESL Reading for Citizenship Certificate of Competency 

Plan Code: 6504
This certificate prepares students to learn simple past-tense verbs in order to better understand and answer questions on the U.S. citizenship exam. Students should consider enrolling in this certificate if they are beginning-level English language learners.

## Program Student Learning Outcomes

- Recognize and produce grammatically accurate forms of past tense questions to facilitate preparation for the U.S. Citizenship exam.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 630 | Reading for Citizenship 1 | 54 |
| ESL 631 | Reading for Citizenship 2 | 54 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## Intermediate Grammar - Certificate of Competency

Plan Code: 6506
Students completing the Certificate of Competency in Intermediate ESL Grammar will possess the English language grammar skills necessary for academic success at the intermediate level of credit reading and writing classes. This certificate is intended to assist non-native English- speaking students with their academic success.

## Program Student Learning Outcomes

- Possess the English language grammar skills necessary for academic success at the intermediate level of credit reading and writing classes
- Demonstrate linguistically accurate control of English verb tenses, identify the major parts of speech, recognize phrases, and control dependent and independent clauses.


## Program Requirements

Code Number Course Title Hours REQUIRED COURSES

| ESL 610A | Fundamentals of English Grammar 1 | 54 |
| :--- | :--- | ---: |
| ESL 610B | Fundamentals of English Grammar 2 | 54 |
| Total Hours |  | 108 |

## Intermediate Oral Skills - Certificate of Competency

Plan Code: 6505
Students completing the Certificate of Competency in Intermediate ESL Oral Skills will possess the English language oral skills necessary for success at the intermediate level of ESL.

## Program Student Learning Outcomes

- Possess the English language oral skills necessary for success at the intermediate level of ESL.
- Orally formulate and articulate opinions and judgments, synthesize attitudes and feelings, apply the principles of precise articulation of individual sounds, and relate knowledge of the sound system of English to writing and spelling conventions.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 613 | Conversation | 27 |
| ESL 615 | Accent Reduction | 108 |
| Total Hours |  | $\mathbf{1 3 5}$ |

# Intermediate Reading and Writing Certificate of Competency 

## Plan Code: 6507

Students completing the Certificate of Competency in Intermediate ESL Reading and Writing will possess the English language grammar skills necessary for academic success at the intermediate level of credit reading and writing classes.

## Program Student Learning Outcomes

- Possess the English language reading and writing skills necessary for success at the intermediate level of non-credit ESL.
- Recognize an increasing number of sight words, identify main ideas, write simple paragraphs, and employ systematic strategies for defining and acquiring academic vocabulary words.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 612 | Reading for Information and Pleasure | 27 |
| ESL 614 | Composition for ESL Students | 27 |
| ESL 618 | Vocabulary Development | 54 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## Reading Skills for ESL Students Level 1 - Certificate of Competency

Plan Code: 6501
Students completing the Reading Skills for ESL Students certificates will possess an English language reading level adequate for most daily activities. They will be ready for employment positions requiring the completion of forms, following written directions and instructions, and understanding short narratives.

## Program Student Learning Outcomes

Respond accurately to questions based on events in reading passages

| Program Requirements |  |  |
| :--- | :--- | :---: |
| Code Number $\quad$ Course Title | Hours |  |
| REQUIRED courses |  |  |
| ESL 602A | Reading Skills for ESL Students 1 | 27 |
| ESL 602B | Reading Skills for ESL Students 2 | 27 |
| Total Hours |  | $\mathbf{5 4}$ |

## Reading Skills for ESL Students Level 2 - Certificate of Competency

Plan Code: 6502
Students completing the Reading Skills for ESL Students certificates will possess an English language reading level adequate for most daily activities. They will be ready for employment positions requiring the completion of forms, following written directions and instructions, and understanding short narratives.

## Program Student Learning Outcomes

- Respond accurately to questions based on events in reading passages.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 602C | Reading Skills for ESL Students 3 | $\mathbf{2 7}$ |
| ESL 602D | Reading Skills for ESL Students 4 | $\mathbf{2 7}$ |
| Total Hours |  | $\mathbf{5 4}$ |

## Reading Skills for ESL Students Level 3 - Certificate of Competency

Plan Code: 6503
Students completing the Reading Skills for ESL Students certificates will possess an English language reading level adequate for most daily activities. They will be ready for employment positions requiring the completion of forms, following written directions and instructions, and understanding short narratives.

## Program Student Learning Outcomes

- Respond accurately to questions based on events in reading passages.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| ESL 602E | Reading Skills for ESL Students 5 | $\mathbf{2 7}$ |
| ESL 602F | Reading Skills for ESL Students 6 | $\mathbf{2 7}$ |
| Total Hours |  | $\mathbf{5 4}$ |

Students must master $70 \%$ or higher of the course concepts in order to be promoted into the next course in the sequence.

## Workplace Language Skills for ESL Level 1 - Certificate of Competency

Plan Code: 6508

Students will develop competency in workplace language skills at low-intermediate level and will be able to select and appropriately use standard organizational, cultural and linguistic features in English language presentations and professional autobiographies.

## Program Student Learning Outcomes

- ESL students will be able to competently use listening, speaking, reading and writing skills in the workplace at low-intermediate level.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 670 | Listen/Speak for Work for ESL Level 1 | $\mathbf{9 0}$ |
| ESL 671 | Read/Write for Work for ESL Level 1 | $\mathbf{9 0}$ |
| Total Hours |  | $\mathbf{1 8 0}$ |

## Workplace Language Skills for ESL Level 2 - Certificate of Competency

Plan Code: 6509
Students will develop competency in workplace language skills at an intermediate level and will be able to select and appropriately use standard organizational, cultural and linguistic features in job applications, professional resumes and in English language presentations.

## Program Student Learning Outcomes

- ESL students will be able to competently use listening, speaking, reading and writing skills in the workplace at an intermediate level.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 672 | Listen/Speak for Work for ESL Level 2 | 90 |
| ESL 673 | Read/Write for Work for ESL Level 2 | $\mathbf{9 0}$ |
| Total Hours |  | $\mathbf{1 8 0}$ |

## Workplace Language Skills for ESL Level 3 - Certificate of Competency

Plan Code: 6510
Students will develop competency in workplace language skills at high-intermediate level and will be able to select and appropriately use standard organizational, cultural and linguistic features in a mock job interview and in written discourse.

## Program Student Learning Outcomes

- Select and use conventional organizational, formatting and grammatical elements to compose and edit a cover letter.
- Select and use appropriate cultural and sociolinguistic norms for a U.S. style mock job interview.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ESL 674 | Listen/Speak for Work for ESL Level 3 | $\mathbf{9 0}$ |
| ESL 675 | Read/Write for Work for ESL Level 3 | $\mathbf{9 0}$ |
| Total Hours |  | $\mathbf{1 8 0}$ |

## FASHION DESIGN

The Fashion Design program at LBCC provide students with discipline specific skills to communicate effectively, think critically, and possess the knowledge of technology essential to employment in design related occupations within the fashion industry or the requisite foundation for transfer to a 4-year college or university.

## Fashion Design - Associate in Science

Plan Code: 2324
This program focuses on fundamental design principles and technical skills preparing students for an entry-level position in the field of fashion design, textile design, and trend forecasting. This foundational course of study introduces design principles and provides students with technical, practical and conceptual development skills. The degree introduces technology throughout the design process and prepares students to apply aesthetic principles and technical skills to execute a design from concept to finished garment. The degree may provide undergraduate requirements necessary for students wishing to transfer to a college or university in fashion design or related majors.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze fashion trends and textiles, and develop technical skills for apparel production.
- Demonstrate the ability to construct garments that express creativity and apply design principles.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 3 | Intro to Careers in Design/Merchandising | 2 |
| FASH 5 | Product Development | 2 |
| FASH 9 | Clothing Selection | 3 |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 20 | Introduction to the Fashion Industry | 3 |
| FASH 21 | Quick Sketch Croquis Drawing | 2 |
| or FASH 215 | Fashion Sketching I | 3 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 25 | Intermediate Apparel Construction | 3 |
| FASH 36 | Flat Pattern Drafting | 3 |
| FASH 37 | Pattern Draping | 3 |
| FASH 38A | Fashion Design I | 3 |
| FASH 38B | Fashion Design II | 3 |
| FASH 45 | Digital Fashion Illustration | 1.5 |
| FASH 46 | Advanced Digital Fashion Illustration | 3 |
| FASH 47 | 3D Fashion Design | 40.5 |
| Subtotal Units |  |  |
| IN ADDITION, complete 3.5 - 4 units from the following: |  |  |


| FASH 27 | Production Sewing (1.5) |
| :---: | :---: |
| FASH 32 | History of Fashion (3) |
| FASH 41 | Fashion Promotion (3) |
| FASH 200 | Trend Forecasting (1) |
| FASH 216 | Fashion Portfolio Development (2) |
| FASH 271WE | Work Experience-Fashion Design (1-4) |
| Subtotal Units | 3.5-4 |
| Required Subtotal | 44-44.5 |
| Complete one of the f | following: ${ }^{1}$ 19-39 |
| Plan A |  |
| Plan B |  |
| Plan C |  |
| Electives (as needed to | to reach 60 degree-applicable units) ${ }^{2}$ |
| Minimum Degree Tota | al 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. |  |

## Fashion Design - Certificate of Achievement

Plan Code: 3324

This program focuses on fundamental design principles and technical skills preparing students for entry-level position in the field of fashion design, textile design, and trend forecasting. This comprehensive course of study encompasses the breadth of design and provides students with skills to execute a design from concept to a finished garment. It focuses on incorporating technology throughout the design process, production processes, and includes specialty classes resulting in a professional design portfolio.

## Program Student Learning Outcomes

- Create an environment that promotes critical thinking, creativity, teamwork, soft skills, multicultural and global awareness that provides career opportunities in fashion.
- Analyze fashion trends and textiles, apply design principles and develop technical skills for apparel production.
- Compile a professional portfolio displaying a fashion collection.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 2 |
| FASH 5 | Product Development | 3 |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 25 | Intermediate Apparel Construction | 1.5 |
| FASH 27 | Production Sewing | 3 |
| FASH 32 | History of Fashion | 3 |
| FASH 36 | Flat Pattern Drafting | 3 |
| FASH 37 | Pattern Draping | 3 |
| FASH 38A | Fashion Design I | 3 |
| FASH 38B | Fashion Design II |  |


| FASH 38C | Fashion Design III | 3 |
| :--- | :--- | ---: |
| FASH 39 | Garment Technical Packages | 1 |
| FASH 41 | Fashion Promotion | 3 |
| FASH 45 | Digital Fashion Illustration | 3 |
| FASH 46 | Advanced Digital Fashion Illustration | 1.5 |
| FASH 47 | 3D Fashion Design | 3 |
| FASH 200 | Trend Forecasting | 1 |
| FASH 216 | Fashion Portfolio Development | 2 |
| FASH 258 | Swimwear | 1 |
| FASH 271WE | Work Experience-Fashion Design | $\mathbf{1 - 4}$ |
| Subtotal Units |  | $\mathbf{4 7 - 5 0}$ |


| IN ADDITION, complete TWO (2) units from the following: |  |
| :--- | :--- |
| FASH 21 | Quick Sketch Croquis Drawing (2) |
| FASH 215 | Fashion Sketching I (2) |
| Subtotal Units | $\mathbf{2}$ |


| IN ADDITION, complete THREE (3) units from the following: |  |
| :--- | :--- |
| FASH 3 | Intro to Careers in Design/Merchandising (2) |
| FASH 9 | Clothing Selection (3) |
| FASH 20 | Introduction to the Fashion Industry (3) |
| FASH 26 | Advanced Sewing and Tailoring Techniques |

(2)

FASH 213 Textile Surface Design (1)
Subtotal Units
Total Units


52-55

## Fashion Design: Custom Apparel Design - Certificate of Achievement

Plan Code: 3323

This program prepares students for entry-level positions such as custom apparel designer, costume designer, samplemaker, seamstress, alterations specialist, and tailor. The certificate is designed to prepare students to apply aesthetic principles and technical skills to execute a design from concept to a finished garment. It focuses on custom design throughout the design process and provides the foundation for starting a small apparel business.

## Program Student Learning Outcomes

- Apply design principles and creativity to select appropriate fabrics for the construction of garments that include proper supportive fabrics and linings.
- Analyze garment specifications, fabric qualities, identification of seams and construction details to develop offshore technical packages.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| FASH 9 | Clothing Selection | 3 |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 25 | Intermediate Apparel Construction | 2 |
| FASH 26 | Advanced Sewing and Tailoring Techniques | 1.5 |
| FASH 27 | Production Sewing |  |


| FASH 36 | Flat Pattern Drafting | 3 |
| :---: | :---: | :---: |
| FASH 37 | Pattern Draping | 3 |
| FASH 38A | Fashion Design I | 3 |
| FASH 38B | Fashion Design II | 3 |
| Subtotal Units |  | 27.5 |
| IN ADDITION, complete TWO to THREE (2-3) units from the following: |  |  |
| FASH 21 | Quick Sketch Croquis Drawing (2) |  |
| FASH 45 | Digital Fashion Illustration (3) |  |
| Subtotal Units |  | 2-3 |
| IN ADDITION, complete a minimum of FIVE (5) units from the following: |  |  |
| FASH 38C | Fashion Design III (3) |  |
| FASH 213 | Textile Surface Design (1) |  |
| FASH 258 | Swimwear (1) |  |
| FASH 271WE | Work Experience-Fashion Design (1-4) |  |
| GBUS 25 | Digital and Social Media (3) |  |
| MGMT 80 | Small Business Entrepreneurship (3) |  |
| Subtotal Units |  | 5 |
| Total Units |  | -35.5 |

## Fashion Design: Patternmaker/ Technical Design - Certificate of Achievement

Plan Code: 3319

This program prepares students for entry-level positions in the field of technical design, patternmaking, production, sourcing and quality control. It focuses on incorporating technology throughout the development process of offshore technical packages, patternmaking, and garment construction.

## Program Student Learning Outcomes

- Create an environment that promotes critical thinking, creativity, teamwork, soft skills, multicultural and global awareness that provides career opportunities in fashion.
- Calculate measurements to develop patterns and to determine pattern adjustments to achieve proper fit.
- Analyze garment specifications, fabric qualities, package specifications, identification of seams, construction details, trims, and labels to develop offshore technical packages.


## Program Requirements

## Code Number Course Title Units

 REQUIRED COURSES| FASH 3 | Intro to Careers in Design/Merchandising | 2 |
| :--- | :--- | ---: |
| FASH 5 | Product Development | 2 |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 25 | Intermediate Apparel Construction | 3 |
| FASH 27 | Production Sewing | 1.5 |
| FASH 36 | Flat Pattern Drafting | 3 |
| FASH 37 | Pattern Draping | 3 |


| FASH 38A | Fashion Design I | 3 |
| :--- | :--- | ---: |
| FASH 39 | Garment Technical Packages | 1 |
| FASH 45 | Digital Fashion Illustration | 3 |
| FASH 47 | 3D Fashion Design | 3 |
| FASH 244 | Computer Patternmaking | 32 |
| Subtotal Units |  |  |
| IN ADDITION, complete FOUR (4) units from the following: |  |  |
| COSA 1 | Computer Information Competency (1) |  |
| FASH 9 | Clothing Selection (3) |  |
| FASH 20 | Introduction to the Fashion Industry (3) |  |
| FASH 21 | Quick Sketch Croquis Drawing (2) |  |
| FASH 38B | Fashion Design II (3) | $\mathbf{4}$ |
| FASH 46 | Advanced Digital Fashion Illustration (1.5) | $\mathbf{3 6}$ |
| FASH 271WE | Work Experience-Fashion Design (1-4) |  |
| Subtotal Units |  |  |
| Total Units |  |  |

## Fashion Design: Wardrobe Designer/ Stylist - Certificate of Achievement

Plan Code: 3325
This program prepares students for entry-level positions in the field of fashion styling for retail, product advertising, celebrity styling and redcarpet events, wardrobe planning and film. This comprehensive course of study encompasses the breadth of styling, trend analysis, and contracts and budgeting.

## Program Student Learning Outcomes

- Analyze fashion trends and apply styling principles and budgeting skills to create a styled fashion photoshoot.


## Program Requirements

Code Number Course Title Units

## REQUIRED COURSES

| FASH 9 | Clothing Selection | 3 |
| :--- | :--- | ---: |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 32 | History of Fashion | 3 |
| FASH 41 | Fashion Promotion | 3 |
| FASH 200 | Trend Forecasting | 1 |
| FASH 210 | Fashion Styling | 2 |
| GBUS 25 | Digital and Social Media | 3 |
| Subtotal Units |  | $\mathbf{2 1}$ |

IN ADDITION, complete a minimum of FIVE (5) units from the following:

| ART 31 | Two Dimensional Design (3) |
| :--- | :--- |
| FASH 21 | Quick Sketch Croquis Drawing (2) |
| FASH 45 | Digital Fashion Illustration (3) |
| FASH 213 | Textile Surface Design (1) |
| FASH 271WE | Work Experience-Fashion Design (1-4) |
| MGMT 80 | Small Business Entrepreneurship (3) |

## Subtotal Units <br> 5 <br> Total Units <br> ..... 26

## Fashion Design - Advanced Apparel Construction - Certificate of Completion

Plan Code: 6064
Students will learn beginning through advanced construction techniques and traditional tailoring steps for jacket construction. The courses will cover appropriate fabric selection, proper fabric layout, cutting, and handling techniques for wovens, knits and slippery, difficult fabrics and complex patterns.

## Program Student Learning Outcomes

- Use standard sewing machines, specialized sewing machines, and pressing equipment to execute construction of beginning through advanced level garments that include proper seam finishes, facings and linings, zipper applications and other types of closures.
- Demonstrate appropriate fabric selection, proper fabric layout and cutting techniques.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 624 | Fundamentals of Apparel Construction | 90 |
| FASH 625 | Intermediate Apparel Construction | 90 |
| FASH 626 | Advanced Sewing and Tailoring Techniques | $\mathbf{7 2}$ |
| Total Hours |  | $\mathbf{2 5 2}$ |

## Fashion Design - Industrial Sewing and Factory Production Methods Certificate of Completion

## Plan Code: 6065

Students will learn construction techniques and methods of stitching for garment construction on specialized power industrial machines as applied to factory production methods in the garment manufacturing industry.

## Program Student Learning Outcomes

- Demonstrate techniques for construction of woven and knit garments using specialized industrial machines and assembly line mass production methods.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 624 | Fundamentals of Apparel Construction | 90 |
| FASH 625 | Intermediate Apparel Construction | 90 |
| FASH 627 | Production Sewing | $\mathbf{5 4}$ |
| Total Hours |  | $\mathbf{2 3 4}$ |

## Fashion Design - Swimwear Construction - Certificate of Completion

Plan Code: 6066
Students will learn construction techniques, pattern manipulation for swimwear design, and fitting of swimwear. Special emphasis is given to stretch fabrics, bra construction, elastic setting and elastic to fabric stretch ratios.

## Program Student Learning Outcomes

- Execute swimwear products to industry standards demonstrating proper construction using standard sewing machines and specialized sewing machines.
- Demonstrate appropriate stretch fabric selection, proper fabric layout and cutting techniques and industry accepted construction of bra cups, elastic application and stretch ratios, joining and finishing of seams, straps and design options.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 624 | Fundamentals of Apparel Construction | 90 |
| FASH 625 | Intermediate Apparel Construction | 90 |
| FASH 658 | Swimwear | 36 |
| Total Hours |  | $\mathbf{2 1 6}$ |

## Fashion Design - Textile Surface Design - Certificate of Completion

## Plan Code: 6063

Students will learn garment construction techniques and methods for specialty hand techniques of surface design on textiles. Students will gain experience in creating designs using industry standard techniques such as block printing, beading, embroidery, and tie dye. There are no material fees for the courses associated with this program.

## Program Student Learning Outcomes

- Demonstrate techniques for construction of woven and knit garments and create hand designed textiles and garment embellishments.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 613 | Textile Surface Design | 36 |
| FASH 624 | Fundamentals of Apparel Construction | 90 |
| FASH 630 | Fashion Design Laboratory | 27 |
| Total Hours |  | $\mathbf{1 5 3}$ |

## FASHION MERCHANDISING

The Fashion Merchandising program provides students with discipline specific skills and knowledge leading to employment in fashion merchandising (retail or manufacturing) or the requisite foundation for transfer to a 4-year college or university.

## Fashion Merchandising - Associate in Science

Plan Code: 2326
This program focuses on fundamental apparel development and technical skills preparing students for an entry-level position in the field of fashion buying, merchandising, product development, sourcing, production, retail sales and management, and fashion promotion. This foundational course of study introduces technology throughout the merchandising and planning process and explores sourcing and the global supply chain. The degree may provide undergraduate requirements necessary for students wishing to transfer to a college or university in fashion design or related majors.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze fashion trends and textiles and apply retail merchandising and buying principles.
- Develop teamwork and technical skills for apparel development.
- Calculate mark-ups, markdowns and open-to buy using formulas.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 3 | Intro to Careers in Design/Merchandising | 2 |
| FASH 5 | Product Development | 2 |
| FASH 9 | Clothing Selection | 3 |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 20 | Introduction to the Fashion Industry | 3 |
| FASH 23 | Fashion/Merchandise Buying | 4 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 32 | History of Fashion | 3 |
| FASH 45 | Digital Fashion Illustration | 3 |
| FASH 46 | Advanced Digital Fashion Illustration | 1.5 |
| OR | 3D Fashion Design | 3 |
| FASH 47 | Trend Forecasting | 1 |
| FASH 200 |  | $\mathbf{2 8 . 5}$ |
| Required Subtotal |  | $19-39$ |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSA 1 | Computer Information Competency | 1 |
| FASH 271WE | Work Experience-Fashion Design | $1-4$ |
| IBUS 20 | Export-Import Business Practices | 3 |

## Fashion Merchandising - Certificate of Achievement

Plan Code: 3326

This program focuses on fundamental apparel development and technical skills preparing students for an entry-level position in the field of fashion buying, merchandising, product development, sourcing, production, retail sales and management, and fashion promotion. This comprehensive course of study introduces technology throughout the merchandising and planning process and explores sourcing and the global supply chain. Students complete a series of required courses and then choose an option in either Buying or Product Development.

## Program Student Learning Outcomes

- Create an environment that promotes critical thinking, creativity, teamwork, soft skills, multicultural and global awareness that provides career opportunities in fashion.
- Analyze fashion trends and textiles, apply retail merchandising and buying principles, and obtain technical skills for apparel development.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FASH 3 | Intro to Careers in Design/Merchandising | 2 |
| FASH 5 | Product Development | 2 |
| FASH 9 | Clothing Selection | 3 |
| FASH 10 | Textile Fibers and Fabrics | 3 |
| FASH 20 | Introduction to the Fashion Industry | 3 |
| FASH 23 | Fashion/Merchandise Buying | 4 |
| FASH 24 | Fundamentals of Apparel Construction | 3 |
| FASH 32 | History of Fashion | 3 |
| FASH 41 | Fashion Promotion | 3 |
| FASH 45 | Digital Fashion Illustration | 3 |
| FASH 271WE | Work Experience-Fashion Design | $\mathbf{1 - 4}$ |
| Subtotal Units |  | $\mathbf{3 0 - 3 3}$ |

IN ADDITION, choose emphasis in Option 1 (Buying) or Option 2 (Product Development):

## Option 1: Buying

Complete SIX (6) units from the following:
COSA 1 Computer Information Competency (1)

| FASH 200 | Trend Forecasting (1) |
| :--- | :--- |
| FASH 216 | Fashion Portfolio Development (2) |
| MKTG 40 | Salesmanship (3) |
| MKTG 41 | Marketing Communications (3) |
| IBUS 1 | Introduction to International Business (3) |
| IBUS 20 | Export-Import Business Practices (3) |
| Subtotal Units for Option 1 |  |
| Option 2: Product Development |  |
| Complete SIX (6) units from the following: |  |
| COSA 1 | Computer Information Competency (1) |
| FASH 27 | Production Sewing (1.5) |
| FASH 36 | Flat Pattern Drafting (3) |
| FASH 39 | Garment Technical Packages (1) |
| FASH 46 | Advanced Digital Fashion Illustration (1.5) |
| FASH 47 | 3D Fashion Design (3) |
| FASH 216 | Fashion Portfolio Development (2) |
| IBUS 1 | Introduction to International Business (3) |

## FILM PRODUCTION

## Film Production - Certificate of Achievement

Plan Code: 3257
This program is designed to prepare students for entry-level and selfemployment in the film and television fields. Students are given basic skills in all aspects of film and video production and post-production: camera operation, lighting and cinematography, sound recording, video editing, sound design and creation, color correction and visual effects. Emphasis is placed on hands-on, experiential learning. Students are given access to professional-level equipment to produce both individual and collaborative projects and gain the necessary skills to enter the entertainment workforce.

## Program Student Learning Outcomes

- Develop specific job skills related to pre-production, production, and post-production career paths in the Film \& Television industry.


## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| FILM 1 | Introduction to Film Studies | 3 |
| FILM 20 | Fundamentals of Digital Film Production | 3 |
| FILM 25 | Introduction to Digital Cinematography | 3 |
| R_TV 16 | Non-Linear Video \& Film Editing | 3 |
| FILM 70WE | Work Experience-Film | 3 |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) | 3 |
| Subtotal Units |  | 18 |
| JOB SKILLS COURSES |  |  |
| IN ADDITION, complete 1.5-2 units from the following: |  |  |
| FILM 220 | Assistant Camera Skills | 0.5 |
| FILM 221 | Film Grip and Electric Skills | 0.5 |
| FILM 222 | Assistant Editor Skills | 0.5 |
| FILM 223 | Film Set Management Skills | 1 |
| Subtotal Units |  | 1.5-2 |
| IN ADDITION, complete SIX (6) units from the following: |  |  |
| DMA 25 | Motion Graphics | 3 |
| FILM 21 | Intermediate Digital Film Production | 3 |
| FILM 40 | Introduction to Screenwriting | 3 |
| Subtotal Units |  | 6 |
| Total Units |  | .5-26 |

## FILM, TELEVISION \& <br> ELECTRONIC MEDIA

## Film, Television, and Electronic Media - Associate in Science Transfer Degree

Plan Code: 5507B/C

The Associate in Science in Film, Television and Electronic Media for Transfer is designed to provide students the opportunity to complete the lower-division major and general education preparation for transferring to a CSU as a Film, Television and Electronic Media major. The study of Film, Television and Electronic Media serves two purposes: it gives students the basic skills of media analysis and the basic technical skills and knowledge of media production. Students learn to analyze media and articulate the historical, social, and aesthetic functions of that media and also learn the basic production practices that goes into making film/ tv/web content. Coursework familiarizes students with classic film/tv/ media works and standard production techniques to build a foundation for future production and/or analytical work. The goal of this curriculum is a comprehensive preparation for further academic study and ultimately a baccalaureate degree for those considering professional careers and/or admission to a graduate program.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze film, television and/or media works for formal and thematic meaning.
- Demonstrate basic operational skills of film, television, and/or media production and post-production technologies.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| Complete TWO (2) courses from the following: |  |  |
| FILM 1 | Introduction to Film Studies | 3 |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 4 <br> or FILM 40 | Writing and Production Planning Introduction to Screenwriting | 3 |
| Subtotal Units |  | 6 |
| IN ADDITION, complete ONE (1) course from each Area in LIST A: |  |  |
| LIST A |  |  |
| Area 1: Audio |  |  |
| R_TV 21 | Radio Production | 3 |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) | 3 |
| Area 2: Video or Film Production |  |  |
| $\begin{aligned} & \text { FILM } 20 \\ & \text { or R_TV } 14 \end{aligned}$ | Fundamentals of Digital Film Production Electronic Field Production | 3 |
| FILM 21 | Intermediate Digital Film Production | 3 |


| R_TV 13 | Television Production | 3 |
| :---: | :---: | :---: |
| Subtotal Units |  | 6 |
| IN ADDITION, complete ONE (1) course from LIST B: |  |  |
| LIST B |  |  |
| Any LIST A course not already used |  |  |
| ART 2 | Art and Civilization | 3 |
| ART 10 | Art Appreciation | 3 |
| FILM 2A | Film History I | 3 |
| FILM 2B | Film History II | 3 |
| Subtotal Units |  | 3 |
| IN ADDITION, complete ONE (1) course from LIST C: |  |  |
| LIST C |  |  |
| Any LIST A or LIST B course not already used |  |  |
| DMA 25 | Motion Graphics | 3 |
| FILM 10 | Film Genres | 3 |
| FILM 11 | Film Directors and Artists | 3 |
| FILM 25 | Introduction to Digital Cinematography | 3 |
| FILM 70WE | Work Experience-Film | 3 |
| or R_TV 70WE | Work Experience-Radio,TV |  |
| R_TV 8 | Introduction to Media Production | 3 |
| R_TV 10 | Non-Fiction/Reality Show Production | 3 |
| R_TV 16 | Non-Linear Video \& Film Editing | 3 |
| R_TV 37 | Radio/Television Management and Sales | 3 |
| R_TV 40 | On-Camera Performance | 3 |
| Subtotal Units |  | 3 |
| Required Subtotal |  | 18 |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |  |
| Degree Total |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |  |
| To earn an associat semester units that either the IGETC pat units. Students mus coursework to recei in the major must be associate degree fo local graduation req | degree for transfer, a student must comple re eligible for transfer to a CSU that consis ern or CSU GE breadth and a major of at leas have a minimum GPA of 2.0 in all CSU-tran an associate degree for transfer and all c completed with a C or better. Students ear ransfer will not be required to complete any rements. |  |

## FINANCIAL LITERACY <br> Financial Literacy - Certificate of Competency

Plan Code: 6541
This program provides students the essential skills for personal money management. Students gain confidence as they learn about budgeting, saving, debt, credit, as well as education, housing, transportation and investing options. Students will create an action plan to improve their quality of life and reach their educational, professional and economic goals.

## Program Student Learning Outcomes

- Create a personal financial plan based on one's vision and goals.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MONEY 690 | Money Basics and Goal Setting | $\mathbf{9}$ |
| MONEY 695 | Your Personal Financial Plan | $\mathbf{9}$ |
| Total Hours |  | $\mathbf{1 8}$ |

## FIRE SCIENCE

The Fire Science program prepares students for careers in the fire service and enhances skills for those who are currently employed in that area.

## Fire Science - Associate in Science

## Plan Code: 2805

Students are educated and trained in the technical fields relating to fire and safety practices. This program also provides partial lower division preparation for the baccalaureate degree in this field. This Associate Degree will prepare students for entry to a fire academy and for career advancement for those already employed in a fire-related industry.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Explore the history, development, structure, and functions of the American fire service.
- Analyze, interpret, and evaluate prevention/protection/fire-fighting theories, policies, practices, and procedures to develop strategies to prevent, control, and fight fires.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| FIRE 1 | Fire Protection Organization | 3 |
| FIRE 2 | Fire Prevention Technology | 3 |
| FIRE 3 | Fire Protection Equipment and Systems | 3 |
| FIRE 4 | Building Construction | 3 |
| FIRE 5 | Fire Behavior and Combustion | 3 |
| Subtotal Units |  | 15 |
| IN ADDITION, complete NINE (9) units from the following: |  |  |
| EMT 251 | Emergency Medical Technician (4) |  |
| EMT 251L | Emergency Medical Technician Laboratory (2) |  |
| FIRE 53 | Fire Hydraulics (3) |  |
| FIRE 54 | Hazardous Materials 1 (3) |  |
| FIRE 57 | Introduction to Fire Tactics \& Strategy (3) |  |
| FIRE 58 | Intro to Fire Company Administration (3) |  |
| FIRE 61 | Rescue Practices (3) |  |
| FIRE 62 | Fire Apparatus and Equipment (3) |  |
| FIRE 64 | Hazardous Materials 2 (3) |  |
| FIRE 65 | Fundamentals of Fire Safety (3) |  |
| FIRE 240 | Firefighter I Physical Agility (0.5) |  |
| PUBAD 1 | Introduction to Public Administration (3) |  |
| Subtotal Units |  | 9 |
| Required Subtotal |  | 24 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |

Plan A
Plan B

Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Fire Science - Certificate of Achievement

Plan Code: 3805

This Certificate of Achievement will prepare students for entry to a fire academy and for an entry-level position in private and public fire-related occupations.

## Program Student Learning Outcomes

- Demonstrate an understanding and ability to recognize and apply preventive and proactive measures in fire protection.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| FIRE 1 | Fire Protection Organization | 3 |
| FIRE 2 | Fire Prevention Technology | 3 |
| FIRE 3 | Fire Protection Equipment and Systems | 3 |
| FIRE 4 | Building Construction | 15 |
| FIRE 5 | Fire Behavior and Combustion |  |
| Subtotal Units |  |  |
| IN ADDITION, complete NINE (9) units from the following: |  |  |
| EMT 251 | Emergency Medical Technician (4) |  |
| EMT 251L | Emergency Medical Technician Laboratory |  |
| FIRE 53 | (2) |  |
| FIRE 54 | Fire Hydraulics (3) |  |
| FIRE 57 | Introduction to Fire Tactics \& Strategy (3) |  |
| FIRE 58 | Intro to Fire Company Administration (3) |  |
| FIRE 61 | Rescue Practices (3) |  |
| FIRE 62 | Fire Apparatus and Equipment (3) |  |
| FIRE 64 | Hazardous Materials 2 (3) |  |
| FIRE 65 | Fundamentals of Fire Safety (3) |  |
| FIRE 240 | Firefighter I Physical Agility (0.5) |  |
| PUBAD 1 | Introduction to Public Administration (3) |  |
| Subtotal Units |  | $\mathbf{9}$ |
| Total Units |  | $\mathbf{2 4}$ |

## FLORAL DESIGN

The Floral Design program is the development of student competency for employment as floral designers.

## Floral Design - Associate in Arts

Plan Code: 1328
This program will prepare students to become a salesperson, manager or owner of a floral shop. The certificate will help students prepare for CCF (California Certified Florist) and AIFD (American Institute of Floral Designers) certification. The degree will also provide students with a broad-based education that will prepare them for global citizenry.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop foundational knowledge and skills for the design and production of industry acceptable floral displays.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| Entry Level Courses |  |  |
| FLO 286A | Introduction to Floral Design: Fall Flowers | 2 |
| FLO 286B | Introduction to Floral Design: Spring Flowers | 2 |
| MGMT 80 or MKTG 40 | Small Business Entrepreneurship <br> Salesmanship | 3 |
| IN ADDITION, complete FIVE (5) units from the following: |  |  |
| ART 30 or ART 31 | Three Dimensional Design Two Dimensional Design | 3 |
| HORT 15A or HORT 15B | Basic Horticulture Basic Horticulture | 2 |
| Subtotal Units |  | 12 |
| Intermediate Level Courses |  |  |
| FLO 287A | Intermediate Floral Design-Wedding | 2 |
| FLO 287B | Intermediate Floral Design-Sympathy | 2 |
| FLO 287C | Intermediate Floral Design-Banquet Holiday | 2 |
| Subtotal Units |  | 6 |
| Advanced Level Courses |  |  |
| FLO 288 | Advanced Floral Design | 2 |
| FLO 289 | Applied Floral Shop Operation | 3 |
| FLO 290 | Floral Creativity and Competition | 0.5 |
| Subtotal Units |  | 5.5 |
| Required Subtotal |  | 23.5 |
| Complete one of the | ollowing: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Floral Design - Certificate of Achievement

Plan Code: 3328

The Certificate of Achievement completer will also have the basic knowledge to become a salesperson, manager or owner of a floral shop. The certificate will help students prepare for CCF (California Certified Florist and AIFD (American Institute of Floral Designers) certification.

## Program Student Learning Outcomes

- Develop foundational knowledge and skills for the design and production of industry acceptable floral displays.


## Program Requirements

Code Number Course Title Units

REQUIRED COURSES
Entry Level Courses

| FLO 286A | Introduction to Floral Design: Fall Flowers | 2 |
| :---: | :--- | :---: |
| FLO 286B | Introduction to Floral Design: Spring | 2 |
|  | Flowers |  |
| MGMT 80 | Small Business Entrepreneurship | 3 |
| or MKTG 40 | Salesmanship |  |

IN ADDITION, complete FIVE (5) units from the following:
ART $30 \quad$ Three Dimensional Design
or ART 31 Two Dimensional Design
HORT 15A Basic Horticulture 2
or HORT 15B Basic Horticulture
Subtotal Units 12

Intermediate Level Courses

| FLO 287A | Intermediate Floral Design-Wedding | 2 |
| :--- | :--- | :--- |
| FLO 287B | Intermediate Floral Design-Sympathy | 2 |
| FLO 287C | Intermediate Floral Design-Banquet Holiday | 2 |
| Subtotal Units |  | 6 |

Advanced Level Courses
FLO 288 Advanced Floral Design 2
FLO 289 Applied Floral Shop Operation 3
FLO $290 \quad$ Floral Creativity and Competition 0.5
Subtotal Units 5.5
Total Units 23.5

## FOREIGN LANGUAGES

See World Languages (p. 292).

## FOUNDATIONAL SKILLS

## Foundational Skills - Certificate of Competency

Plan Code: 6542
This program prepares students with the essential skills for academic success. Students gain knowledge and skills in language arts and math. Students who reach competencies may advance to develop skills for the workplace and to prepare for future educational opportunities.

## Program Student Learning Outcomes

- Demonstrate the ability to apply foundational language arts and/or math skills.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| FS 600 | Foundational Skills Language Arts | 18 |
| FS 605 | Foundational Skills Math | 18 |
| Total Hours |  | $\mathbf{3 6}$ |

## GED/HISET PREPARATION

## GED/HiSET Preparation - Certificate of Competency

Plan Code: 6543

The General Educational Development (GED)/High School Equivalency Test Preparation (HiSET) program prepares students with the essential skills for the GED test/HiSET. Students gain knowledge and skills in language arts, social studies, math, and science. Students who reach competencies may advance to develop skills for the workplace and to prepare for future educational opportunities.

## Program Student Learning Outcomes

- Utilize the social studies, science, math and/or language arts skills required for the GED test/HiSET.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| Complete THIRTY-SIX (36) hours from any two of the following: |  |  |
| GED/HSET 600 | GED/HiSET Preparation: Language Arts | 18 |
| GED/HSET 605 | GED/HiSET Preparation: Social Studies | 18 |
| GED/HSET 610 | GED/HiSET Preparation: Mathematics | 18 |
| GED/HSET 615 | GED/HiSET Preparation: Science | 18 |
| Total Hours |  | 36 |

## GED/HiSET Preparation Spanish Certificate of Competency

## Plan Code: 6544

The General Educational Development (GED)/High School Equivalency Test Preparation (HiSET) program in Spanish prepares students with the essential skills for the GED test/HiSET. Students gain knowledge and skills in language arts, social studies, math, and science. Students who reach competencies may advance to develop skills for the workplace and to prepare for future educational opportunities.

## Program Student Learning Outcomes

- Utilize the social studies, science, math and/or language arts skills required for the Spanish language GED test/HiSET.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| Complete THIRTY-SIX (36) hours from any two of the following: |  |  |
| GED/HSET 620 | GED/HiSET Prep - Spanish: Language Arts | 18 |
| GED/HSET 625 | GED/HiSET Prep - Spanish: Social Studies | 18 |
| GED/HSET 630 | GED/HiSET Prep - Spanish: Mathematics | 18 |

## GENDER AND SEXUALITY STUDIES

## Gender and Sexuality Studies Certificate of Achievement

Plan Code: 3429
This program is designed to teach the fundamentals of theory and knowledge relevant to gender and sexuality. The program will prepare students to be more aware of systemic power structures and how to promote inclusivity and equity within those structures. Some courses may be double counted to fulfill general education area requirements that will aid in transfer. Students can earn this certificate by completing the 18 units of required course work in the various fields listed on the certificate.

## Program Student Learning Outcomes

- Identify and synthesize the theoretical and practical knowledge of gender and sexuality studies in various social sciences areas, history, and health education.


## Program Requirements

| Code Number <br> REQUIRED COURSES | Course Title | Units |
| :--- | :--- | ---: |
| HIST 25 | History of Women and Gender in the U.S. | 3 |
| PSYCH 10 | Human Sexuality | 3 |
| or HLED 10 | Human Sexuality |  |
| SOCIO 17 | Introduction to Sociology of Gender | 3 |
| Subtotal Units |  | $\mathbf{9}$ |
| IN ADDITION, complete NINE (9) units from the following: |  |  |
| HLED 4 | Women's Health Issues (3) |  |
| HLED 5 | Men's Health Issues (3) |  |
| PHIL 1/1H | Philosophy of LGBTQIA+ Studies (3) | $\mathbf{9}$ |
| PHIL 10/10H | Introduction to Feminist Philosophy (3) | $\mathbf{1 8}$ |
| Subtotal Units |  |  |
| Total Units |  |  |

## GENERAL EDUCATION

## CSU GE Breadth (Plan B) - Certificate of Achievement

Plan Code: 3000
The Certificate of Achievement in CSUGE Breadth will provide students with the required general education coursework needed for transfer to a four-year university in California. The general education pattern for CSU incorporates a wide variety of disciplines in the areas of written and oral communication, quantitative reasoning, critical thinking, science, social science, humanities, arts, and personal growth and development. Upon completion, students will have fulfilled the minimum lower division general education requirements for a Bachelors' degree, thereby allowing them to focus on their upper-division curriculum in their major after transfer.

## Program Student Learning Outcomes

- Synthesize information provided through a variety of disciplines and determine the relationship between them while preparing for transfer to a California State University institution.
- Develop skills, comprehension, and information in oral and written communication provided through a variety of disciplines.


## Program Requirements

Students may earn a Certificate of Achievement in General Education after completing the following transfer General Education requirements below.

## California State University General Education-Breadth (CSUGE-B)

Students must complete a minimum of 39 units used to satisfy the California State University General Education Breadth (CSUGE-B) requirements (Plan B). Students must complete all the requirements for full certification of the breadth requirements, which includes a grade of " C " or better in Oral Communication, Written Communication, Critical Thinking, and Mathematical Concepts. Consult with a counselor or see the appropriate requirements listed in Plan B.

## IGETC (Plan C) - Certificate of Achievement

Plan Code: 3001
The Certificate of Achievement in IGETC will provide students with the required general education coursework needed for transfer to a fouryear university in California. The IGETC pattern CSU incorporates a wide variety of disciplines in the areas of written and oral communication, quantitative reasoning, critical thinking, science, social science, humanities, arts. Upon completion, students will have fulfilled the minimum lower division general education requirements for a Bachelors' degree, thereby allowing them to focus on their upper-division curriculum in their major after transfer.

## Program Student Learning Outcomes

- Synthesize information provided through a variety of disciplines and determine the relationship between them while preparing for transfer to a California State University or University of California institution.
- Develop skills, comprehension, and information in oral and written communication provided through a variety of disciplines.


## Program Requirements

Students may earn a Certificate of Achievement in General Education after completing the following transfer General Education requirements below.

## Intersegmental General Education Transfer Curriculum (IGETC)

Students must complete a minimum of 34 units used to satisfy the Intersegmental General Education Transfer Curriculum (IGETC) requirements (Plan C). Students must receive full certification of the IGETC pattern, which requirements a minimum grade of " $C$ " or better in each IGETC course. Consult with a Long Beach City College counselor or see the appropriate requirements listed in Plan C.

## GEOGRAPHY

Geography is a unique discipline that combines the social and physical sciences to understand human society, the natural environment, and interaction between them. Geographers study global climate change, natural disasters, environmental policy, urban growth, population and migration patterns, global conflict, international development, poverty, racial and ethnic disparities, weather patterns, and other issues central to creating a sustainable and equitable world.

## Geography - Associate in Arts Transfer Degree

Plan Code: 5009B/C
The Department of Social Sciences offers an Associate in Arts in Geography for Transfer Degree. The Transfer degree assures enrollment and transfer opportunities at California State Universities. The geography major provides students with a comprehensive knowledge of theoretical concepts of geography and associated knowledge and skills. Geography majors develop understanding of the spatial organization of physical and human landscapes, interactions between human society and the physical environment, as well as the meanings that people bring to their place in the world. Concentrations include: physical geography, and weather and climate; human geography, including world regional geography, the global economy; technical skills: use and application of Geographic Information Systems. The Geography major is preparation for general education, and meaningful employment in a wide variety of interesting occupations. It prepares students for participation in an increasingly diverse and globalized world.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply scientific research methods and technologies to observe, collect and analyze geographic data and information regarding human-environment interactions.
- Communicate an understanding of the importance of geographical processes and spatial interactions.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number <br> REQUIRED CORE COURSES | Course Title | Units |
| :--- | :--- | ---: |
| PGEOG 1 | Physical Geography | 3 |
| GEOG 2 | Elements of Cultural Geography |  |
| or GEOG 40 | World Regional Geography | 3 |
| Subtotal Units |  | 6 |
| IN ADDITION, complete SIX to SEVEN (6-7) units from LIST A: |  |  |
| LIST A |  |  |
| GEOG 10 | Intro to Geographic Information Systems (3) |  |
| PGEOG 1L | Physical Geography Lab (1.5) | $\mathbf{6 - 7}$ |
| PGEOG 2 | Weather and Climate (3) |  |
| Subtotal Units |  |  |



## Foundations of Geospatial Data and Programming - Certificate of Accomplishment

Plan Code: 4309

The Department of Social Science offers a Certificate of Accomplishment in Foundations of Geospatial Data and Programming. The certificate is designed for students who plan to transfer to the California State University system and pursue additional coursework in geographic information systems and other geospatial technologies. The certificate provides students with a solid background in geographic information systems, Excel databases, and computer programming. These are essential skills for upper division coursework in geographic information systems and are valued by employers looking for geospatial analysts. These skills apply to myriad majors and occupations, including geography/GIS, anthropology, sociology, economics, geology, environmental science, public health, urban planning, field biology, and more.

## Program Student Learning Outcomes

- Analyze data using geospatial tools, including GIS, GPS, and remote sensing.

IN ADDITION, complete SIX (6) units from LIST B:

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| COSA 15 | Microsoft Excel for Windows | 3 |
| CS 31 | Introduction to Computer Science-Python | 3 |
| GEOG 10 | Intro to Geographic Information Systems | 3 |
| Total Units |  | $\mathbf{9}$ |

## GEOLOGY

The Department of Physical Science offers an Associate in Science in Geology for Transfer Degree. The Transfer degree assures enrollment and transfer opportunities at California State Universities. The geology major provides students with authentic laboratory and field experiences that serve as the foundation for geologic understanding and reasoning. The Geology program offers several courses that prepare geology students for upper-division geology courses offered at 4-year institutions.

## Geology - Associate in Science Transfer Degree

## Plan Code: 5503C

This program is designed to prepare students with a general education in the principles, concepts and methodologies of geology. This degree is designed to increase students' understanding of the earth, and to continue their education toward upper division courses in the Earth Sciences. Students will have guaranteed admission to the CSU system, but not to a particular campus or major. The Associate in Science in Geology for Transfer degree will prepare students for meaningful career employment and will facilitate transfer in a related major if desired.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Differentiate between unsupported opinion and verifiable scientific fact supported by observations, experiments, and scientific theory.
- Demonstrate a basic understanding of the field of geology by applying basic geologic concepts verbally and in writing.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| GEOL 1/1H | General Physical Geology | 4.5 |
| OR |  | 4.5 |
| GEOL 2 | General Geology, Physical |  |
| \& 2L | and General Geology, Physical Geology Lab |  |
| GEOL 3/3H | Historical Geology | 4.5 |
| CHEM 1A | General Chemistry | 5.5 |
| CHEM 1B | General Chemistry | 5.5 |
| MATH 60/60H | First Calculus Course | 5 |
| MATH 70/70H | Second Calculus Course | 5 |
| Required Subtotal |  | 30 |
| Complete the following: ${ }^{1}$ | 37 |  |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) |  |  |

Degree Total 60

[^6]${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn the Geology - Associate in Science Transfer Degree, a student must complete 60 -semester units that are eligible for transfer to a CSU that consist of the IGETC pattern and the major requirements. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## GLOBAL STUDIES

## Global Studies - Associate in Arts Transfer Degree

Plan Code: 5021B/C

Global Studies is an interdisciplinary course of study focused on globalization and its associated controversies. The program introduces students to the political, historical, economic, cultural, and ecological dimensions of globalization. Students will develop the skills and knowledge for critically evaluating global issues, developing policy solutions, and advocating for change.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply major theoretical concepts from globalization literature to the analysis of global issues.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$

## Degree Total

${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## HISTORY

The History Department offers the Associate in Arts in History for Transfer Degree which provides students with a fundamental knowledge of historical events, historical literacy, and historical thinking. Upon completion of the degree, students will also gain the knowledge, skills, civic engagement abilities and cultural sensitivity that will allow them to be successful as citizens in a multicultural society. Furthermore, this degree supplies students with a basic understanding of what it means to be a historian. Finally, students completing the degree will gain the necessary skills needed to succeed after transfer to a California State University Campus (CSU) or any other 4-year college.

## History - Associate in Arts Transfer Degree

## Plan Code: 5006B/C

This program prepares students for transfer into the CSU system to complete a baccalaureate degree in History or a similar major. Upon completion of the Associate in Arts in History for Transfer Degree, a student will be prepared to complete a baccalaureate degree in History or a similar major because the proposed courses for this associate degree meet all the requirements specified in section 66746 of the California Educational Code.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Students will develop the ability to critically analyze topics in History using a variety of primary and secondary sources and understand the causes and effects of historical events, thereby identifying and articulating problems, theses, arguments, evidence and conclusions about the significance of historical change and continuity over time.
- Students will develop an understanding of their roles in society, take responsibility for their own actions, and make ethical decisions in complex situations.
- Students will be able to articulate similarities and differences among cultures, times, and environments, demonstrating an understanding of cultural pluralism, as well as the value the importance of diverse perspectives in history.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) | 3 |
| HIST 11/11H Hist./Modern America (Reconstr-Present) | 3 |  |
| Subtotal Units |  | 6 |
| IN ADDITION, complete TWO (2) courses from LIST A: |  |  |
| LIST A |  |  |
| HIST 1A/1AH | History of Western (European) Civilization <br> or HIST 2B | (3) <br> World History to 1500 (3) |


| HIST 1B/1BH | History of Western (European) Civilization (3) |
| :---: | :---: |
|  | World History Since 1500 (3) |
| or HIST 2CH | Honors World History Since 1500 (3) |
| Subtotal Units | 6 |
| IN ADDITION, complete ONE (1) course from each Area in LIST B: |  |
| LIST B |  |
| Area 1 |  |
| Any LIST A course not already used |  |
| HIST 9A | History of China (3) |
| HIST 9B | History of Japan and Korea (3) |
| HIST 9C | History of India and Southeast Asia (3) |
| HIST 18 | History of Mexico (3) |
| HIST 25 | History of Women and Gender in the U.S. (3) |
| HIST 27A | African American History to 1877 (3) |
| HIST 27B | African American History 1877 to present (3) |
| Subtotal Units | 3 |
| Area 2 |  |
| Any LIST A course not already used |  |
| HIST 8A/8AH | History of the Americas (3) |
| HIST 8B/8BH | History of the Americas (Modern Era) (3) |
| HUMAN 1/1H <br> or SOCSC 1 <br> or SOCSC 1H | Comparative World Cultures (3) <br> Comparative World Cultures (3) <br> Honors Comparative World Cultures (3) |
| HUMAN 7 or SOCSC 7 | Intro to Ethnic Histories and Identity (3) Intro to Ethnic Histories and Identity (3) |
| Subtotal Units | 3 |
| Required Subtotal | 18 |
| Complete one of the | ollowing: ${ }^{1}$ 37-39 |
| Plan B |  |
| Plan C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| 1 Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations. <br> 2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |
| To earn an associate semester units that either the IGETC pat units. Students mus coursework to recei in the major must be associate degree for local graduation req | degree for transfer, a student must complete 60 e eligible for transfer to a CSU that consist of rn or CSU GE breadth and a major of at least 18 have a minimum GPA of 2.0 in all CSU-transferable an associate degree for transfer and all courses completed with a C or better. Students earning an ransfer will not be required to complete any other rements. |

## HORTICULTURE

The Horticulture program provides students with the training and practical experience for an entry level position as well as continuing education for those working in the horticulture industry.

## Horticulture - Associate in Science

## Plan Code: 2962

This program is designed to furnish students with knowledge of the entry-level skills necessary to embark upon a career in the horticulture industry. It includes emphasis on practical applications leading to career advancement. This Associate Degree will prepare students for career advancement once a certificate has been earned. Appropriate course selection may also facilitate transfer in a related major.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Distinguish 100 landscape plants suitable for different landscape situations with proper cultural practices.
- Demonstrate safe and efficient competence with hand and power tools used in the trade.
- Demonstrate fundamental technical skills to cultivate and manage edible and ornamental plants in horticultural production systems.
- Demonstrate fundamental landscaping principles to layout and install residential gardens.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number <br> REQUIRED COURSES | Course Title | Units |
| :--- | :--- | :---: |
| HORT 11A | Plant Identification: Trees | 3 |
| HORT 11B | Plant Identification: Shrubs | 3 |
| HORT 11C | Plant Identification: Herbaceous | 3 |
| HORT 11D | Plant Identification: Tropicals | 3 |
| HORT 15A | Basic Horticulture | 2 |
| or HORT 15B | Basic Horticulture | $\mathbf{1 4}$ |
| Subtotal Units |  |  |

## Subtotal Units

| IN ADDITION, complete TWENTY (20) units from the following: |  |
| :--- | :--- |
| BIO 5 Plant Biology (4) |  |
| FLO 286A | Introduction to Floral Design: Fall Flowers <br> $(2)$ |
| FLO 286B | Introduction to Floral Design: Spring <br> Flowers (2) |
| HORT 15A | Basic Horticulture (2) <br> or HORT 15B |
| Basic Horticulture (2) |  |


| HORT 223 | Landscape Construction (4) |
| :---: | :---: |
| HORT 227 | Interior Plant Design/Installation/Maint. (2) |
| HORT 430 | Landscape Maintenance (4) |
| KINPP 23 | First Aid and Safety (3) |
| MGMT 58 | Leadership and Supervision (3) |
| MGMT 80 | Small Business Entrepreneurship (3) |
| MKTG 47 | Essentials of Marketing (3) |
| Subtotal Units | 20 |
| Required Subtotal | 34 |
| Complete one of the fo | ollowing: ${ }^{1}$ 19-39 |
| Plan A |  |
| Plan B |  |
| Plan C |  |
| Electives (as needed to | to reach 60 degree-applicable units) ${ }^{2}$ |
| Minimum Degree Tota | l 60 |
| 1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. |  |
| ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |

## Horticulture - Certificate of Achievement

Plan Code: 3962

This program will prepare students for an entry-level position in a variety of horticulture/landscape/nursery industry positions and will serve as a foundation for specialization.

## Program Student Learning Outcomes

- Distinguish 100 landscape plants suitable for different landscape situations with proper cultural practices.
- Demonstrate safe and efficient competence with hand and power tools used in the trade.
- Demonstrate fundamental technical skills to cultivate and manage edible and ornamental plants in horticultural production systems.
- Demonstrate fundamental landscaping principles to layout and install residential gardens.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| HORT 11A | Plant Identification: Trees | 3 |
| HORT 11B | Plant Identification: Shrubs | 3 |
| HORT 11C | Plant Identification: Herbaceous | 3 |
| HORT 11D | Plant Identification: Tropicals | 2 |
| HORT 15A | Basic Horticulture | $\mathbf{1 4}$ |
| or HORT 15B Basic Horticulture |  |  |
| IN ADDITION, complete TWENTY (20) units from the following: |  |  |
| BIO 5 | Plant Biology (4) |  |
| FLO 286A | Introduction to Floral Design: Fall Flowers |  |
| (2) |  |  |


| FLO 286B | Introduction to Floral Design: Spring <br> Flowers (2) |
| :--- | :--- |
| HORT 15A | Basic Horticulture (2) |
| or HORT 15B | Basic Horticulture (2) |
| HORT 19 | Turf Management (4) |
| HORT 21 | Principles of Landscape Design (3) |
| HORT 26A | Plant Propagation - Spring (4) |
| HORT 26B | Plant Propagation - Fall (4) |
| HORT 30 | Integrated Pest Management (3) |
| HORT 202 | Principles of Pruning (4) |
| HORT 223 | Landscape Construction (4) |
| HORT 227 | Interior Plant Design/Installation/Maint. (2) |
| HORT 430 | Landscape Maintenance (4) |
| KINPP 23 | First Aid and Safety (3) |
| MGMT 58 | Leadership and Supervision (3) |
| MGMT 80 | Small Business Entrepreneurship (3) |

## HOSPITALITY MANAGEMENT

The Hospitality Management program at LBCC is designed to prepare graduates for management careers in the food service, tourism, and hospitality industries. In addition, the program provides the necessary lower-division coursework at the Community College level for transferring to a Baccalaureate degree in Hospitality Management in the CSU system. Career opportunities include Dining Room Manager, Catering and Event Manager, Beverage Manager, Assistant Dining Services Manager, Night Auditor, Food and Beverage Front Office Managers, Food Service Managers, and First-Line Kitchen Supervisors.

## Hospitality Management - Associate in Science Transfer Degree

Plan Code: 5541B/C

This program prepares students to complete lower-level requirement for transfer to the Hospitality Management program at the CSU system to continue academic study in the field. Students completing this degree will attain the fundamental knowledge of the hospitality industry. The degree provides students with an introduction to hospitality, food preparation, restaurant management, foodservice management, cost control in hospitality, and sanitation and safety.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Examine the hospitality industry's social and economic indicators and develop proficient management strategies.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| CULAR 10 | Intro to Hospitality | 3 |
| Subtotal Units |  | 3 |
| IN ADDITION, select EIGHT to NINE (8-9) units or THREE (3) courses from LIST A: |  |  |
| LIST A |  |  |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. (2) |  |
| CULAR 30 | Cost Control in Hospitality (3) |  |
| CULAR 90 | Intro to Culinary Skills \& Principles (4) |  |
| ECON 2/2H | Micro Economic Analysis (3) |  |
| Subtotal Units |  | 8-9 |
| IN ADDITION, select SIX to SEVEN (6-7) units or TWO (2) courses from LIST B: |  |  |
| LIST B |  |  |
| Any List A course not already used |  |  |
| ACCTG 1A | Financial Accounting (5) |  |
| LAW 18 | Fundamentals of Business Law (3) |  |
| MATH 21B | Statistics Pathway B (5) |  |
| STAT 1/1H | Elementary Statistics (4) |  |


| Subtotal Units | 6-7 |
| :---: | :---: |
| Required Subtotal | 18-23 |
| Complete one of the following: ${ }^{1}$ | 37-39 |
| Plan B |  |
| Plan C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach transferable units. | see <br> 60 |
| To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least units. Students must have a minimum GPA of 2.0 in all CSU-transfer coursework to receive an associate degree for transfer and all cours in the major must be completed with a C or better. Students earning associate degree for transfer will not be required to complete any ot local graduation requirements. | 60 <br> 18 <br> rable <br> ses <br> an <br> ther |

# HUMAN SERVICES ADDICTION STUDIES 

Human Services Addiction Studies will prepare students for an entrylevel position in the field of addiction treatment and recovery. Students demonstrate knowledge of key theories and approaches underlying human services intervention and prevention models for population with drug use disorders, providing resources for treatment, social services, and helplines for intervention, prevention and treatment, understand how culture impacts treatment and recovery, learning advocacy against the stigma surrounding drugs and society.

## Human Services Addiction Studies Associate in Arts

Plan Code: 1811
This program will prepare students for an entry-level position in the addiction treatment and recovery field. Completing the coursework for this program will prepare students for certification as a Certified Addiction Treatment Counselor (CATC). The Program is accredited by the California Alcohol and Drug Education (CAADE). Students interested in state-level certification will need to pass a state examination. The program's coursework can also assist career advancement for those already employed in occupations related to addiction counseling and treatments. Students may also learn the skills and knowledge necessary to transfer to upper division programs in social work, psychology, or human services.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop a psychosocial treatment plan for a client.
- Demonstrate knowledge of key theories and approaches underlying human services intervention and prevention models for diverse populations with drug use disorders.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| HS_AS 41 | Introduction to Chemical Dependency | 3 |
| HS_AS 43 | Case Management: Treatment \& Aftercare | 3 |
| HS_AS 46 | Physiology \& Pharmacology of Drugs | 3 |
| HS_AS 47 | Intervention, Treatment \& Recovery | 3 |
| HS_AS 48 | Group \& Family Process | 3 |
| HS_AS 50 | Law and Ethics | 3 |
| HS_AS 72A | Field Instruction and Seminar I | 3.5 |
| HS_AS 72B | Field Instruction and Seminar II | 3.5 |
| HS_AS 153 | Multicultural and Diverse Populations | 3 |
| HS_AS 162 | Addiction Counseling Skills | 3 |
| HS_AS 252 | Co-Occurring Disorders | 3 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| PSYCH 14 | Abnormal Psychology | 3 |



Successful Human Services, Addiction Studies program completion requires that students understand and abide by the state requirements in holding and updating valid clinical credentials and certificates while seeing clients.

## Addiction Studies - Certificate of Achievement

## Plan Code: 3811

This program will prepare students for entry-level occupations in the field of addiction treatment and recovery field. Completing the coursework for this program will prepare students for certification as a Certified Addiction Treatment Counselor (CATC). Students interested in statelevel certification must take additional courses required to be eligible for the state examination. Completing this certificate may also prepare the student for the associate degree in Human Services Addiction Studies.

## Program Student Learning Outcomes

- Demonstrate an ability to work with a diverse population in resolving chronic and crisis issues that impact family, health, employability and social standing.
- Demonstrate knowledge of key theories and approaches underlying human services intervention and prevention models for population with drug use disorders, linking participants to related resources for treatment, locating and providing resources for social services and helplines for treatment and prevention, understand how culture impacts help seeking and recovery, learning advocacy against the stigma surrounding drugs and society.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| HS_AS 41 | Introduction to Chemical Dependency | 3 |
| HS_AS 43 | Case Management: Treatment \& Aftercare | 3 |
| HS_AS 46 | Physiology \& Pharmacology of Drugs | 3 |
| HS_AS 47 | Intervention, Treatment \& Recovery | 3 |
| HS_AS 48 | Group \& Family Process | 3 |
| HS_AS 50 | Law and Ethics | 3 |
| HS_AS 72A | Field Instruction and Seminar I | 3.5 |
| HS_AS 72B | Field Instruction and Seminar II | 3.5 |
| HS_AS 153 | Multicultural and Diverse Populations | 3 |
| HS_AS 162 | Addiction Counseling Skills | 3 |


| HS_AS 252 | Co-Occurring Disorders | 3 |
| :--- | :--- | ---: |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| PSYCH 14 | Abnormal Psychology | 3 |
| Total Units |  | $\mathbf{4 0}$ |

## HUMAN SERVICES <br> GENERALIST

See Social Work (p. 278).

## INDUSTRIAL DESIGN

Associate in Science Degrees

- Industrial Design - Associate in Science (p. 228)


## Certificates of Completion

- Solidworks Essentials - Certificate of Completion (p. 228)


## Industrial Design - Associate in Science

## Plan Code: 2904

This program provides students with the knowledge and skills needed to enter industrial design or related professions. Students will learn industrial designing, drafting, and prototyping and will complete a portfolio that demonstrates the mastery of these skills. This program prepares students for transfer to a university with an industrial design program. This major requires the use of power tools and machinery in a woodshop and may lead to minor injuries and occasional mishaps if proper safety protocols are not followed. Appropriate training will be provided. Potential careers include Industrial Designer, Product Designer, Furniture Designer, Packaging Designer, Design Manager and Industrial Fabricator.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply methodologies for designing industrial objects, such as ideation, prototyping, and fabrication.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| ARCHT 20 | Visual Literacy and Civilization | 3 |
| DSGN 31 | Visualizations for Industrial Design | 3 |
| DSGN 50 | Design Materials and Tools | 3 |
| DSGN 53 | Industrial Prototyping | 3 |
| DSGN 54 | Design Methodologies | 1.5 |
| DSGN 60 | Solidworks 1 | 1.5 |
| DSGN 61 | Solidworks 2 | 3 |
| DSGN 71 | Industrial Design Studio I | 3 |
| DSGN 72 | Industrial Design Studio II | 3 |
| DSGN 73 | Industrial Design Studio III | $\mathbf{2 7}$ |

## Solidworks Essentials - Certificate of Completion

Plan Code: 6049
This program provides students with introductory skills to prepare to find employment as a designer or fabricator. Basic and intermediate skills are developed to effectively use the Solidworks software. This program
can facilitate finding employment or advancement in the field of spatial design or related fields.

## Program Student Learning Outcomes

- Apply knowledge of theory and skillsets in Solidworks to projects related to industrial design and fabrication.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| DSGN 660 | Solidworks 1 | 54 |
| DSGN 661 | Solidworks 2 | 54 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## INTERIOR DESIGN

## Interior Design - Associate in Science

Plan Code: 2902
This field of concentration is designed to provide foundational knowledge of the practice of interior design with the option of maximizing the number of lower division transfer units. This Associate Degree will prepare students for an interior design-related career, and appropriate course selection will facilitate transfer to a professional degree program.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Understand methodologies for specifying furniture, fixtures, equipment and finish materials in interior spaces.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| ARCHT 20 | Visual Literacy and Civilization | 3 |
| ARCHT 32 | SketchUp I | 1.5 |
| ARCHT 34 | AutoCAD Basics | 1.5 |
| ARCHT 37 | Advanced AutoCAD | 1.5 |
| ART 1/1H | Art and Civilization | 3 |
| ART 30 | Three Dimensional Design | 3 |
| ART 31 | Two Dimensional Design | 3 |
| DSGN 20 | Space Planning | 3 |
| DSGN 30 | Visualizations for Interiors | 3 |
| DSGN 40 | Materials of Interiors | 3 |
| DSGN 50 | Design Materials and Tools | 3 |
| DSGN 51 | Lighting Design | 3 |
| DSGN 52 | Building Code and Systems | 3 |
| MATH 40 | Trigonometry | 3 |
| Total Units |  | 37.5 |

RECOMMENDED but not required General Education courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ETHST 1/1H | Introduction to Ethnic Studies | 3 |
| ENVRS 1 | Energy for the Future | 3 |
| HIST 10/10H | Hist./Early America (Colonial-Reconstr) | 3 |
| POLSC 1/1H | Introduction to Government | 3 |
| READ 84 | Analytical Reading | 3 |

## Interior Design - Certificate of Achievement

## JOURNALISM

The Journalism program prepares students with a body of knowledge and a system of inquiry, scholarship and training for careers in which they are accountable to the public interest for their knowledge, ethics, competence and service; to citizens, clients or consumers for their competencies and the quality of their work; and to employers for their performance.

## Journalism - Associate in Arts Transfer Degree

Plan Code: 5014B/C

This program is designed to provide students with exciting handson media training for students interested in journalism or other mass communication career options. Courses such as Beginning Newswriting and Reporting, Intro to Global Communication, Multimedia Newsroom, Photojournalism and Magazine Feature Writing prepare students to become strong researchers, information gatherers, vital communicators and advocates needed today in industries such as journalism, reporting, news production, advertising, media relations, public information and other forms of mass communications. Students also develop important technical skills in industry software and learn vital production processes while building social skills. Students are trained to be knowledgeable of the variety of jobs, functions and production process of the mass media industry. They will be able to produce quality media content based on current media standards and they will understand the role of journalism and mass media in society. The study of journalism develops critical reading, writing, and thinking skills that are crucial for success at the university level. The overall mission of this program is to aid students in developing the requisite knowledge and skills to excel upon transfer to the CSU and UC systems.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Gather and prepare material accurately and fairly while meeting deadlines.
- Apply teamwork skills to publish a newspaper, magazine, or website.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

## Code Number Course Title Units

## REQUIRED CORE COURSES

| JOURN 10 | Intro to Global Media Communications | 3 |
| :--- | :--- | ---: |
| JOURN 20 | Beginning Newswriting and Reporting | 4 |
| JOURN 80 | Multimedia Newsroom: News | 4 |
| Subtotal Units |  | 11 |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |
| JOURN 5 | Introduction to Public Relations (4) |  |
| JOURN 35 | Photojournalism (3) |  |
| JOURN 86 | Multimedia Editors: Design (4) |  |
| JOURN 87 | Multimedia Editors: Visuals (4) |  |


| JOURN 88 | Multimedia Editor Training: Management (4) |  |
| :---: | :---: | :---: |
| Subtotal Units |  | 3-4 |
| IN ADDITION, complete TWO (2) courses from LIST B: |  |  |
| LIST B |  |  |
| COMM 40 | Elements of Communication Theory (3) |  |
| COMM 60 | Elements of Argumentation and Debate (3) |  |
| ECON 1/1H <br> or ECON 2 <br> or ECON 2H | Macro Economic Analysis (3) <br> Micro Economic Analysis (3) <br> Honors Micro Economic Analysis (3) |  |
| ENGL 3/3H | Argumentative and Critical Writing (4) |  |
| $\begin{aligned} & \text { PHIL } 12 \\ & \quad \text { or PHIL } 22 \end{aligned}$ | Introduction to Logic (3) Symbolic Logic (3) |  |
| POLSC 1/1H | Introduction to Government (3) |  |
| POLSC $2 / 2 \mathrm{H}$ | Comparative Government (3) |  |
| STAT 1/1H | Elementary Statistics (4) |  |
| Subtotal Units |  | 6-8 |
| Required Subtotal |  | 20-23 |
| Complete one of th | llowing: ${ }^{1}$ | 37-39 |
| Plan B |  |  |
| Plan C |  |  |
| Transferable Elect | (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations. |  |  |
| ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |  |

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Journalism - Associate in Arts

## Plan Code: 1411

This degree, with an emphasis in newspapers and magazines, provides a basic program for students interested in careers requiring journalistic training, such as newspaper or Internet reporting, magazine or free-lance writing.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Gather and prepare material accurately and fairly while meeting deadlines.
- Apply teamwork skills to publish a magazine.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| JOURN 10 | Intro to Global Media Communications | 3 |
| JOURN 20 | Beginning Newswriting and Reporting | 4 |
| JOURN 80 | Multimedia Newsroom: News | 4 |
| JOURN 81 | Multimedia Newsroom: Features | 4 |
| JOURN 86 | Multimedia Editors: Design | 4 |
| Subtotal Units |  | 19 |

IN ADDITION, complete TWO (2) courses from the following:

| JOURN 5 | Introduction to Public Relations (4) |  |
| :--- | :--- | ---: |
| JOURN 35 | Photojournalism (3) |  |
| JOURN 82 | Multimedia Newsroom: Profiles (4) |  |
| JOURN 83 | Multimedia Newsroom: Politics (4) | $\mathbf{7 - 8}$ |
| Subtotal Units |  | $\mathbf{2 6 - 2 7}$ |
| Required Subtotal |  |  |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) |  |  |

Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Photojournalism - Certificate of Achievement

## Plan Code: 3414

This program provides students with the ability to learn the entrylevel skills necessary to embark upon a career in the news online and documentary photography field. It includes emphasis on practical applications leading to career advancement.

## Program Student Learning Outcomes

- Create photographic projects or bodies of work that meet professional standards.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| JOURN 35 | Photojournalism | 3 |
| JOURN 80 | Multimedia Newsroom: News | 4 |
| JOURN 81 | Multimedia Newsroom: Features | 4 |
| PHOT 32 | Introduction to Digital Photography | 4 |
| Subtotal Units |  | 15 |
| IN ADDITION, complete ONE (1) course from the following: |  |  |
| PHOT 33 |  | Professional Studio Lighting (4) |
| PHOT 37 |  | Portrait Photography (4) |

PHOT $43 \quad$ Photoshop and Lightroom Management (3)
Subtotal Units 3-4
Total Units 18-19

## KINESIOLOGY

The Department of Kinesiology prepares students in the study of exercise, physical activity and sport, educates students in the study of human movement, and provides students with an opportunity to prepare for transfer or a career in the field of human movement and wellness.

## Kinesiology - Associate in Arts Transfer Degree

Plan Code: 5004B/C

This program is designed to prepare students with a general education in the principles, concepts and methodologies of Kinesiology. This degree is designed to increase students' awareness, understanding and knowledge of the broad range of career paths within the field of Kinesiology and to prepare them for seamless transfer to a California State University.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate proficiency in skills needed in activities commonly included in a human movement program.
- Examine and evaluate physical activities and their relationship to wellness and fitness.
- Recognize various career opportunities in the field of human movement.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| ANAT 1 | Human Anatomy | 4 |
| KINPP 1 | Introduction to Kinesiology | 3 |
| PHYSI 1 | Human Physiology | 5 |
| Subtotal Units | $\mathbf{1 2}$ |  |

IN ADDITION, complete ONE (1) course from THREE of the
following areas:

| Aquatics |  |
| :--- | :--- |
| KING 76 | Swimming (1) |
| Combatives |  |
| KING 65 | Martial Arts (1) |
| KING 66 | Self-Defense (1) |
| Fitness |  |
| KINPF 6 | Cardio Fitness (1) |
| KINPF 14 | Yoga (1) |
| KINPF 17 | Jogging (1) |
| KINPF 17B | Jogging (1) |
| KINPF 18 | Triathlon Training (1) |
| KINPF 21 | Low Impact Cardio (1) |
| KINPF 22 | Physical Fitness (1) |
| KINPF 42 | Swimming Fitness (1) |
| KINPF 54 | Weight Training (1) |


| Individual Sports |  |
| :--- | :--- |
| KING 10 | Badminton (1) |
| KING 10B | Badminton (1) |
| KING 84 | Tennis (1) |
| Team Sports |  |
| KING 2 | Ultimate Frisbee (1) |
| KING 14 | Basketball (1) |
| KING 14B | Basketball (1) |
| KING 70 | Soccer (1) |
| KING 70B | Soccer (1) |
| KING 74 | Softball (1) |
| KING 86 | Touch Football (1) |
| KING 90 | Volleyball (1) |
| KING 90B | Volleyball (1) |
| KING 92 | Sand Volleyball (1) |
| KING 94 | Rugby (1) |

Subtotal Units
IN ADDITION, complete TWO (2) courses from LIST A:
LIST A

| CHEM 1A | General Chemistry (5.5) |
| :---: | :--- |
| or CHEM 3 | Intro to Gen, Organic and Biochemistry (5) |
| KINPP 23 | First Aid and Safety (3) |
| PHYS 2A | General Physics (4.5) |
| or PHYS 3A | Physics for Sci. \& Eng. - Mechanics (5.5) |
| STAT 1/1H | Elementary Statistics (4) |

Subtotal Units ..... 7-11
Required Subtotal ..... 22-26
Complete one of the following: ${ }^{1}$ ..... 37-39
Plan B

Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$
Degree Total
1 Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Kinesiology - Associate in Arts

## Plan Code: 1701

This program prepares students for entry-level positions as physical activity specialists in fitness, health, and medical settings (i.e. health clubs, rehabilitative exercise centers, sports medicine clinics); educational settings (i.e. elementary and secondary schools); and
community service agencies (e.g. YMCAs, Boys and Girls Clubs, neighborhood recreation centers, private and public camps).

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate knowledge of rules, strategies, techniques, and etiquette of various activities to promote lifelong fitness.
- Demonstrate knowledge of basic aspects of a training/fitness program.
- Recognize various career opportunities in the field of human movement.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| KINPP 1 | Introduction to Kinesiology | 3 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| Choose ONE (1) of the following: |  |  |
| BIO 41/41H | Contemporary Biology | 3 |
| ANAT 1 | Human Anatomy | 4 |
| ANAT 41 | Anatomy \& Physiology | 5 |
| Choose ONE (1) of the following: |  |  |
| HLED 3 | Contemporary Health Issues | 3 |
| HLED 4 | Women's Health Issues | 3 |
| HLED 5 | Men's Health Issues | 3 |
| Choose ONE (1) of the following: |  |  |
| COMM 10/10H | Elements of Public Speaking | 3 |
| COMM 20 | Elements of Interpersonal Communication | 3 |
| Choose ONE (1) of the following: |  |  |
| KINPP 4 | Lifetime Wellness Principles | 3 |
| KINPP 5 | Sports Appreciation | 3 |
| KINPP 7 | Intro to Community Recreation | 3 |
| KINPP 8 | Stress Management through Physical Activity | 3 |
| KINPP 10 | Prevention \& Care of Athletic Injuries | 3 |
| KINPP 14 | Theory of Athletic Coaching | 3 |
| KINPP 15 | Sports Officiating (Fall) | 3 |
| KINPP 17 | Sports Officiating (Spring) | 3 |
| KINPP 23 | First Aid and Safety | 3 |
| KINPP 70 | Fitness Program Design \& Instruction | 3 |
| KINPP 75 | Exercise Science \& Fitness Assessment | 3 |
| KINPP 233 | Techniques of Strength and Conditioning | 3 |
| Subtotal Units |  | 18-20 |
| IN ADDITION, complete SIX (6) units from at least THREE of the following categories: |  |  |
| Aquatics Category |  |  |
| KING 55 | Lifeguard/Water Safety Training | 4 |
| KING 76 | Swimming | 1 |
| KINPF 3 | Aqua Calisthenics | 1 |
| KINPF 4 | Deep Water Aerobics | 1 |


| KINPF 42 | Swimming Fitness | 1 |
| :---: | :---: | :---: |
| Combative Category |  |  |
| KING 65 | Martial Arts | 1 |
| KING 65B | Martial Arts | 1 |
| KING 66 | Self-Defense | 1 |
| KING 66B | Self Defense | 1 |
| Fitness Category |  |  |
| KINA 1 | PE for the Physically Limited | 1 |
| KINPF 6 | Cardio Fitness | 1 |
| KINPF 8 | Circuit Weight Training | 1 |
| KINPF 8B | Circuit Weight Training | 1 |
| KINPF 10 | Stretch \& Relaxation | 1 |
| KINPF 10B | Stretch \& Relaxation | 1 |
| KINPF 12 | Core Conditioning | 1 |
| KINPF 12B | Core Conditioning | 1 |
| KINPF 14 | Yoga | 1 |
| KINPF 17 | Jogging | 1 |
| KINPF 17B | Jogging | 1 |
| KINPF 18 | Triathlon Training | 1 |
| KINPF 18B | Triathlon Training | 1 |
| KINPF 21 | Low Impact Cardio | 1 |
| KINPF 22 | Physical Fitness | 1 |
| KINPF 22B | Physical Fitness | 1 |
| KINPF 23 | Cycling Conditioning | 1 |
| KINPF 24 | Cardio Cross Fit | 1 |
| KINPF 53 | Resistance Training | 1 |
| KINPF 53B | Resistance Training | 1 |
| KINPF 54 | Weight Training | 1 |
| KINPF 54B | Weight Training | 1 |
| KINPF 81 | Fitness and Wellness Center | 1 |
| Team Sports Category |  |  |
| KING 2 | Ultimate Frisbee | 1 |
| KING 2B | Ultimate Frisbee | 1 |
| KING 14 | Basketball | 1 |
| KING 14B | Basketball | 1 |
| KING 70 | Soccer | 1 |
| KING 70B | Soccer | 1 |
| KING 74 | Softball | 1 |
| KING 86 | Touch Football | 1 |
| KING 90 | Volleyball | 1 |
| KING 90B | Volleyball | 1 |
| KING 92 | Sand Volleyball | 1 |
| KING 92B | Sand Volleyball | 1 |
| KING 94 | Rugby | 1 |
| Individual and Dual Activities Category |  |  |
| KING 10 | Badminton | 1 |
| KING 10B | Badminton | 1 |
| KING 84 | Tennis | 1 |
| Intercollegiate Athletics Category |  |  |
| KINIA 1AD | Baseball (Men) | 3 |
| KINIA 2AD | Off-Season Conditioning for Athletes | 0.5-3 |
| KINIA 3AD | Basketball (Men) | 3 |


| KINIA 4AD | Pre-Season Training for Athletes | 0.5-3 |
| :---: | :---: | :---: |
| KINIA 5AD | Cross Country (Men) | 3 |
| KINIA 7AD | Football (Men) | 3 |
| KINIA 13AD | Soccer (Men) | 3 |
| KINIA 15AD | Swimming (Men) | 3 |
| KINIA 19AD | Track \& Field (Men) | 3 |
| KINIA 21AD | Volleyball (Men) | 3 |
| KINIA 23AD | Water Polo (Men) | 3 |
| KINIA 27AD | Basketball (Women) | 3 |
| KINIA 29AD | Cross Country (Women) | 3 |
| KINIA 33AD | Beach Volleyball (Women) | 3 |
| KINIA 35AD | Soccer (Women) | 3 |
| KINIA 37AD | Softball (Women) | 3 |
| KINIA 39AD | Swimming (Women) | 3 |
| KINIA 43AD | Track \& Field (Women) | 3 |
| KINIA 45AD | Volleyball (Women) | 3 |
| KINIA 47AD | Water Polo (Women) | 3 |
| Subtotal Units |  | 6 |
| Required Subtotal |  | 24-26 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |

Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Personal Trainer - Certificate of Achievement

Plan Code: 3700
This program is designed for students interested in pursuing careers in the personal training and fitness industries. Topics include fitness principles in fitness, anatomy and physiology, fitness and wellness assessment tests, safety concerns and risk management, proper exercise techniques and client relationship building. Students completing this program will be prepared to pass the National Academy of Sports Medicine (NASM) Certification Exam.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to different components of personal training.
- Demonstrate human movement science, functional anatomy, physiology, and kinesiology skills.


## Program Requirements

REQUIRED COURSES
KINPP 23 First Aid and Safety
Units

# Yoga Teacher Training - Certificate of Achievement 

Plan Code: 3701

This program is designed to enhance students' understanding of yoga by exploring the anatomy of yoga postures, cueing for proper alignment in poses, emphasis on safe and sensible sequencing for beginning and intermediate level students, examining effective teaching techniques for a variety of settings, and exploring the history and philosophy. Upon successful completion of the Yoga Teacher Training Program, students will be eligible to apply for their Yoga Alliance 200-hour instructor certification and will be prepared for employment as a trained yoga teacher in private and public settings.

## Program Student Learning Outcomes

- Demonstrate skills for instructing yoga, including developing
sequences, pranayama techniques, anatomical cueing for
adjustments, biomechanics of asanas, providing variations, and
modifications.
- Identify the philosophy of yoga through history, the development of
the asanas and major lineages of yoga.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| KINPF 14 | Yoga | $\mathbf{1}$ |
| :--- | :--- | ---: |
| KINPP 23 | First Aid and Safety | 3 |
| KINPP 220 | Yoga Theory | 3 |
| KINPP 222 | Foundations of Teaching Yoga 1 | 3 |
| KINPP 224 | Foundations of Teaching Yoga 2 | 3 |
| KINPP 226 | Yoga Practicum | 3 |
| Total Units |  | $\mathbf{1 6}$ |

## Athletic Coaching - Certificate of Accomplishment

Plan Code: 4701

This certificate is recognized in the greater Long Beach area for enhanced employment opportunities in the field of coaching.

## Program Student Learning Outcomes

- Develop a statement of philosophy for athletic coaching.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| KINPP 5 | Sports Appreciation | 3 |
| KINPP 14 | Theory of Athletic Coaching | 3 |
| KINPP 15 | Sports Officiating (Fall) | 3 |
| KINPP 17 | Sports Officiating (Spring) | 3 |
| KINPP 23 | First Aid and Safety | 3 |
| Total Units |  | $\mathbf{1 5}$ |

## LIBRARY TECHNICIAN

The goal of the Library program is to prepare all students for transfer, vocational, and to become lifelong learners to function effectively in a highly technological society with an information-based economy. Library systems are designed, and the staff is organized and committed, to achieving the following objective: to help users develop information competency, a broad-based literacy that includes the skill to identify, retrieve, evaluate, and apply information to a problem-solving context.

## Library Technician - Associate in Science

Plan Code: 2033
This program is designed to teach the fundamentals of knowledge and skills needed for today's library technicians, library assistants, and library support staff. The degree is designed to successfully prepare students for employment with entry and mid-level library technician positions in public, academic, school, special libraries, and other informationrelated industries. It encompasses library automation essentials such as acquisitions, cataloging, circulation, public access catalogs, techniques of information retrieval, and leadership.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate knowledge of theory and skillsets related to services in library and information settings.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| Complete FIFTEEN (15) units from the following: |  |  |
| LIB 200 | Foundation of Library Services (3) |  |
| LIB 210 | Introduction to Access Services (3) |  |
| LIB 220 | Introduction to Acquisitions (3) |  |
| LIB 230 | Technology and Teamwork (3) |  |
| LIB 240 | Introduction to Cataloging (3) |  |
| LIB 250 | Introduction to Youth Services (3) |  |
| LIB 251 | School Library Media Assistant (3) |  |
| Subtotal Units |  | 15 |
| IN ADDITION, complete THREE to FOUR (3-4) units from the following: |  |  |
| CDECE 47 | Human Development (3) |  |
| COMM 20 | Elements of Interpersonal Communication (3) |  |
| COMM 25 | Elements of Intercultural Communication (3) |  |
| COSA 30 | Introduction to Computers (3) |  |
| COSA 35 | Microsoft Office (3) |  |
| LIB 271WE | Work Experience-Library Technician (1-4) |  |
| Subtotal Units |  | 3-4 |

Required Subtotal ..... 18-19
Complete one of the following: ${ }^{1}$ ..... 19-39
Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Library Technician - Certificate of Achievement 

## Plan Code 3030

This program is designed to teach the fundamentals of knowledge and skills needed for today's Library Technicians. The program is designed to successfully prepare students for employment with entry and midlevel library technician positions in public, academic, school, special libraries, and other information-related industries. It encompasses library automation essentials such as acquisitions, cataloging, circulation, public access catalogs, techniques of information retrieval, and leadership.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to services in library and information settings.
- Demonstrate communication skills that contribute to the functioning as a library technician.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES
Complete FIFTEEN (15) units from the following:

| LIB 200 | Foundation of Library Services (3) |
| :--- | :--- |
| LIB 210 | Introduction to Access Services (3) |
| LIB 220 | Introduction to Acquisitions (3) |
| LIB 230 | Technology and Teamwork (3) |
| LIB 240 | Introduction to Cataloging (3) |
| LIB 250 | Introduction to Youth Services (3) |
| LIB 251 | School Library Media Assistant (3) |

Subtotal Units
IN ADDITION, complete THREE to FOUR (3-4) units from the following:

| CDECE 47 | Human Development (3) |
| :--- | :--- |
| COMM 20 | Elements of Interpersonal Communication <br> $(3)$ |
| COMM 25 | Elements of Intercultural Communication <br> $(3)$ |
| COSA 30 | Introduction to Computers (3) |
| COSA 35 | Microsoft Office (3) |
| LIB 271WE | Work Experience-Library Technician (1-4) |


| Subtotal Units | 3-4 |
| :--- | ---: |
| Total Units | $18-19$ |

# Library Technician - Certificate of Completion 

Plan Code: 6093
This program is designed to teach the fundamentals of knowledge and skills needed for today's Library Technicians. The program is designed to successfully prepare students for employment with entry and midlevel library technician positions in public, academic, school, special libraries, and other information-related industries. It encompasses library automation essentials such as acquisitions, cataloging, circulation, public access catalogs, techniques of information retrieval, and leadership.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to a library's technical services.
- Demonstrate knowledge of theory and skillsets related to a library's patron-facing services.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| Complete TWO HUNDRED SEVENTY (270) hours from the |  |  |
| following: |  | 54 |
| LIB 600 | Foundations of Library Services | 54 |
| LIB 610 | Introduction to Access Services | 54 |
| LIB 620 | Introduction to Acquisitions | 54 |
| LIB 630 | Technology and Teamwork | 54 |
| LIB 640 | Introduction to Cataloging | 54 |
| LIB 650 | Introduction to Youth Services | 54 |
| LIB 651 | School Library Media Assistant | 270 |
| Total Hours |  |  |

# Fundamentals of Academic Research - Certificate of Accomplishment 

## Plan Code: 4238

This program is designed to help students understand the landscape of credibility for information in society, recognize bias in media, act with an awareness of fake news and deep fakes. The certificate also empowers students to successfully conduct college-level research utilizing scholarly library resources to locate appropriate materials for research assignments.

## Program Student Learning Outcomes

- Develop skills and strategies to conduct effective scholarly research.

LIB 2
Total Units

Introduction to Academic Research

Fundamentals of Academic Research - Certificate of Completion

Plan Code: 6090

This program is designed to help students understand the landscape of credibility for information in society, recognize bias in media, act with an awareness of fake news and deep fakes. The certificate also empowers students to successfully conduct college-level research utilizing scholarly library resources to locate appropriate materials for research assignments.

## Program Student Learning Outcomes

- Develop skills and strategies to conduct effective scholarly research.


## Program Requirements

Code Number Course Title Hours REQUIRED COURSES

| LIB 601 | Introduction to Information | 36 |
| :--- | :--- | :--- |
| LIB 602 | Introduction to Academic Research | 54 |
| Total Hours |  | $\mathbf{9 0}$ |

## Information Competency - Certificate of Accomplishment

Plan Code: 4239

This program is designed to teach students and members of the community the fundamentals of information literacy and media literacy as well as advanced topics on scholarly research in an academic setting. This program helps students understand the information landscape, how to identify fake news and misinformation, formulate research questions, and how to effectively navigate online searches using the Internet and academic databases. The program introduces students to the philosophical, ethical, and legal issues that surround information.
There are no material fees for the courses associated with this program.

## Program Student Learning Outcomes

- Demonstrate knowledge of the concepts related to information literacy, including the ability to find and evaluate accurate information in scholarly and public settings.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| LIB 1 | Introduction to Information | 2 |
| LIB 2 | Introduction to Academic Research | $\mathbf{3}$ |
| Total Units |  | $\mathbf{5}$ |

## Program Requirements

Code Number Course Title Units REQUIRED COURSES

LIB 1
Introduction to Information

## Information Competency - Certificate of Competency

Plan Code: 6571
This program is designed to teach students the fundamentals of information literacy and media literacy as well as advanced topics on scholarly research in an academic setting. This program helps students understand the information landscape, formulate a research question, determine which resources to use for research topics, and how to effectively navigate online searches using the Internet and academic databases. The program introduces students to the philosophical, ethical, and legal issues that surround information.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to research and computer services in library and information settings.

| Program Requirements |  |  |
| :--- | :--- | :---: |
| Code Number $\quad$ Course Title | Hours |  |
| REQUIRED courses |  |  |
| LIB 601 | Introduction to Information | 36 |
| LIB 602 | Introduction to Academic Research | 54 |
| Total Hours |  | 90 |

## Library Technician Patron Facing Certificate of Completion

Plan Code: 6091
This program is designed to teach the fundamentals of knowledge and skills needed for today's Library Technicians. The program is designed to successfully prepare students for employment with entry and mid-level library technician positions in public, academic, school, special libraries, and other information-related industries. It encompasses front-end library services such as access services, reference, techniques of information retrieval, and leadership.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to a library's patron-facing services.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| Complete ONE HUNDRED EIGHT (108) hours from the following: |  |  |
| LIB 610 | Introduction to Access Services | 54 |
| LIB 630 | Technology and Teamwork | 54 |
| LIB 650 | Introduction to Youth Services | 54 |
| LIB 651 | School Library Media Assistant | 54 |
| Total Hours |  | 108 |

# Library Technician School Media Assistant - Certificate of Completion 

Plan Code: 6094

This program is designed to teach the fundamentals of knowledge and skills needed for today's Library Technicians who will be employed, and are employed, in K-12 school settings. The program is designed to successfully prepare students for employment with entry and midlevel library technician positions in school libraries. It encompasses foundations of library services, youth services, and school-library specific functions.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to a library media assistant position.

| Program Requirements |  |  |
| :--- | :--- | ---: |
| Code Number | Course Title | Hours |
| REQUIRED courses |  |  |
| LIB 600 | Foundations of Library Services | 54 |
| LIB 650 | Introduction to Youth Services | 54 |
| LIB 651 | School Library Media Assistant | 54 |
| Total Hours |  | $\mathbf{1 6 2}$ |

## Library Technician Technical Services <br> - Certificate of Completion

Plan Code: 6092
This program is designed to teach the fundamentals of knowledge and skills needed for today's Library Technicians. The program is designed to successfully prepare students for employment with entry and midlevel library technician positions in public, academic, school, special libraries, and other information-related industries. It encompasses backend services such as library automation, acquisitions, and cataloging.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to a library's technical services.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| LIB 620 | Introduction to Acquisitions | 54 |
| LIB 640 | Introduction to Cataloging | 54 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## LINGUISTICS

The mission of the Linguistics program is to provide students with discipline-specific skills and knowledge for transfer to a 4-year college or university. Since language in some form lies at the root of most human activities, commitment to a strong linguistics program is critical to the college's mission to "promote equitable student learning and achievement, academic excellence, and workforce development by delivering high-quality educational programs and support services to our diverse communities."

## Linguistics - Associate in Arts

## Plan Code: 1398

This program focuses on the study of human language from many different aspects, including the structure of language, the sound system, words and their meanings, the history of language, language acquisition, language and the mind and language and culture.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Students will demonstrate awareness of the nature of language and its role in human society.
- Students will describe theories of language and how theories relate to data.
- Students will analyze linguistic structures and their functions.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| LING 1/1H | Linguistics 1 | 3 |
| LING 3 | Introduction to World Languages | 3 |
| PHIL 12 | Introduction to Logic | 3 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| Subtotal Units |  | $\mathbf{1 2}$ |

IN ADDITION, complete SIX to TEN (6-10) units from the following:

| ASL 2 | American Sign Language 2 (4) |
| :--- | :--- |
| ASL 3 | American Sign Language 3 (4) |
| ASL 4 | American Sign Language 4 (4) |
| CDECE 58 | Language \& Literacy in Early Childhood (3) |
| CHIN 2 | Elementary Chinese 2 (5) |
| COMM 25 | Elements of Intercultural Communication |
| ENGL 24 | College Grammar (4) |
| FREN 2 | Elementary French (5) |
| FREN 2C | French 2 for Spanish Speakers (5) |
| FREN 3 | Intermediate French (5) |
| FREN 4 | Intermediate French (5) |
| FREN 25A | Advanced French: Culture in Literature (3) |
| GER 2 | Elementary German (5) |
| ITAL 2 | Elementary Italian (5) |


| ITAL 2C | Elementary Italian for Spanish Speakers (5) |  |
| :---: | :---: | :---: |
| JAPAN 2 | Elementary Japanese (5) |  |
| JAPAN 3 | Intermediate Japanese (5) |  |
| JAPAN 4 | Intermediate Japanese (5) |  |
| KHMER 9 | Khmer for Heritage Speakers (5) |  |
| KHMER 10 | Khmer for Heritage Speakers (5) |  |
| SPAN 2 | Elementary Spanish (5) |  |
| SPAN 3 | Intermediate Spanish (5) |  |
| SPAN 4 | Intermediate Spanish (5) |  |
| SPAN 8 | Spoken Spanish (3) |  |
| SPAN 9/9H | Spanish for Spanish Speakers (5) |  |
| SPAN 10/10H | Spanish for Spanish Speakers (5) |  |
| SPAN 25A | Advanced Spanish: Culture in Literature (3) |  |
| SPAN 25B | Advanced Spanish: History (3) |  |
| SPAN 25C | Advanced Spanish: Politics, Current Event (3) |  |
| SPAN 25D | Advanced Spanish: Literature (3) |  |
| Subtotal Units |  | 6-10 |
| Required Subtotal |  | 18-22 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed | to reach 60 degree-applicable units) ${ }^{2}$ |  |

1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## MATHEMATICS

The Mathematics program is to foster an environment that both challenges and supports its students. The primary purposes of the educational program offered by the department are

- Prepare students for transfer to baccalaureate-granting institutions.
- Nurture an appreciation of the role of mathematics in life.
- Enhance our students' ability to utilize mathematics and critical thinking in their lives.
- Support business and industry in economic development by providing a highly educated work-force.


## Mathematics - Associate in Science Transfer Degree

## Plan Code: 5500C

Students who are interested in becoming a scientist or engineer should consider obtaining the Associate in Science in Mathematics for Transfer degree. Mathematics is the underlying language of all of the physical and life sciences as well as engineering and business. Math is also the architecture upon which modern computers are based. The purpose of the Associate in Science in Mathematics for Transfer degree is threefold.

1. Students who complete the Associate in Science in Mathematics for Transfer degree will have a solid mathematical foundation with semesters of transferable university credit under their belt.
2. Students who complete the Associate in Science in Mathematics for Transfer degree have also taken a transferable elective course selected from the field of their choice.
3. Students who complete the Associate in Science in Mathematics for Transfer degree will receive priority admission with junior status into the California State University system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze given information, then determine and execute a course of action.
- Analyze and interpret results.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| MATH 60/60H | First Calculus Course | 5 |
| MATH 70/70H | Second Calculus Course | 5 |
| MATH 80 | Third Calculus Course | 5 |
| Subtotal Units |  | 15 |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |
| MATH 84 | Intro Differential Eqns and |  |
| Subtotal Units |  | 5 |
| IN ADDITION, | te ONE (1) course from LIS |  |


| LIST B |  |
| :---: | :---: |
| CS 11 | Introduction to Computer Science- C++ (3) |
| CS 21 | Introduction to Computer Science-Java (3) |
| ENGR 54 | Computer Methods (3.5) |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics (5.5) |
| STAT 1/1H | Elementary Statistics (4) |
| Subtotal Units | 3-5.5 |
| Required Subtotal | 23-25.5 |
| Complete one of the | following: ${ }^{1} 37$ |
| Plan C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |
| To earn the Mathematics - Associate in Science Transfer Degree, a student must complete 60-semester units that are eligible for transfer to a CSU that consist of the IGETC pattern and the major requirements. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements. |  |

## Mathematics - Associate in Science

## Plan Code: 2530

This degree is designed to recognize competency in mathematics at a postsecondary level. This Associate Degree may facilitate transfer for a four-year degree.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze given information, then determine and execute a course of action.
- Analyze and interpret results.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:
$\left.\begin{array}{llr}\hline \begin{array}{l}\text { Code Number } \\ \text { REQUIRED COURSES }\end{array} & \text { Course Title } & \text { Units } \\ \hline \begin{array}{ll}\text { ENGL 1 } \\ \text { or ENGL 1H }\end{array} & \begin{array}{l}\text { Reading and Composition } \\ \text { javascript:void(0) } \\ \text { or ENGL 1S }\end{array} & 4-5 \\ \text { or ESL 1S } & \text { Reading and Composition with Support }\end{array}\right]$

| PHYS 3A | Physics for Sci. \& Eng. - Mechanics | 5.5 |
| :---: | :---: | :---: |
| Subtotal Units |  | 33-34 |
| IN ADDITION, complete TWO (2) courses from the following: |  |  |
| BIO 1A | Biology for Science Majors (5) |  |
| BIO 1B | Biology for Science Majors (5) |  |
| CHEM 1A | General Chemistry (5.5) |  |
| CHEM 1B | General Chemistry (5.5) |  |
| ECON 1/1H | Macro Economic Analysis (3) |  |
| ECON $2 / 2 \mathrm{H}$ | Micro Economic Analysis (3) |  |
| GEOL 2 | General Geology, Physical (3) |  |
| GEOL 3/3H | Historical Geology (4.5) |  |
| GEOL 5 | Environmental Geology (3) |  |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M (4.5) |  |
| PHYS 3C | Physics for Sci. \& Eng. - Modern Ph (4.5) |  |
| Subtotal Units |  | 6-11 |
| Required Subtotal |  | 39-45 |
| Complete one of the following: ${ }^{1}$ |  | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree Total |  | 60 |
| 1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> 2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

## MEDICAL ASSISTING PROGRAM

The Medical Assisting program prepares competent Medical Assistants with cognitive, psychomotor, and affective learning domains to enable them to perform entry-level administrative and clinical tasks in a physician's office.

## Medical Assisting: Combined Administrative/Clinical - Associate in Science

Plan Code: 2608
The Medical Assistant Program is designed to educate the student for immediate employment providing assistance to the physician in caring for patients in the medical office or clinic. The wide range of clinical and business duties provides an interesting career for one who enjoys working with people. The Medical Assisting Program is approved by the Long Beach Medical Association. The program is designed to be completed in one academic year and includes either the administrative or clinical assisting courses or a combination of both.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Accurately assess a patient's vital signs.
- Analyze medical records and accurately construct a medical insurance claim form.
- Inspect and correctly troubleshoot artifacts while performing an electrocardiogram.
- Apply common practices to Medical Asepsis in a physician's office and daily living.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | $4-5$ |
| ANAT 41 | Anatomy \& Physiology |  |
| or BIO 60 | Human Biology | 3 |
| AH 60 | Medical Terminology | 1 |
| AH 276 | Health Care Law | 3 |
| MA 270 | Introduction to Medical Assisting | 3 |
| MA 280 | Health Care Clinical Procedures | 3 |
| MA 282 | Advanced Health Care Clinical Procedures | 4 |
| MA 286 | Medical Assisting Combined Practicum | 1 |
| MA 288 | Medical Assisting Practicum Seminar | 3 |
| MA 290 | Basic Medical Insurance Billing | $\mathbf{2 5 - 2 6}$ |
| Subtotal Units |  |  |

IN ADDITION, complete ONE of the following Administrative Options:

Accounting Option

| Database Option |  |
| :---: | :---: |
| Subtotal Units | 6-7 |
| Required Subtotal | 31-33 |
| Complete one of the following: ${ }^{1}$ | 19-39 |
| Plan A |  |
| Plan B |  |
| Plan C |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |
| Minimum Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. |  |
| ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |

## Accounting Option

Code Number Course Title Units
ACCTG 200 Introduction to Accounting 3
COSA 1 Computer Information Competency 1
COSA 10 Microsoft Word for Windows 3
Subtotal Units 7

## Database Option

Code Number Course Title Units
COSA 15 Microsoft Excel for Windows 3
COSA 25 Microsoft Access for Windows 3

Subtotal Units 6

# Medical Assisting: Combined Administrative/Clinical - Certificate of Achievement 

Plan Code: 3608

An Administrative/Clinical Medical Assistant assists the physician in caring for the patient in the medical office or clinic. The range of administrative and clinical duties include assisting with the physical exam, specialty exams, and minor surgery; sterilization; laboratory procedures; giving injections; diagnostic tests; pharmacology; taking a health history; venipuncture; and handling emergency situations, answering phones, scheduling in and out of office appointments, verifying insurance, greeting patients, insurance billing (CPT and ICD-10 coding), insurance authorizations, vital signs, and processing payments.
Program Student Learning Outcomes

- Demonstrate clinical patient skills.
• Demonstrate administrative patient skills.
- Demonstrate medical office employability skills.
Program Requirements

| Code Number $\quad$ Course Title |
| :--- |
| REQUIRED COURSES |


| ANAT 41 | Anatomy \& Physiology |
| :--- | :--- |
| or BIO 60 | Human Biology |


| AH 60 | Medical Terminology | 3 |
| :---: | :---: | :---: |
| AH 276 | Health Care Law | 1 |
| MA 270 | Introduction to Medical Assisting | 3 |
| MA 280 | Health Care Clinical Procedures | 3 |
| MA 282 | Advanced Health Care Clinical Procedures | 3 |
| MA 286 | Medical Assisting Combined Practicum | 4 |
| MA 288 | Medical Assisting Practicum Seminar | 1 |
| MA 290 | Basic Medical Insurance Billing | 3 |
| Subtotal Units |  | 25-26 |
| IN ADDITION, complete ONE of the following Administrative Options: |  |  |
| Accounting Option |  |  |
| Database Option |  |  |
| Subtotal Units |  | 6-7 |
| Total Units |  | 31-33 |

## Accounting Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ACCTG 200 | Introduction to Accounting | 3 |
| COSA 1 | Computer Information Competency | 1 |
| COSA 10 | Microsoft Word for Windows | 3 |
| Subtotal Units |  | 7 |

## Database Option

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSA 15 | Microsoft Excel for Windows | 3 |
| COSA 25 | Microsoft Access for Windows | 3 |
| Subtotal Units |  | 6 |

## Medical Assisting: Administrative Option - Certificate of Achievement

Plan Code: 3606

An Administrative Medical Assistant assists the physician in caring for the patient in the medical office or clinic. The range of Administrative duties include answering phones, scheduling in and out of office appointments, verifying insurance, greeting patients, insurance billing (CPT and ICD-10 coding), insurance authorizations, vital signs, and processing payments.

## Program Student Learning Outcomes

- Demonstrate administrative medical assistant skills.
- Demonstrate medical office employability skills.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | $4-5$ |
| ANAT 41 | Anatomy \& Physiology |  |
| or BIO 60 | Human Biology | 3 |
| AH 60 | Medical Terminology | 1 |
| AH 276 | Health Care Law | 3 |
| MA 270 | Introduction to Medical Assisting | 1 |
| MA 288 | Medical Assisting Practicum Seminar |  |


| MA 290 | Basic Medical Insurance Billing | 3 |
| :---: | :---: | :---: |
| Subtotal Units |  | 15-16 |
| IN ADDITION, complete ONE of the following Administrative Options: |  |  |
| Accounting Option |  |  |
| Database Option |  |  |
| Subtotal Units |  | 6-7 |
| Total Units |  | 21-23 |
| Accounting Option |  |  |
| Code Number | Course Title | Units |
| ACCTG 200 | Introduction to Accounting | 3 |
| COSA 1 | Computer Information Competency | 1 |
| COSA 10 | Microsoft Word for Windows | 3 |
| Subtotal Units |  | 7 |
| Database Option |  |  |
| Code Number | Course Title | Units |
| COSA 15 | Microsoft Excel for Windows | 3 |
| COSA 25 | Microsoft Access for Windows | 3 |
| Subtotal Units |  | 6 |

## Medical Assisting: Clinical Option Certificate of Achievement

Plan Code: 3607
A Clinical Medical Assistant assists the physician in caring for the patient in the medical office or clinic. The range of clinical duties include assisting with the physical exam, specialty exams, and minor surgery; sterilization; laboratory procedures; giving injections; diagnostic tests; pharmacology; taking a health history; venipuncture; and handling emergency situations.

## Program Student Learning Outcomes

- Demonstrate clinical medical assistant skills.
- Demonstrate medical office employability skills.


## Program Requirements

| Code Number <br> REQUIRED COURSES | Course Title | Units |
| :--- | :--- | ---: |
| ANAT 41 | Anatomy \& Physiology |  |
| or BIO 60 | Human Biology | $4-5$ |
| AH 60 | Medical Terminology | 3 |
| AH 276 | Health Care Law | 1 |
| COSA 1 | Computer Information Competency | 1 |
| MA 270 | Introduction to Medical Assisting | 3 |
| MA 280 | Health Care Clinical Procedures | 3 |
| MA 282 | Advanced Health Care Clinical Procedures | 3 |
| MA 286 | Medical Assisting Combined Practicum | 4 |
| MA 288 | Medical Assisting Practicum Seminar | $\mathbf{1}$ |
| MA 290 | Basic Medical Insurance Billing | 3 |
| Total Units |  | $\mathbf{2 6 - 2 7}$ |

## Emergency Medical Technician Certificate of Accomplishment

Plan Code: 4010
An Emergency Medical Technician (EMT) is a specially trained and certified professional who renders immediate medical care in basic life support practices. California law requires all ambulance attendants to be trained and certified to the EMT level and many fire agencies require firefighters to be EMT certified.
Program Student Learning Outcomes

- Demonstrate ability to perform an appropriate primary/initial assessment of the ill or injured patient in the prehospital setting.


## Program Student Learning Outcomes

- To prepare students to become accurate and reliable members of the health care team.
- To prepare students who are well qualified in phlebotomy practices to perform competent lab procedures for the patient.
- Obtain blood using various methods in patients across the lifespan.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AH 220 | Phlebotomy | 2 |
| AH 223 | Phlebotomy Practicum | 1 |
| Total Units |  | 3 |

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| EMT 251 | Emergency Medical Technician | 4 |
| EMT 251L | Emergency Medical Technician Laboratory | 2 |
| Total Units |  | 6 |

## Medical Insurance Billing Certificate of Accomplishment

Plan Code: 4044

A Medical Insurance Biller is trained in medical insurance claim forms, healthcare delivery systems, diagnosis and procedure coding, billing and claims processing. These skills can help qualify you to work in physicians' offices or clinics, medical insurance companies, government agencies and other healthcare environments.

## Program Student Learning Outcomes

- Interpret health care data and properly complete a CMS claim form.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| AH 60 | Medical Terminology | 3 |
| MA 290 | Basic Medical Insurance Billing | 3 |
| Total Units |  | $\mathbf{6}$ |

## Phlebotomy - Certificate of Accomplishment

## Plan Code: 4046

A Phlebotomy Technician is a specially trained certified professional who performs skin puncture and venipuncture blood collection in a laboratory, hospital or physician's office. California law requires training must be obtained in a phlebotomy program approved by the California Department of Public Health.

# METAL FABRICATION TECHNOLOGY 

The Metal Fabrication Technology program's mission is to provide technical training to meet the demands of the industry and the needs of the individual to demonstrate entry level skills necessary for employment.

## Metal Fabrication Technology Associate in Science

Plan Code: 2984
This program will provide the student with the technical competencies required to meet the demands of the metal fabrication industries. This degree will place added emphasis on CNC metal fabrication, design, welding and advance manufacturing techniques and help prepare the student for acceptance into apprenticeship in one of the metalworking trades. The Associate Degree will also provide the General Education courses that help build the scope of knowledge and self-confidence that prepare a student for the working environment.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Perform a common sheet metal layout and fabrication project.
- Perform common metal fabrication using power machinery to produce a fabrication project.
- Design and fabricate an advanced sheet metal project involving two different pieces of CNC fabrication equipment.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 4 |
| MTFAB 50 | Introduction to Metalworking | 3 |
| MTFAB 90 | Computer Integrated Manufacturing | 4 |
| MTFAB 202 | Advanced Metal Layout/Fabrication | 4 |
| MTFAB 204 | Power Metalworking Machine Operations | 4 |
| MTFAB 206 | CNC Metal Fabrication Systems | 3 |
| MTFAB 260 | Blueprint Reading for Metal Fabrication | 2.5 |
| MTFAB 270 | Metallurgy | 2.5 |
| MTFAB 280 | Introduction to Robotic Welding | 1 |
| MTFAB 421 | Metal Fabrication and Layout | 4 |
| WELD 50 | Introduction to Welding | $\mathbf{3 2}$ |
| Required Subtotal |  | $19-39$ |
| Complete one of the following: |  |  |
| Plan A |  |  |
| Plan B |  | 60 |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) |  |  |

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Metal Fabrication Technology Certificate of Achievement

Plan Code: 3982

This program will prepare students for an entry-level position as a trainee in metal layout, fabrication, welding and installation. This certificate will place added emphasis on CNC metal fabrication, design, welding and advance manufacturing techniques and help prepare the student for acceptance into apprenticeship in one of the metalworking trades.

## Program Student Learning Outcomes

- Perform a common sheet metal layout and fabrication project.
- Perform common metal fabrication using power machinery to produce a fabrication project.
- Design and fabricate an advanced sheet metal project involving two different pieces of CNC fabrication equipment.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MTFAB 50 | Introduction to Metalworking | 4 |
| MTFAB 90 | Computer Integrated Manufacturing | 3 |
| MTFAB 202 | Advanced Metal Layout/Fabrication | 4 |
| MTFAB 204 | Power Metalworking Machine Operations | 4 |
| MTFAB 206 | CNC Metal Fabrication Systems | 4 |
| MTFAB 260 | Blueprint Reading for Metal Fabrication | 3 |
| MTFAB 270 | Metallurgy | 2.5 |
| MTFAB 280 | Introduction to Robotic Welding | 2.5 |
| MTFAB 421 | Metal Fabrication and Layout | 1 |
| WELD 50 | Introduction to Welding | 4 |
| Total Units |  | 32 |

## Robotic Welding Automation Certificate of Achievement

Plan Code: 3990
This program provides training to gain the technical and applied skills required to perform advanced programming and operational tasks as per the American Welding Society standards and specifications for robotic welding. The program prepares students for jobs in industry including but not limited to Computer-Controlled Machine Tool Operators for Metal and Plastic and Computer Numerically Controlled Machine Tool Programmers for Metal and Plastic.

## Program Student Learning Outcomes

[^7]
## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MTFAB 50 | Introduction to Metalworking | 4 |
| MTFAB 260 | Blueprint Reading for Metal Fabrication | 3 |
| MTFAB 270 | Metallurgy | 2.5 |
| MTFAB 280 | Introduction to Robotic Welding | 2.5 |
| MTFAB 281 | Advanced Robotic Welding | 2.5 |
| WELD 50 | Introduction to Welding | 4 |
| Total Units |  | $\mathbf{1 8 . 5}$ |

## MUSIC

The Music program is designed to provide students with the technique and repertoire for a successful audition into a university major program, and the coursework necessary to complete core academic courses required for a lower-division major program. There are a number of curricular components that are needed to achieve these goals: theory, musicianship, piano, and the applied performance program, which requires an audition for entrance into the program. The ultimate career goals after transferring to a university music program would be to receive a bachelor's degree in music performance, education, composition, or musicology (theory or history). This would prepare one for a teaching or performance career and/or admission to a graduate program.

## Music - Associate in Arts Transfer Degree

## Plan Code: 5008B/C

The goals of this program are academic transfer to a university and preparation for audition into a university music program. The A.A.T. provides a streamlined core set of courses designed to align with comparable BA music degrees; BM degrees are available as well, depending on the institution.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Students will develop audition and ensemble repertoire and performance techniques at a level appropriate for transfer to a CSU.
- Students will develop proficiency in their music coursework, specifically theory and musicianship, at a level appropriate for transfer to a CSU.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| MUSIC 6 | Introduction to Music Theory | 3 |
| MUSIC 1A | Music Theory I | 3 |
| MUSIC 1B | Music Theory II | 3 |
| MUSIC 2A | Music Theory III | 3 |
| MUSIC 5 | Musicianship I | 1 |
| MUSIC 9 | Musicianship II | 1 |
| MUSIC 10 | Musicianship III | 1 |
| Subtotal Units | $\mathbf{1 5}$ |  |
| IN ADDITION, complete FOUR semesters (2 units) of the following: |  |  |
| MUSIC 92AD |  | Applied Vocal \& Instrumental Music (0.5) |
| Subtotal Units |  | $\mathbf{2}$ |
| IN ADDITION, complete FOUR semesters (6 units) from ONE of the |  |  |
| following performance groups: |  |  |
| MUSIC 11AD | Long Beach City College Viking Chorale (1.5) |  |
| OR |  |  |
| MUSIC 12AD | Long Beach City College Viking Singers (1.5) |  |



To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Music - Associate in Arts

Plan Code: 1220
This program provides additional training and opportunities beyond the A.A.-T. in Music, namely, study in piano proficiency requirements, additional elective ensemble opportunities, and a sophomore performance recital.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Students will achieve sophomore proficiency ranking in performance repertoire and technique.
- Students will achieve sophomore proficiency level in theory, musicianship, and piano placement exams.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MUSIC 1A | Music Theory I | 3 |
| MUSIC 1B | Music Theory II | 3 |
| MUSIC 2A | Music Theory III | 3 |
| MUSIC 5 | Musicianship I | 1 |
| MUSIC 6 | Introduction to Music Theory | 3 |
| MUSIC 9 | Musicianship II | 1 |
| MUSIC 10 | Musicianship III | 1 |
| MUSIC 16 | Musicianship IV | 1 |
| MUSIC 17A | Advanced Applied Vocal \& Instrumental | 0.5 |
|  | Music |  |
| MUSIC 92AD | Applied Vocal \& Instrumental Music (take 3 <br> times) | 1.5 |

## Subtotal Units

IN ADDITION, complete each of the three REQUIRED components below:

| Performance Ensemble Component (Four Semesters) |  |
| :--- | :--- |
| MUSIC 11AD | Long Beach City College Viking Chorale (1.5) |
| OR |  |
| MUSIC 12AD | Long Beach City College Viking Singers (1.5) |
| OR |  |
| MUSIC 14AD | Orchestra (1.5) |
| OR |  |
| MUSIC 23AD | Jazz Choir (1.5) |
| OR |  |
| MUSIC 24AD | Vocal Jazz Ensembles (1.5) |
| OR |  |
| MUSIC 38AD | Wind Ensemble (1.5) |
| OR |  |
| MUSIC 54AD | Jazz Big Band (1.5) |
| Subtotal Units |  |

Subtotal Units

| Piano Proficiency | Component (Three Semesters) |
| :--- | :--- |
| MUSIC 51A | Beginning Piano $1(1.5)$ |
| MUSIC 51B | Beginning Piano $2(1.5)$ |
| MUSIC 51C | Intermediate Piano I (1.5) |

Subtotal Units 4.5

| Chamber Music Component (One Semester) |  |
| :--- | :--- |
| MUSIC 25AD | Chamber Music Ensemble (1.5) |
| OR |  |
| MUSIC 41AD | Madrigal A Cappella Choir (1.5) |
| OR |  |
| MUSIC 57AD | Jazz Combos (1.5) |
| OR |  |
| MUSIC 24AD | Vocal Jazz Ensembles (1.5) |


| Subtotal Units | $\mathbf{1 . 5}$ |
| :--- | ---: |
| Required Subtotal | 30 |
| Complete one of the following: ${ }^{1}$ | $19-39$ |

Plan A

Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Commercial Music - Certificate of Achievement

## Plan Code: 3220

This program is designed to teach the fundamental knowledge and skills needed for today's music professionals. The certificate is designed to successfully prepare students for employment with entry positions in recording, sound production, performance, and other music-related industries. It surveys a broad spectrum of music industry fundamentals such as signal flow, audio recording, audio production, copyright, publishing, licensing, marketing, and music monetization in the internet age.

## Program Student Learning Outcomes

- Demonstrate the industry-standard techniques of modern recording, from analog signal flow to digital audio workstations.
- Develop and apply the necessary technological and business skills required to work and perform in the commercial music industry.


## Program Requirements

Code Number Course Title Units
REQUIRED COURSES
CMUSIC 200 Introduction to Music Technology 2

CMUSIC 220 Live Sound Techniques 2
CMUSIC 230 Music Recording Techniques 2
CMUSIC 240 Music Industry and Entrepreneurship 3
MUSIC 6 Introduction to Music Theory 3
R_TV 60 Pro Tools (Digital Audio Recording/Edit) 3
Subtotal Units 15
IN ADDITION, complete at least FOUR (4) units from the following:

| CMUSIC 18 | Techniques of Jazz \& Commercial Vocalist <br> $(2)$ |
| :--- | :--- |
| CMUSIC 29 | Jazz and Commercial Theory (2) |
| CMUSIC 210 | Electronic and Acoustic Music Production <br> (2) |
| CMUSIC 250 | Songwriting (2) |
| MGMT 80 | Small Business Entrepreneurship (3) |
| MUSIC 7 | Elementary Voice (2.5) |
| MUSIC 8AD | Advanced Voice (2.5) |
| MUSIC 11AD | Long Beach City College Viking Chorale (1.5) |
| MUSIC 12AD | Long Beach City College Viking Singers (1.5) |
| MUSIC 13AD | College Symphony Orchestra (1.5) |
| MUSIC 23AD | Jazz Choir (1.5) |
| MUSIC 24AD | Vocal Jazz Ensembles (1.5) |


| MUSIC 25AD | Chamber Music Ensemble (1.5) |
| :--- | :--- |
| MUSIC 28AD | Percussion Ensemble (1.5) |
| MUSIC 38AD | Wind Ensemble (1.5) |
| MUSIC 41AD | Madrigal A Cappella Choir (1.5) |
| MUSIC 43 | Jazz Improvisation Techniques (1) |
| MUSIC 49AD | Viking Show Band (1.5) |
| MUSIC 51A | Beginning Piano 1 (1.5) |
| MUSIC 51B | Beginning Piano 2 (1.5) |
| MUSIC 51C | Intermediate Piano I (1.5) |
| MUSIC 51D | Intermediate Piano II (1.5) |
| MUSIC 54AD | Jazz Big Band (1.5) |
| MUSIC 55 | Beginning Guitar (1.5) |
| MUSIC 57AD | Jazz Combos (1.5) |
| Subtotal Units |  |
| Total Units |  |

## NURSING: LVN TO RN CAREER LADDER PROGRAM

This program provides high-quality nursing education to a diverse student population. The program facilitates the development of entry-level nurses who are prepared to meet the evolving healthcare needs of the community. The faculty support a student-centered learning environment of collaboration, communication, safety, compassion, and excellence in nursing care.

## Accreditation

Long Beach City College is fully accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges. The nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE Suite 1400, Atlanta, Georgia 30326, (404) 975-5000 and approved by the State of California Board of Registered Nursing.

## Restrictions on Licensure

Persons with substance abuse problems or with conviction of crimes substantially related to the practice of nursing may not be granted a license by the California Board of Registered Nursing. Fingerprints are part of the application for licensure. For further information, refer to the BRN site related to Prior Convictions and Disciplinary Actions. For additional questions, contact the ADN Program Director.

## Program Admission Requirements

## General Information Items

1. All applicants must have a clear background as unclear backgrounds may prevent the student from completing clinical requirements and jeopardize completion of the nursing program or licensure.
2. All applicants should be physically and emotionally fit. If selected, applicant will need to demonstrate proficiency in nursing skills and competencies to meet course objectives and progress in the nursing program.
3. A strong command of the English language, both written and verbal is essential for successful completion of the program.
4. Some clinical facilities require proof of legal U.S. residency to complete required clinical hours. In some cases, an alternative clinical site will not be available. A Social Security or Taxpayer I.D. is required by the California Board of Registered Nurses to obtain licensure as a Registered Nurse.
5. All applicants must show proof of high school graduation or equivalency in the form of a diploma, transcripts or GED. This requirement is waived if the applicant has an Associate's Degree or higher.
6. All applicants must have a valid VN license.

## Sequential Procedure for Application to the Program

1. Applicants are encouraged to view and/or attend the Associate Degree Nursing information session. Information sessions are held on a regular basis throughout the fall and spring semester. Dates and times are listed on the nursing website: https://www.lbcc.edu/ department-nursing (https://www.lbcc.edu/department-nursing/).
2. Successful completion with a grade of "C" or higher in a college math course at the level
of MATH 120 or MATH 130 or MATH 130A or MATH 140 or MATH 115 or
higher OR transcript verified completion with a grade of " $C$ " or higher in a high school Math class at the level of Intermediate Algebra.
3. Completion of ENGL 1 or ENGL 1 S or ESL 1 S or equivalent with a grade of "C" or higher.
4. Applicants must have a minimal overall GPA of 2.5 or higher.
5. Applicants must have a minimal GPA of 2.5 or higher in these science courses: Human Anatomy, Human Physiology and Microbiology. These science courses must be less than 5 years old at the time of application and have a grade of " C " or higher.
6. Unofficial transcripts from LBCC and all colleges attended must be submitted with the application. If accepted into the nursing program, official transcripts for colleges other than Long Beach City College will be required.
7. Complete the online application found on the nursing website (https://www.lbcc.edu/department-nursing (https://www.lbcc.edu/ department-nursing/)) during the posted application period.
8. All provisionally selected applicants and alternates will be required to attend a mandatory Advisement Meeting to discuss further requirements such as the TEAS test, background check and health information.

## LVN to RN Career Ladder - Associate in Science

Plan Code: 2626

The degree prepares students for an entry-level position in a variety of health care settings following successful completion of the NCLEX-RN, the registered nurse national licensing exam. The graduate is qualified for immediate employment in acute care hospitals and many other health care facilities. The ADN also serves as a foundation for specialization. Graduates of the Associate Degree Nursing Program are also eligible to transfer into the upper division nursing courses in ADN to bachelor's degree nursing programs and ADN to master's degree nursing programs.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate nursing practice that is patient centered and culturally appropriate for individuals, families, and communities.
- Integrate principles of quality improvement and safety into nursing practice within healthcare organizations and systems.
- Utilize evidence-based practice in providing nursing care to patients across the lifespan.
- Internalize professional and leadership qualities that influence individuals and groups in the delivery of nursing care.
- Demonstrate collaboration with the interprofessional team, patient, family, and community in the delivery of nursing care.
- Use technologies for the management of information in the delivery of nursing care.


## Program Prerequisites

1. Complete the following courses with a " $C$ " or better.

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ANAT 1 | Human Anatomy | 4 |
| BIO 2 | General Microbiology | 5 |
| ENGL 1 | Reading and Composition | $4-5$ |


| or ENGL 1H | Honors Reading and Composition |  |
| :--- | :--- | ---: |
| or ENGL 1S | Reading and Composition with Support |  |
| or ESL 1S | College Writing for Non-Native Speakers |  |
| PHYSI 1 | Human Physiology | 5 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| Subtotal Units |  | $\mathbf{2 1 - 2 2}$ |
| RECOMMENDED but not a required course: |  |  |
| ADN 225 |  | Pharmacology (3) |

2. Pass Nursing Department Examination with a score of $75 \%$ or better immediately after completion of ADN 20A Transition to Second Level Nursing. This multiple-choice test covers theoretical aspects of first level nursing practice and is given on an individual basis. The test may be taken twice. Before a third attempt, a student must wait for a period of six months. If test is not passed on the second attempt, see program director.
Subtotal (advanced placement) Units: 16
3. Hold a current license to practice as a Vocational Nurse in California.
4. Entrance is not guaranteed. Entrance is determined by space availability.

## Program Requirements

This degree requires the completion of General Education coursework plus the following:


Electives (as needed to reach 60 degree-applicable units) ${ }^{3}$
Minimum Degree Total
${ }^{1}$ Student must be prepared to enter the program within one year after successful completion of ADN 20A Transition to Second Level Nursing.
${ }^{2}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{3}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# LVN to RN Career Ladder (30-unit option) - Certificate of Achievement 

Plan Code: 3626

The Certificate of Achievement prepares students for an entry-level position in a variety of health care settings following successful completion of the NCLEX-RN. Persons who complete only the certificate are not graduates of an accredited ADN program and may not qualify for license by endorsement in other states nor qualify for transfer to an ADN to BSN program.

## Program Student Learning Outcomes

- Integrate evidence supported clinical reasoning and the nursing process into clinical practice.
- Utilize therapeutic and culturally competent communication in the collaborative care environment.
- Demonstrate safe practice in the delivery of patient-centered care.
- Develop an individualized patient teaching plan developed to address patients' unique learning needs.
- Deliver care in a professional manner to meet complex patient and family needs.


## Program Prerequisites

1. Complete the following courses with a "C" or better.

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| PHYSI 1 | Human Physiology | 5 |
| BIO 2 | General Microbiology | 5 |
| Subtotal Units |  | $\mathbf{1 0}$ |

2. Take the Nursing Department Examination This multiple-choice test covers theoretical aspects of first level nursing practice. Results will be used for counseling in the program.

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| First Semester REQUIRED COURSES: |  |  |
| ADN 20A | Transition to Second Level Nursing | 1 |
| Subtotal Units |  | $\mathbf{1}$ |
| Second Semester | REQUIRED COURSES: | 2.5 |
| ADN 21B | Mental Health | 3 |
| ADN 21BL | Mental Health Lab | 1 |
| ADN 31A | Trends in Nursing A | 1.5 |
| ADN 35A | Maternal/Newborn Nursing | 1.5 |
| ADN 35AL | Maternal/Newborn Nursing Lab | $\mathbf{9 . 5}$ |
| Subtotal Units |  |  |

Third Semester REQUIRED COURSES:

| ADN 22B | Advanced Nursing II/Role Transition | 2.5 |
| :--- | :--- | ---: |
| ADN 22BL | Adv Nursing II-Role Transition Lab | 3 |
| ADN 45A | Advanced Medical/Surgical Nursing | 1.5 |
| ADN 45AL | Advanced Medical/Surgical Nursing Lab | 1.5 |
| ADN 31B | Trends in Nursing B | 1 |
| Subtotal Units |  | 9.5 |
| Total Program Units (including prerequisites) | $\mathbf{3 0}$ |  |

## NURSING: REGISTERED NURSING

The nursing program provides high-quality nursing education to a diverse student population. The program facilitates the development of entrylevel nurses who are prepared to meet the evolving healthcare needs of the community. The faculty supports a student-centered learning environment of collaboration, communication, safety, compassion, and excellence in nursing care.

## Accreditation

Long Beach City College is fully accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges. The nursing program is accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road NE Suite 1400, Atlanta, Georgia 30326 and the State of California Board of Registered Nursing

## Restrictions on Licensure

Persons with substance abuse problems or with conviction of crimes substantially related to the practice of nursing may not be granted a license by the California Board of Registered Nursing. Fingerprints via Live Scan are part of the application for licensure. For more information, refer to the BRN site related to Prior Convictions and Disciplinary Actions. For additional questions, contact the ADN Program Director.

## Program Admission Requirements

## General Information Items

1. All applicants must have a clear background as unclear backgrounds may prevent the student from completing clinical requirements and jeopardize completion of the nursing program or licensure.
2. All applicants should be physically and emotionally fit. If selected, the applicant will need to demonstrate proficiency in nursing skills and competencies to meet course objectives and progress in the nursing program.
3. A strong command of the English language, both written and verbal is essential for successful completion of the program.
4. Some clinical facilities require proof of legal U.S. residency to complete required clinical hours. In some cases, an alternative clinical site will not be available. A Social Security or Taxpayer I.D. is required by the California Board of Registered Nurses to obtain licensure as a Registered Nurse.
5. All applicants must show proof of high school graduation or equivalency in the form of a diploma, transcripts or GED. This requirement is waived if the applicant has an Associate Degree or higher.

## Sequential Procedure for Application to the Program

1. Applicants are encouraged to view and/or attend the Associate Degree Nursing information session. Information sessions are held on a regular basis throughout the fall and spring semester. Dates and times are listed on the nursing website: https://www.lbcc.edu/ department-nursing (https://www.lbcc.edu/department-nursing/).
2. Successful completion with a grade of "C" or higher in a college math course at the level of MATH 120 or MATH 130 or MATH 130A or MATH 140 or MATH 115 or
higher OR transcript verified completion with a grade of " C " or higher in a high school Math class at the level of Intermediate Algebra.
3. Completion of ENGL 1 or ENGL 1S or ESL 1S or equivalent with a grade of "C" or higher.
4. Applicants must have a minimal overall GPA of 2.5 or higher.
5. Applicants must have a minimal GPA of 2.5 or higher in these science courses: Human Anatomy, Human Physiology and Microbiology. These science courses must be less than 5 years old at the time of application and have a grade of " C " or higher.
6. Unofficial transcripts from LBCC and all colleges attended must be submitted with the application. If accepted into the nursing program, official transcripts for colleges other than Long Beach City College will be required.
7. Complete the online application found on the nursing website (https://www.lbcc.edu/department-nursing (https://www.lbcc.edu/ department-nursing/)) during the posted application period.
8. All provisionally selected applicants and alternates will be required to attend a mandatory Advisement Meeting to discuss further requirements such as the TEAS test, background check and health information.

## Registered Nursing - Associate in Science

## Plan Code: 2621

This program provides high-quality nursing education to a diverse student population. The program facilitates the development of entry-level nurses who are prepared to meet the evolving healthcare needs of the community. The faculty support a student-centered learning environment of collaboration, communication, safety, compassion, and excellence in nursing care.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate nursing practice that is patient centered and culturally appropriate for individuals, families, and communities.
- Integrate principles of quality improvement and safety into nursing practice within healthcare organizations and systems.
- Utilize evidence-based practice in providing nursing care to patients across the lifespan.
- Internalize professional and leadership qualities that influence individuals and groups in the delivery of nursing care.
- Demonstrate collaboration with the interprofessional team, patient, family, and community in the delivery of nursing care.
- Use technologies for the management of information in the delivery of nursing care.


## Program Prerequisites

Complete the following prerequisite courses prior to applying for the program:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ANAT 1 | Human Anatomy | 4 |
| PHYSI 1 | Human Physiology | 5 |
| BIO 2 | General Microbiology | 5 |
| ENGL 1 | Reading and Composition | 4 |


| or ENGL 1H | Honors Reading and Composition |  |
| :---: | :--- | :--- |
| or ENGL 1S | Reading and Composition with Support |  |
| or ESL 1S | College Writing for Non-Native Speakers |  |
| Subtotal Units |  | $\mathbf{1 8 - 1 9}$ |

## Program Requirements

This degree requires the completion of General Education coursework including the following courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| SOCIO 1/1H | Introduction to Sociology | 3 |
| COMM 10 | Elements of Public Speaking | 3 |
| or COMM 20 | Elements of Interpersonal Communication |  |
| or COMM 30 | Elements of Group Communication |  |

Code Number Course Title Units

First Semester REQUIRED COURSES:

| ADN 10 | Nursing Track - Pharmacology 1 | 1.5 |
| :--- | :--- | ---: |
| ADN 14A | Foundational Concepts of Nursing | 3.5 |
| ADN 14B | Nursing - Health Care Participant | 4 |

Second Semester REQUIRED COURSES:

| ADN 15A | Health and Illness Nursing Concepts 1 | 4 |
| :--- | :--- | ---: |
| ADN 24A | Maternal Newborn Nursing Concepts | 2.5 |
| ADN 24B | Pediatric Nursing Concepts | 2.5 |
| Third Semester REQUIRED COURSES: |  |  |
| ADN 15B | Health and Illness Nursing Concepts 2 | 4.5 |
| ADN 20 | Nursing Track - Pharmacology 2 | 1.5 |
| ADN 24C | Mental Health Nursing Concepts | 3 |

Fourth Semester REQUIRED COURSES:

| ADN 25A | Health and Illness Nursing Concepts 3 | 4 |
| :--- | :--- | ---: |
| ADN 25B | Health and Illness Nursing Concepts 4 | 5 |
| Required Subtotal | $\mathbf{3 6}$ |  |
| Total Program Units (including prerequisites) | $\mathbf{5 4 - 5 5}$ |  |
| Complete one of the following: ${ }^{1}$ | $\mathbf{1 9 - 3 9}$ |  |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units)
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

RECOMMENDED but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ADN 225 | Pharmacology | 3 |
| ADN 810 | Preparation for Nursing | 0.5 |
| AH 60 | Medical Terminology | 3 |
| AH 225 | Basic Arrhythmia Recognition | 0.5 |
| VN 222 | Intravenous Therapy \& Blood Withdrawal | 1.5 |

## NURSING: VOCATIONAL/ PRACTICAL

Prepare students for entry-level vocational nursing licensure and competent practice.

## Program Admission Requirements

1. California Nurse Assistant (CNA) Certificate
2. High School: Proof of high school graduation (12 years) is required. Official transcripts from a U.S. high school, or official General Educational Development (GED) certificate, or official transcripts from a college showing an $A A / A S / B A / B S$ is required. All foreign transcripts must be evaluated by ACEI translation service.
3. Reading Proficiency: Meet graduation proficiency reading requirement, or completion of READ 82 or READ 83 with a grade of "C" or better, or Bachelor's Degree from an accredited U.S. college/ university (foreign transcript evaluation not accepted for Reading).
4. Writing Proficiency: Meet graduation proficiency writing requirement or completion of ENGL 105 or higher.
5. Mathematics Proficiency: Successful completion with a grade of "C" or higher in a college math course at the level of MATH 120 or MATH 130 or MATH 130A or MATH 140 or MATH 115 or higher OR transcript verified completion with a grade of " C " or higher in a high school Math class at the level of Intermediate Algebra.
6. Grade Point Average: If previous college work has been completed, a GPA of 2.0 must be achieved.
7. Information Meeting: It is highly recommended that applicants attend a VN Information meeting prior to applying. Meetings are held monthly. Please view VN webpage to verify date and time of monthly meeting.
8. Prerequisite Courses: All prerequisite courses must be completed prior to applying to the program. Students may apply to the program at the end of the Fall and Spring semester. Please call the Nursing office for exact dates. Prerequisites must have been completed within the previous five years.
9. Background Check: Vocational nursing students must obtain a clear criminal background check prior to the first day of clinical experience. Vocational nursing graduates send fingerprints with the application for licensure.
10. A social security card is required by the California Board of Nursing in order to take the NCLEX. In addition, a social security card is required by some clinical agencies. Inability to provide proof of social security card may jeopardize a student from completing clinical requirements.

## Program Information

1. Applications, along with all required documents, must be submitted the last week of Fall \& Spring semester to the office staff of the School of Health and Science. Selection for admission to the next beginning class will be by lottery. If more students apply than can be accepted, selection will be based upon the student's science GPA.
2. We offer a full-time 3 semester (or 48 weeks) program. The program admits students twice a year in the Fall and Spring semesters.
3. While waiting for the program to start, the student should take any of the following courses to strengthen reading, language or mathematics skills and prepare for a nursing career.

| Code Number | Course Title | Credits |
| :--- | :--- | ---: |
| AH 60 | Medical Terminology | 3 |
| BIO 60 | Human Biology | 4 |
| CDECE 47 | Human Development | 3 |
| COUNS 1 | Orientation for College Success | 1 |
| LEARN 11 | Learning and Academic Strategies | 3 |
| PSYCH 1 | Introduction to Psychology | 3 |
| SOCIO 1 | Introduction to Sociology | 3 |
| KINPP 23 | First Aid and Safety | 3 |
| ENGL 1 | Reading and Composition | 4 |
| ADN 810 | Preparation for Nursing | 0.5 |

4. For questions about any of the above, telephone the School of Nursing at (562) 938-4169 and (562) 938-4166 or visit the Vocation Nursing web page.

## Nursing: Vocational/Practical Associate in Science

Plan Code: 2630

Completion of the Vocational Nursing Program qualifies the student to take the national licensing examination for Vocational nurses (NCLEXPN). A Licensed Vocational Nurse (Practical Nurse in all other states) is prepared for employment in ambulatory care settings (Physician's office, clinics); long term care (skilled nursing facilities, convalescent and residential care); rehabilitation facilities, acute care hospitals, psychiatric facilities, hospice, and in the home. A Licensed Vocational Nurse is qualified to apply to the Associate Degree Nursing Program for the Career Ladder LVN-RN Program. The associate degree also provides students with a broad-based education that prepares them for global citizenry.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Synthesize theories and principles necessary for licensure as a vocational nurse.
- Develop entry-level LVN job readiness skills and employment status 1year post graduation.


## Prerequisite Courses

Complete the following prerequisite courses with a minimum grade of "C" or better in each course:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| BIO 60 | Human Biology | 4 |
| VN 225 | Pharmacology | 3 |
| or ADN 225 | Pharmacology |  |

Select one of the following: 0-6
VN $215 \quad$ Fundamentals of Nursing (6)
Certified Nursing Assistant (CNA) certificate issued by the State of California (Contact Nursing Department)
Subtotal Units 7-13

## Program Requirements

This degree requires the completion of General Education coursework plus the following:

Complete the following required courses with a minimum grade of " C " or better in each course:

Code Number Course Title Units

## REQUIRED COURSES

| VN 220 | Transition to Vocational Nursing | 4 |
| :--- | :--- | ---: |
| VN 240 | Mental Health Nursing | 3 |
| VN 230 | Common Health Deviations 1 | 3 |
| VN 230L | Common Health Deviations 1 Lab | 3.5 |
| VN 235 | Common Health Deviations 2 | 3 |
| VN 235L | Common Health Deviations 2 Lab | 3.5 |
| VN 245 | Maternal-Infant Nursing | 2 |
| VN 245L | Maternal-Infant Nursing Lab | 1 |
| VN 250 | Nursing Care of Children | 2 |
| VN 250P | Nursing Care of Children Practicum | 1 |
| VN 255 | Common Health Deviations 3 | 3 |
| VN 255L | Common Health Deviations 3 Lab | 3.5 |
| VN 260 | Roles and Responsibilities | 1.5 |
| VN 265 | Common Health Deviation-4 | 3 |
| VN 265L | Common Health Deviation-4 Lab | 3 |
| Subtotal Units |  | 40 |
| Required Subtotal (including prerequisites) | $47-53$ |  |
| Complete one of the following: |  |  |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
1 Units for the major may be double-counted for LBCC GE, CSU GE, or
IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60
degree-applicable units.

RECOMMENDED, but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ADN 810 | Preparation for Nursing | 0.5 |
| AH 60 | Medical Terminology | 3 |
| AH 225 | Basic Arrhythmia Recognition | 0.5 |
| VN 222 | Intravenous Therapy \& Blood Withdrawal | 1.5 |

## Nursing: Vocational/Practical Certificate of Achievement

## Plan Code: 3630

Completion of the Vocational Nursing Program qualifies the student to take the national licensing examination for Vocational nurses (NCLEXPN). A Licensed Vocational Nurse (Practical Nurse in all other states) is prepared for employment in ambulatory care settings (Physician's office, clinics); long term care (skilled nursing facilities, convalescent and
residential care); rehabilitation facilities, acute care hospitals, psychiatric facilities, hospice, and in the home. A Licensed Vocational Nurse is qualified to apply to the Associate Degree Nursing Program for the Career Ladder LVN-RN Program.

## Program Student Learning Outcomes

- Synthesize theories and principles necessary for licensure as a vocational nurse.


## Prerequisite Courses

Complete the following prerequisite courses with a minimum grade of " C " or better in each course:

| Code Number | Course Title | Units |
| :---: | :--- | ---: |
| BIO 60 | Human Biology | 4 |
| VN 225 | Pharmacology | 3 |
| or ADN 225 | Pharmacology |  |

Select one of the following: 0-6
VN $215 \quad$ Fundamentals of Nursing (6)
Certified Nursing Assistant (CNA) certificate issued by the State of California (Contact Nursing Department)
Subtotal Units

## Program Requirements

Complete the following required courses with a minimum grade of " C " or better in each course:

Code Number Course Title Units REQUIRED COURSES

| VN 220 | Transition to Vocational Nursing | 4 |
| :--- | :--- | ---: |
| VN 240 | Mental Health Nursing | 3 |
| VN 230 | Common Health Deviations 1 | 3 |
| VN 230L | Common Health Deviations 1 Lab | 3.5 |
| VN 235 | Common Health Deviations 2 | 3 |
| VN 235L | Common Health Deviations 2 Lab | 3.5 |
| VN 245 | Maternal-Infant Nursing | 2 |
| VN 245L | Maternal-Infant Nursing Lab | 1 |
| VN 250 | Nursing Care of Children | 2 |
| VN 250P | Nursing Care of Children Practicum | 1 |
| VN 255 | Common Health Deviations 3 | 3 |
| VN 255L | Common Health Deviations 3 Lab | 3.5 |
| VN 260 | Roles and Responsibilities | 1.5 |
| VN 265 | Common Health Deviation-4 | 3 |
| VN 265L | Common Health Deviation-4 Lab | 3 |
| Subtotal Units |  | 40 |
| Total Units (including prerequisites) | $47-53$ |  |

RECOMMENDED, but not required courses:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ADN 810 | Preparation for Nursing | 0.5 |
| AH 60 | Medical Terminology | 3 |
| AH 225 | Basic Arrhythmia Recognition | 0.5 |
| VN 222 | Intravenous Therapy \& Blood Withdrawal | 1.5 |

## Home Health Aide - Certificate of Accomplishment

Plan Code: 4631

Completion guarantees a state certificate as a Home Health Aide. Students must obtain their Certified Nursing Assistant (C.N.A.) before attending VN 216 Home Health Aide course.

## Program Student Learning Outcomes

- Synthesize theories and principles necessary for certification as a home health aide.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| VN 216 | Home Health Aide | 1.5 |
| Total Units |  | $\mathbf{1 . 5}$ |

## Nursing Assistant - Certificate of Accomplishment

Plan Code: 4630
This certificate prepares students in basic-entry level fundamental nursing skill sets. Completion of course VN 215 Fundamentals of Nursing prepares students to test for the state competency examination for a Certified Nursing Assistant. (C.N.A.)

## Program Student Learning Outcomes

- Synthesize theories and principles necessary for certification as a nursing assistant.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| VN 215 | Fundamentals of Nursing | 6 |
| Total Units |  | 6 |

## NUTRITION AND DIETETICS

Nutrition and Dietetics is one of the fastest growing industries. Hospitals, clinics, schools, senior living centers, wellness programs, community and public health centers, universities, and the hospitality industry are always in need of trained food service professionals. The Nutrition and Dietetics program prepares students for entry-level jobs in two years or less. Students earn state-recognized certification and receive hands-on training in local healthcare facilities.

# Nutrition and Dietetics - Associate in Science Transfer Degree 

Plan Code: 5506B/C

This program prepares students for a major in Nutrition and Dietetics at a four-year institution. This degree will provide students with foundations in nutritional science, food principles, biology, microbiology, chemistry sciences, and statistics required towards a Bachelor of Science degree in Dietetics and Food Administration at the four-year university. This AS transfer degree will allow a seamless transition to the CSU system for students interested in a Registered Dietitian/Nutritionist professional pathway.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Utilize up-to-date, evidenced-based practices in the field of nutrition and dietetics.
- Communicate effectively orally and in writing in a health care or community nutrition environment whether working with children, families and seniors.
- Advocate within the community for continued support of health and nutrition.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| BIO 2 | General Microbiology | 5 |
| CHEM 1A | General Chemistry | 5.5 |
| NUTR 20 | Nutrition and Life | 3 |
| PSYCH 1 | Introduction to Psychology | 3 |
| Subtotal Units |  | 16.5 |
| IN ADDITION, complete TWO (2) courses from LIST A: |  |  |
| LIST A |  |  |
| ANAT 1 | Human Anatomy (4) |  |
| CHEM 12A | Organic Chemistry (5.5) |  |
| STAT 1 | Elementary Statistics (4) |  |
| Subtotal Units |  | 8-9.5 |
| IN ADDITION, complete ONE (1) course from LIST B: |  |  |
| LIST B |  |  |
| NUTR 21 | Food Selection and Meal Pr |  |
| Subtotal Units |  | 4 |

Required Subtotal
Complete one of the following: ${ }^{1}$ 28.5-30
Plan B
Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$
Degree Total
1 Units for the major may be double-counted for CSU GE, or IGETC; see
counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60
transferable units.
To earn an associate degree for transfer, a student must complete 60
semester units that are eligible for transfer to a CSU that consist of
either the IGETC pattern or CSU GE breadth and a major of at least 18
units. Students must have a minimum GPA of 2.0 in all CSU-transferable
coursework to receive an associate degree for transfer and all courses
in the major must be completed with a C or better. Students earning an
associate degree for transfer will not be required to complete any other
local graduation requirements.

## Nutrition Assistant - Associate in Science

Plan Code: 2321
The Nutrition Assistant is a member of the dietetic health care team, functioning under the direction of a Registered Dietitian Nutritionist (RDN). This program instructs the student in nutritional care, teaching techniques, nutrition principles, diet modification, nutritional counseling and food service management. Nutrition Assistants are trained to function as nutritional care specialists in the dietary departments of hospitals, clinics and other health care facilities. For the Nutrition Assistant Program, students must fulfill the Associate Degree requirements (by completing the Certificates of Achievement for the Dietetic Service Supervisor 30-unit program, Nutrition Assistant program courses 13 units and the graduation requirements). Students completing the associate degree, in Nutrition Assistant are eligible for transfer to a four-year university and can continue their education in Dietetics/Food and Nutrition. This degree offers a Registered Dietitian Nutritionist (RDN) pathway.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Synthesize the theory and principle of clinical nutrition care.
- Manage a healthcare kitchen to industry standards.
- Develop and conduct a nutrition presentation within a community agency.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

Code Number Course Title Units

## REQUIRED COURSES

Complete the 30-unit coursework required for the Dietetic Service Supervisor Program:

| NUTR 20 | Nutrition and Life | 3 |
| :---: | :---: | :---: |
| NUTR 21 | Food Selection and Meal Preparation | 4 |
| NUTR 24 | Sanitation, Safety and Equipment | 3 |
| NUTR 25 | Intro to Food Service/Work Organizations | 3 |
| NUTR 28 | Food Production Management | 3 |
| NUTR 31 | Menu Planning and Food Purchasing | 3 |
| NUTR 32 | Therapeutic Diets | 3 |
| NUTR 227 | Supervision and Training Techniques | 3 |
| NUTR 230A | Clinical Field Experience I | 2.5 |
| NUTR 230B | Clinical Field Experience I | 2.5 |
| Subtotal Units |  | 30 |
| IN ADDITION, complete the following: |  |  |
| NUTR 34 | Advanced Nutrition Care | 3 |
| NUTR 35 | Advanced Medical Nutrition Therapy | 3 |
| NUTR 236 | Dietetic Professional Development Seminar | 1 |
| NUTR 240A | Clinical Field Experience II | 3 |
| NUTR 240B | Clinical Field Experience II | 3 |
| Subtotal Units |  | 13 |
| Required Subtotal |  | 43 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree To |  | 60 |

${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

RECOMMENDED for the Natural Sciences Requirement: BIO 60 Human Biology (preferred), BIO 2 General Microbiology, PHYSI 1 Human Physiology, ANAT 1 Human Anatomy, or any CHEM.

RECOMMENDED for the Proficiency in Mathematics: It is recommended that the student complete this proficiency prior to enrollment in NUTR 28 Food Production Management and NUTR 32 Therapeutic Diets by presenting a passing score on the placement test or successful completion of a mathematics course at the level of elementary algebra (MATH 110 First Course in Algebra) or higher.

## Formula Room Technician Certificate of Achievement

## Plan Code: 3221

This Certificate of Achievement will prepare an individual to be employed as a Formula Room Technician or Formula Room Human Milk Technician in specialized formula rooms in children hospitals and other health care institutions. The Formula Room Technician is responsible for safe and effective operation of equipment needed to prepare infant formula and maintain sanitation in the preparation room.

## Program Student Learning Outcomes

- Evaluate proper safety and sanitation techniques utilized in food service systems.
- Create menus for modified diets in the health care setting.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSA 1 | Computer Information Competency | $\mathbf{1}$ |
| NUTR 20 | Nutrition and Life | 3 |
| NUTR 21 | Food Selection and Meal Preparation | 4 |
| NUTR 24 | Sanitation, Safety and Equipment | 3 |
| NUTR 32 | Therapeutic Diets | 3 |
| NUTR 34 | Advanced Nutrition Care | 3 |
| Total Units |  | $\mathbf{1 7}$ |

## Dietetic Service Supervisor Associate in Arts

Plan Code: 1320

This program is a state-approved program meeting federal Omnibus Budget Reconciliation Act (OBRA) and Title 22 requirements of the California State Department of Public Health (CDPH) and Certification Regulation for food service supervisors in general acute care hospitals, acute psychiatric hospitals, skilled nursing facilities, rehabilitation and convalescent hospitals, and intermediate care facilities. In addition, this program is approved by the Association of Nutrition and Foodservice Professionals (ANFP), which administers the credentialing exam for the Certified Dietary Manager (CDM) certification.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Synthesize the theory and principle of clinical nutrition care.
- Manage a healthcare kitchen to industry standards.
- Develop and conduct a nutrition presentation within a community agency.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| NUTR 20 | Nutrition and Life | 3 |
| NUTR 21 | Food Selection and Meal Preparation | 4 |
| NUTR 24 | Sanitation, Safety and Equipment | 3 |
| NUTR 25 | Intro to Food Service/Work Organizations | 3 |
| NUTR 28 | Food Production Management | 3 |
| NUTR 31 | Menu Planning and Food Purchasing | 3 |
| NUTR 32 | Therapeutic Diets | 3 |
| NUTR 227 | Supervision and Training Techniques | 3 |
| NUTR 230A | Clinical Field Experience I | 2.5 |
| NUTR 230B | Clinical Field Experience I | 2.5 |


| Required Subtotal |
| :--- |
| Complete one of the following: ${ }^{1} \quad 30$ |
| $\quad$ Plan A |
| Plan B |
| Plan C |
| Electives (as needed to reach 60 degree-applicable units) |
| Minimum Degree Total |
| Units for the major may be double-counted for LBCC GE, CSU GE, or |
| IGETC; see counselor for limitations. |
| ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 |
| degree-applicable units. |

RECOMMENDED for the Natural Sciences Requirement: BIO 60 Human Biology (preferred), BIO 2 General Microbiology, PHYSI 1 Human Physiology, ANAT 1 Human Anatomy, or any CHEM.

RECOMMENDED for the Proficiency in Mathematics: It is recommended that the student complete this proficiency prior to enrollment in NUTR 28 Food Production Management and NUTR 32 Therapeutic Diets by presenting a passing score on the placement test or successful completion of a mathematics course at the level of elementary algebra (MATH 110 First Course in Algebra) or higher.

RECOMMENDED for the Social Sciences Requirement: SOCIO 1 Introduction to Sociology or PSYCH 1 Introduction to Psychology

## Dietetic Service Supervisor Certificate of Achievement

Plan Code: 3320

This program is a state-approved program meeting federal Omnibus Budget Reconciliation Act (OBRA) and Title 22 requirements of the California State Department of Public Health (CDPH) and Certification Regulation for food service supervisors in general acute care hospitals, acute psychiatric hospitals, skilled nursing facilities, rehabilitation and convalescent hospitals, and intermediate care facilities. In addition, this program is approved by the Association of Nutrition and Foodservice Professionals (ANFP) organization, which administers the credentialing exam for the Certified Dietary Manager (CDM) certification.

## Program Student Learning Outcomes

- Synthesize the theory and principle of clinical nutrition care.
- Manage a healthcare kitchen to industry standards.
- Develop and conduct a nutrition presentation within a community agency.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| NUTR 20 | Nutrition and Life | 3 |
| NUTR 21 | Food Selection and Meal Preparation | 4 |
| NUTR 24 | Sanitation, Safety and Equipment | 3 |
| NUTR 25 | Intro to Food Service/Work Organizations | 3 |
| NUTR 28 | Food Production Management | 3 |
| NUTR 31 | Menu Planning and Food Purchasing | 3 |


| NUTR 32 | Therapeutic Diets | 3 |
| :--- | :--- | ---: |
| NUTR 227 | Supervision and Training Techniques | 3 |
| NUTR 230A | Clinical Field Experience I | 2.5 |
| NUTR 230B | Clinical Field Experience I | 2.5 |
| Total Units |  | $\mathbf{3 0}$ |

## Certified Dietary Manager (CDM) Board Exam Preparation - Certificate of Completion

## Plan Code: 6061

The Certified Dietary Manager program provides topics including information, resources, and insights to facilitate students' preparation for the national credentialing examination for dietary managers in health care institutions. Topics cover the five competency areas included in the Certified Dietary Manager (CDM) Credentialing exam, namely: Nutrition, Foodservice, Personnel and Communications, Sanitation and Food Safety, and Business Operations.

## Program Student Learning Outcomes

- Describe the various topics of the CDM Board Exam BluePrint.
- Pass all three sections of the CDM Board Practice Exam including Personnel and Communications section, Sanitation and Food Safety section and Business Operations section with a score of $75 \%$ or higher.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| NUTR 601 | CDM Board Exam Preparation 1 | 18 |
| NUTR 602 | CDM Board Exam Preparation 2 | 18 |
| Total Hours |  | $\mathbf{3 6}$ |

## Cake Decorating Techniques Certificate of Completion

## Plan Code: 6062

Topics in this program include cake decorating techniques, recipes, tools and skill development, cake decorating, creating cakes with special effects, candy molds, novelties, international styles, delivery, set up techniques and business practices. A variety of icings, designs, and shaping techniques will be covered. Upon successful completion, students will receive a Certificate of Completion in Cake Decorating Techniques.

## Program Student Learning Outcomes

- Apply design concepts and techniques in creating cakes/products for special occasions.
- Use a variety of decorating techniques.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| FT 651 | Cake Decorating Techniques | 54 |
| FT 652 | Cake Decorating for Special Occasions | 54 |
| Total Hours |  | $\mathbf{1 0 8}$ |

## PHILOSOPHY

The discipline of philosophy is a fundamental course of study for all college students. Philosophy courses explore enduring human concerns regarding the nature of knowledge, reality, the mind, and values. Students are trained to understand and analyze classic philosophical texts as well as to think critically about contemporary issues relating to social justice, human rights, the environment, technology, art, and religion. Philosophy courses help to instill lifelong habits of questioning, analyzing, and exploring alternative viewpoints. The study of philosophy also develops critical reading, writing, and thinking skills that are crucial for success at the university level. The overall mission of this program is to aid students in developing the requisite knowledge and skills to excel upon transfer to the CSU and UC systems.

## Philosophy - Associate in Arts Transfer Degree

Plan Code: 5012B/C

This program is designed to guide students in the exploration of a diversity of philosophical ideas, and to enhance their critical thinking, logic, and imaginative skills. Students who complete the philosophy degree will be able to explain, analyze, and assess a wide variety of philosophical issues. A second purpose is to prepare students for transfer to a university. Upon completion of their program, philosophy majors will be able to describe and analyze various philosophical problems with both academic and practical applications. They will be able to utilize critical thinking and logic skills in philosophical contexts as well as other academic and non-academic areas.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Describe philosophical problems and apply critical thinking and logic skills to analyze them.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| Complete TWO (2) courses from the following: |  |  |
| PHIL 6/6H | Introduction to Philosophy (3) |  |
| or PHIL 7 | Introduction to Ethics (3) |  |
| or PHIL 7H | Honors Introduction to Ethics (3) |  |
| PHIL 22 | Symbolic Logic (3) |  |
| Subtotal Units |  | 6 |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |
| Any REQUIRED CORE not already used |  |  |
| PHIL 4 | History of Ancient Philosophy (3) |  |
| PHIL 5 | History of Modern Philosophy (3) |  |
| PHIL 9 | Introduction to Existentialism (3) |  |
| PHIL 10 | Introduction to Feminist Philosophy (3) |  |
| or PHIL 10H | Honors Intro to Feminist Philosophy (3) |  |


| Subtotal Units |  |
| :---: | :---: |
| IN ADDITION, complete TWO (2) courses from LIST B: |  |
| LIST B |  |
| Any LIST A course not already used |  |
| HIST 1A | History of Western (European) Civilization (3) |
| HIST 1B | History of Western (European) Civilization (3) |
| PHIL 14 | Philosophy of Religion (3) |
| Subtotal Units | 6 |
| IN ADDITION, complete ONE (1) course from LIST C: |  |
| LIST C |  |
| Any LIST A or LIST B course not already used |  |
| PHIL 8 | Philosophies of Global East and South (3) |
| PHIL 11 | Critical Thinking (3) |
| PHIL 12 | Introduction to Logic (3) |
| Subtotal Units | 3 |
| Required Subtotal | 18 |
| Complete one of th | following: ${ }^{1}$ 37-39 |
| Plan B |  |
| Plan C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE, or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |
| To earn an associat semester units that either the IGETC pat units. Students mus coursework to receiv in the major must be associate degree for local graduation req | degree for transfer, a student must complete 60 re eligible for transfer to a CSU that consist of ern or CSU GE breadth and a major of at least 18 have a minimum GPA of 2.0 in all CSU-transferable an associate degree for transfer and all courses completed with a C or better. Students earning an transfer will not be required to complete any other irements. |

## PHYSICAL SCIENCES

The Physical Sciences program offers lower division courses which provide an understanding of physical science concepts and thus permits students to transfer to a baccalaureate degree program in various physical science majors.

# Physics - Associate in Science Transfer Degree 

Plan Code: 5540C

The Physics Associate Degree for Transfer will prepare students for transfer to a University of California (UC) or California State University (CSU) program in Physics while meeting the minimum lower division admission requirements ( 60 transferable units). Completion of these classes also provides a foundation for programs in Physical Science, Engineering and Math.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze problems and formulate solutions using a combination of graphs, drawings, equations, and conceptual reasoning at the appropriate level.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| MATH 60/60H | First Calculus Course | 5 |
| MATH 70/70H | Second Calculus Course | 5 |
| MATH 80 | Third Calculus Course | 5 |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics | 5.5 |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M | 4.5 |
| PHYS 3C | Physics for Sci. \& Eng. - Modern Physics | 4.5 |
| Required Subtotal |  | 29.5 |
| Complete the following: ${ }^{1}$ |  | 37 |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |  |
| Degree Total |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |  |

To earn the Physics - Associate in Science Transfer Degree, a student must complete 60 -semester units that are eligible for transfer to a CSU that consist of the IGETC pattern and the major requirements. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree
for transfer will not be required to complete any other local graduation requirements.

# UCTP in Physics - Associate in Science UC Transfer Degree 

Plan Code: 5539C
The University of California Transfer Pathways (UCTP) in Physics is designed to prepare students for transferring into a science or engineering-intensive major at a University of California school. This degree gives students a foundational knowledge in calculus-based physics and the calculus required to understand $i t$, which is the prerequisite to many STEM fields. Students who complete this degree will have completed most or all of their underclassman requirements and be qualified for many internship programs in local industries.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze problems and formulate solutions using a combination of graphs, drawings, equations, and conceptual reasoning.


## Program Requirements

This degree requires the completion of General Education ${ }^{1}$ coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| CHEM 1A | General Chemistry | 5.5 |
| CHEM 1B | General Chemistry | 5.5 |
| PHYS 3A | Physics for Sci. \& Eng. - Mechanics | 5.5 |
| PHYS 3B | Physics for Sci. \& Eng. - E \& M | 4.5 |
| PHYS 3C | Physics for Sci. \& Eng. - Modern Physics | 4.5 |
| MATH 60/60H | First Calculus Course | 5 |
| MATH 70/70H | Second Calculus Course | 5 |
| MATH 80 | Third Calculus Course | 5 |
| MATH 84 | Intro Differential Eqns and Linear Alg | 5 |
| Subtotal Units |  | 45.5 |
| IN ADDITION, complete the following IGETC General Education Requirements: ${ }^{1}$ |  |  |
| Plan C ${ }^{2}$ |  |  |
| Area 1A: Freshman Composition (one course) |  |  |
| Area 1B: Critical Thinking (one course) |  |  |
| Area 3: Arts and Humanities (one course) |  |  |
| Area 4: Social and Behavior Science (one course) |  |  |
| Area 5B: Biological Science (one course) |  |  |
| Area 6: Language other than English (one course) |  |  |
| Subtotal IGETC Units: |  | 16-20 |
| Degree Total |  | 5-65.5 |
| 1 The remainin courses in Ar California to | C requirements of two courses in Area 3 be completed after transfer to the Univers ete the entire IGETC pattern. |  |

${ }^{2}$ Units for the major may be double-counted for IGETC; see counselor for limitations.

To earn the UCTP in Physics - Associate in Science UC Transfer Degree, a student must complete a minimum of 60-semester units that are eligible for transfer to a UC that consist of the IGETC pattern and the major requirements. Students must have a minimum GPA of 2.0 in all UCtransferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Physical Sciences - Associate in Science

## Plan Code: 2540

This Associate Degree will prepare students for an entry-level position as a laboratory or environmental technician. Appropriate course selection will also facilitate transfer in a related science major. The A.S. degree requires fewer General Education units, allowing for more physical science units to be counted toward the degree.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Differentiate between unsupported opinions and verifiable scientific facts supported by observations, experiments, and scientific theory.
- Demonstrate a foundational scientific understanding of a specific field of science.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:



Note: Courses are offered each semester excluding the following:
PHYS 3C Physics for Sci. \& Eng. - Modern Physics is offered once each year, usually in the second semester.

GEOL 3 Historical Geology is offered once each year, usually in the second semester.

## POLITICAL SCIENCE

The political science major provides systematic knowledge of the nature and scope of political science with a diverse academic regimen of academic research and practical application. In a nutshell, it is the study of politics and government with concentrations that include: American government, public policy, foreign affairs, political philosophy, and comparative government. In addition, a political science major is preparation for general education, good citizenship and participation in political life.

## Political Science - Associate in Arts Transfer Degree

Plan Code: 5005B/C

This program offers students a comprehensive education in the theoretical as well as practical applications of the discipline. A variety of offered political science courses aid in familiarizing students with the diverse and interrelated subfields in the area of Political Science. The mission of this program (Associate in Arts in Political Science for Transfer degree) is to provide a definitive course of study in political science to a diverse population of students, ultimately preparing those students for transfer to California State University. This program in political science (Associate in Arts in Political Science for Transfer degree) is a broad theoretical and practical major that is applicable to everyday life, which further fulfills the general requirements of the California State University transfer system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Students will demonstrate a systematic knowledge of the nature and scope of political science, particularly in terms of American government and politics.
- Students will develop the necessary skills to civically participate in ways that support a representative democracy


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| POLSC 1/1H | Introduction to Government | 3 |
| Subtotal Units |  | 3 |
| IN ADDITION, complete THREE (3) courses from LIST A: |  |  |
| LIST A |  |  |
| POLSC 11 | Introduction to Political Theory (3) |  |
| POLSC 2/2H | Comparative Government (3) |  |
| POLSC 4/4H | World Politics (3) |  |
| POLSC 10 | Introduction to Political Science (3) |  |
| STAT 1/1H | Elementary Statistics (4) |  |
| Subtotal Units |  | 9-10 |
| IN ADDITION, complete TWO (2) courses from LIST B: |  |  |
| LIST B |  |  |
| Any course fr | IST A not already used |  |



## PSYCHOLOGY

The psychology program presents psychology as the science of mental processes and behaviors, providing research results applicable to everyday life and benefiting human welfare. A second purpose is to prepare students for transfer to a university. Upon completion of their program, psychology majors will be able to describe psychological science as a diverse field of research with both academic and practical applications, that encompasses more than a dozen major subfields. They will be able to identify and explain the four goals of psychology (really, the four goals of science). These goals are description, explanation, prediction and control of mental processes and behaviors occurring within an individual as well as within inter- personal, cultural, and global contexts. Students completing the psychology major program will be equipped to use the scientific method to explore healthy mental processes and behaviors, as well as the pathological ones. Psychology coursework is done in a variety of subspecialties including social psychology, abnormal psychology, cognitive psychology, biological psychology, and personality, psychology of gender and sexuality and research methods. Psychology curriculum introduces students to many of these subspecialties in preparation for upper division coursework at a four-year college or university.

## Psychology - Associate in Arts Transfer Degree

## Plan Code: 5000B/C

This program is designed to expose students to a diverse field of academic research and practical application. The science of psychology deals with description, explanation, prediction and control of mental processes and behaviors occurring within an individual as well as within the inter-personal, cultural and global contexts. Students scientifically explore healthy mental processes and behaviors, as well as the pathological (abnormal) ones in terms of how they affect one's daily functioning within the mentioned contexts, and how to diagnose, explain and treat that pathology. This psychology program (Associate in Arts in Psychology for Transfer Degree) offers students a comprehensive education in the content as well as scientific method of the discipline emphasizing the processes of creating hypotheses as well as hypothesis testing. A variety of offered psychology courses familiarize students with diverse yet interrelated psychology sub-fields. The mission of this program is to provide a major presenting psychology as a science (of mental processes and behaviors) applicable to everyday life, as well as to provide a major that fulfills the general requirements of the California State University transfer system.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- Apply basic research methods in psychology, including research design, data analysis, and interpretation.
- Examine problems related to behavior and mental processes through the scientific approach.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| STAT 1/1H | Elementary Statistics | 4 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| PSYCH 2 | Research Methods for Psychology | 4 |
| Subtotal Units |  | 11 |
| IN ADDITION, complete ONE (1) course from LIST A: |  |  |
| LIST A |  |  |
| PSYCH 6 | Physiological Foundations of Psychology <br> (3) |  |
| Subtotal Units |  | 3 |
| IN ADDITION, complete ONE (1) course from LIST B: |  |  |
| LIST B |  |  |
| PSYCH 11 | Social Psychology (3) |  |
| Subtotal Units |  | 3 |
| IN ADDITION, complete ONE (1) course from LIST C: |  |  |
| LIST C |  |  |
| Any LIST A or LIST B course not already used |  |  |
| PSYCH 4 | Psychology of Adjustment (3) |  |
| PSYCH 10 | Human Sexuality (3) |  |
| or HLED 10 | Human Sexuality (3) |  |
| Subtotal Units |  | 3 |
| Required Subtotal |  | 20 |
| Complete one of the following: ${ }^{1}$ |  | 37-39 |
| Plan B |  |  |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |  |
| Degree Total |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE, or IGETC; se counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |  |

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## PUBLIC HEALTH SCIENCE

The Public Health program provides students with a foundation for a future career in public health, health education and other health-related fields. Students will gain a broad-level understanding of individual, community and population health at the local, national and global levels. Upon completing the necessary coursework, students will be prepared to transfer and continue their education and career preparation at a fouryear institution of higher learning

## Public Health Science - Associate in Science Transfer Degree

## Plan Code: 5508B/C

This program is designed to prepare students with a general education in the principles, concepts and methodologies of Public Health. Public Health is a dynamic field that focuses on community-based efforts to prevent disease, prolong life, and promote healthy environments and lifestyles. Students will be prepared for careers in a variety of settings, including hospitals, state and local health departments, non-profit agencies, educational institutions, research organizations, health clinics, and international programs. This degree is designed for seamless transfer to a California State University.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Appraise the guiding principles of public health as a discipline, including how public health differs from personal health.
- Propose public health interventions to improve the health of a population.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED CORE COURSES |  |  |
| ANAT 1 | Human Anatomy | 4 |
| BIO 41/41H | Contemporary Biology | 3 |
| CHEM 1A | General Chemistry | 5.5 |
| HLED 3 | Contemporary Health Issues | 3 |
| HLED 21 | Introduction to Public Health | 3 |
| PHYSI 1 | Human Physiology | 5 |
| PSYCH 1/1H | Introduction to Psychology | 3 |
| STAT 1/1H | Elementary Statistics | 4 |
| Subtotal Units |  | 30.5 |
| IN ADDITION, complete ONE (1) course from LIST A: | 3 |  |
| LIST A |  |  |
| ECON 1/1H | Macro Economic Analysis (3) |  |
| ECON 2/2H | Micro Economic Analysis (3) |  |
| HLED 10 | Human Sexuality (3) |  |
| HLED 22 | Health and Social Justice (3) |  |
| HLED 24 | Drugs, Health and Society (3) |  |
| NUTR 20 | Nutrition and Life (3) |  |

SOCIO 1/1H Introduction to Sociology (3)

| Subtotal Units | 3 |
| :---: | :---: |
| Required Subtotal | 33.5 |
| Complete one of the following: ${ }^{1}$ | 37-39 |
| Plan B |  |
| Plan C |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |
| Degree Total | 60 |
| ${ }^{1}$ Units for the major may be double-counted for CSU GE, or IGETC; counselor for limitations. |  |
| ${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units. |  |

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## RADIO/TELEVISION BROADCAST NEWS

This program's mission is to provide an academic (A.A.) degree, a certificate, and the personal preparation for successful transfer to a university, Digital Media Arts, or Broadcast News program and to provide Vocational training and skills to successfully gain an internship or employment in the Radio/Television News and media entertainment/ news industry, as well as to provide a General Education course necessary to fulfill transfer requirements, and to provide meaningful and vital opportunities and outreach to the community at large to engage in the creation of radio-television and multi-media news productions.

## Radio/Television Broadcast News Associate in Arts

Plan Code: 1251
This degree is designed to teach the fundamental knowledge and skills needed for today's Broadcast, Cable, Web, and other forms of digital media news productions. Students prepare for writing, editing and producing radio, television, and other forms of digital media news and news feature programs. The degree prepares students for career advancement in this field and may facilitate transfer, in film/television, communications, broadcasting, journalism, or digital media arts, to a four-year college or university, such as CSU, UC, Chapman University or USC. Employment opportunities include audio/video technicians, camera operators, producers/directors, writers, editors, and a plethora of other audio/video support staff for all forms of digital media news productions.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze the elements of pre-production, production, and postproduction to create an industry-ready news segment.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 | Television Production |  |
| R_TV 14 | Electronic Field Production | 3 |
| R_TV 36 | Broadcast News Production | 2.5 |
| R_TV 70WE | Work Experience-Radio,TV | 1-4 |
| Subtotal Units |  | 12.5-15.5 |
| IN ADDITION, complete SIX (6) units from the following: |  |  |
| R_TV 2 | Intro to Careers in Radio \& Television (2) |  |
| R_TV 4 | Writing and Production Planning (3) |  |
| R_TV 8 | Introduction to Media Production (3) |  |
| or R_TV 13 | Television Production (3) |  |
| R_TV 12 | Television Lighting (2.5) |  |
| R_TV 15 | Sports Production (3) |  |



# Radio/Television Broadcast News Certificate of Achievement 

Plan Code: 3251

This certificate is designed to teach the fundamental knowledge and skills needed for today's Broadcast, Cable, Web, and other forms of digital media news productions. Students prepare for writing, editing and producing radio, television, and other forms of digital media news and news feature programs. The Certificate of Achievement will prepare students for career advancement in this field. Employment and internship opportunities include audio/video technicians, camera operators, producers/directors, writers, and a plethora of other audio/video support staff for all forms of digital media news productions.

## Program Student Learning Outcomes

- Critically assess the responsibilities of various creative and technical staff positions and evaluate the importance of each to the production.


## Program Requirements

## Code Number Course Title Units

 REQUIRED COURSES| R_TV 1 | Introduction to Broadcasting | 3 |
| :--- | :--- | ---: |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 Television Production |  |  |
| R_TV 14 | Electronic Field Production | 3 |
| R_TV 36 | Broadcast News Production | 2.5 |
| R_TV 70WE | Work Experience-Radio,TV | $1-4$ |

Subtotal Units
IN ADDITION, complete SIX (6) units from the following:

| R_TV 2 | Intro to Careers in Radio \& Television (2) |
| :--- | :--- |
| R_TV 4 | Writing and Production Planning (3) |
| R_TV 8 | Introduction to Media Production (3) |
| or R_TV 13 | Television Production (3) |
| R_TV 12 | Television Lighting (2.5) |
| R_TV 15 | Sports Production (3) |


| R_TV 16 | Non-Linear Video \& Film Editing (3) |
| :---: | :--- |
| R_TV 34 | Music Video Production (2.5) |
| R_TV 37 | Radio/Television Management and Sales (3) |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) (3) |
| Subtotal Units |  |
| Total Units | $\mathbf{6}$ |

## RADIO/TELEVISION PERFORMANCE

This program's mission is to provide an academic (A.A.) degree, a certificate, and the personal preparation for successful transfer to a university, Digital Media Arts, or Broadcast Radio \& Television program and to provide Vocational training and skills to successfully gain an internship or employment in the Radio/Television and media entertainment industry as an "on air" performer, as well as to provide a General Education course necessary to fulfill transfer requirements, and to provide meaningful and vital opportunities and outreach to the community at large to engage in the creation of radio-television and multi-media productions.

## Radio/Television Performance Associate in Arts

Plan Code: 1252

The Radio/Television Performance Associate in Arts Degree is designed to teach the fundamentals of knowledge and skills needed for today's "On- Air" performer in Broadcast, Cable, Web, and other forms of digital media. Students prepare for performing in these productions either independently or as part of a cast. The Associate Degree will prepare students for career advancement in this field. Appropriate course selection will also facilitate transfer to a four-year college or university in film/television, communications, broadcasting, journalism, or digital media arts. Possible transfers to four-year universities include CSU, UC, and private universities such as Chapman University and USC. Employment opportunities include announcers, reporters, correspondents, radio hosts and contributors, and podcast talent.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Critically assess the responsibilities of various creative and technical staff positions and evaluate the importance of each to the production.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 | Television Production |  |
| R_TV 21 | Radio Production | 3 |
| R_TV 36 | Broadcast News Production | 2.5 |
| R_TV 40 | On-Camera Performance | 3 |
| R_TV 70WE | Work Experience-Radio,TV | 1-4 |
| Subtotal Units |  | 15.5-18.5 |

IN ADDITION, complete FIVE to SIX (5-6) units from the following, which have not already been taken as a required course:

[^8]|  | Introduction to Media Production (3) |
| :---: | :---: |
| or R_TV 13 | Television Production (3) |
| R_TV 12 | Television Lighting (2.5) |
| R_TV 14 | Electronic Field Production (3) |
| R_TV 15 | Sports Production (3) |
| R_TV 16 | Non-Linear Video \& Film Editing (3) |
| R_TV 37 | Radio/Television Management and Sales (3) |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) (3) |
| Subtotal Units | 5-6 |
| Required Subtotal | 20.5-24.5 |
| Complete one of the | following: ${ }^{1}$ 19-39 |
| Plan A |  |
| Plan B |  |
| Plan C |  |
| Electives (as neede | to reach 60 degree-applicable units) ${ }^{2}$ |
| Minimum Degree To | al 60 |
| 1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> 2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |
|  |  |

## Radio/Television Performance Certificate of Achievement

Plan Code: 3252

The Radio/Television Performance Certificate of Achievement is designed to teach the fundamentals of knowledge and skills needed for today's "On- Air" performer in Broadcast, Cable, Web, and other forms of digital media. Students prepare for performing in these productions either independently or as part of a cast. The Certificate of Achievement will prepare students for career advancement in this field. Employment and internship opportunities include announcers, reporters, correspondents, radio hosts and contributors, and podcast talent.

## Program Student Learning Outcomes

- Analyze and demonstrate the physical characteristics of on-air talent required to make an industry-ready production segment.
- Critically assess the responsibilities of various creative and technical staff positions and evaluate the impact of each to the production.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 | Television Production |  |
| R_TV 21 | Radio Production | 3 |
| R_TV 36 | Broadcast News Production | 2.5 |
| R_TV 40 | On-Camera Performance | 3 |
| R_TV 70WE | Work Experience-Radio,TV | $1-4$ |

Subtotal Units
15.5-18.5

IN ADDITION, complete FIVE to SIX (5-6) units from the following, which have not already been taken as a required course:

| R_TV 2 | Intro to Careers in Radio \& Television (2) |
| :--- | :--- |
| R_TV 8 | Introduction to Media Production (3) |
| or R_TV 13 | Television Production (3) |
| R_TV 12 | Television Lighting (2.5) |
| R_TV 14 | Electronic Field Production (3) |
| R_TV 15 | Sports Production (3) |
| R_TV 16 | Non-Linear Video \& Film Editing (3) |
| R_TV 37 | Radio/Television Management and Sales (3) |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) (3) |
| Subtotal Units |  |
| Total Units |  |

## RADIO/TELEVISION PRODUCER

This program's mission is to provide an academic (A.A.) degree, a certificate, and the personal preparation for successful transfer to a university, Digital Media Arts, or Broadcast Television \& Radio program and to provide Vocational training and skills to successfully gain an internship or employment in the Radio/Television and media entertainment industry as a producer of media content, as well as to provide a General Education course necessary to fulfill transfer requirements, and to provide meaningful and vital opportunities and outreach to the community at large to engage in the creation of radiotelevision and multi-media productions.

## Radio/Television Producer Associate in Arts

Plan Code: 1253

The Radio/Television Producer Associate in Arts degree is designed to teach the fundamentals of knowledge and skills needed for today's media producer via Broadcast, Cable, Web, and other forms of digital media program content. Students prepare for producing media productions either independently or in a production environment. The Associate Degree will prepare students for career advancement in this field. Appropriate course selection will also facilitate transfer to a four-year college or university in film and television, communications, broadcasting, or digital media arts. Possible transfers are to four-year universities such as CSU, UC, and private universities such as Chapman University and USC. Employment and internship opportunities include audio/video technicians, camera operators, producers/directors, writers, editors, and a plethora of other audio/video support staff for all forms of digital media content.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Critically assess the responsibilities of various creative and technical staff positions and evaluate the importance of each to the production.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 4 | Writing and Production Planning | 3 |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 | Television Production |  |
| R_TV 14 | Electronic Field Production | 3 |
| R_TV 16 | Non-Linear Video \& Film Editing | 3 |
| R_TV 21 | Radio Production | 3 |
| R_TV 70WE | Work Experience-Radio,TV | $\mathbf{1 - 4}$ |
| Subtotal Units |  | $\mathbf{1 9 - 2 2}$ |

IN ADDITION, complete TWO to THREE (2-3) units from the following:

| R_TV 2 | Intro to Careers in Radio \& Television (2) |
| :--- | :--- |
| R_TV 8 | Introduction to Media Production (3) |
| or R_TV 13 | Television Production (3) |
| R_TV 12 | Television Lighting (2.5) |
| R_TV 15 | Sports Production (3) |
| R_TV 34 | Music Video Production (2.5) |
| R_TV 36 | Broadcast News Production (2.5) |
| R_TV 37 | Radio/Television Management and Sales (3) |
| R_TV 40 | On-Camera Performance (3) |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) (3) |



## Radio/Television Producer Certificate of Achievement

Plan Code: 3253

The Radio/Television Producer Certificate of Achievement is designed to teach the fundamentals of knowledge and skills needed for today's media producer via Broadcast, Cable, Web, and other forms of digital media program content. Students prepare for producing media productions either independently or in a production environment. The Certificate of Achievement will prepare students for career advancement in this field. Employment and internship opportunities include audio/video technicians, camera operators, producers/directors, writers, editors, and a plethora of other audio/video support staff for all forms of digital media content.

## Program Student Learning Outcomes

- Demonstrate collaboration skills related to personnel and timelines for an industry-ready radio or television segment.
- Critically assess the responsibilities of various creative and technical staff positions and evaluate the importance of each to the production.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 4 | Writing and Production Planning | 3 |
| R_TV 8 | Introduction to Media Production |  |


| or R_TV 13 | Television Production |  |
| :--- | :--- | ---: |
| R_TV 14 | Electronic Field Production | 3 |
| R_TV 16 | Non-Linear Video \& Film Editing | 3 |
| R_TV 21 | Radio Production | 3 |
| R_TV 70WE | Work Experience-Radio,TV | $\mathbf{1 9 - 2 2}$ |
| Subtotal Units |  |  |
| IN ADDITION, complete TWO to THREE (2-3) units from the |  |  |
| following: |  |  |
| R_TV 2 | Intro to Careers in Radio \& Television (2) |  |
| R_TV 8 | Introduction to Media Production (3) |  |
| or R_TV 13 | Television Production (3) |  |
| R_TV 12 | Television Lighting (2.5) |  |
| R_TV 15 | Sports Production (3) |  |
| R_TV 34 | Music Video Production (2.5) |  |
| R_TV 36 | Broadcast News Production (2.5) |  |
| R_TV 37 | Radio/Television Management and Sales (3) |  |
| R_TV 40 | On-Camera Performance (3) |  |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) (3) |  |
| Subtotal Units |  | $\mathbf{2 - 3}$ |
| Total Units |  | $\mathbf{2 1 - 2 5}$ |

## Radio/Television Multimedia Production - Certificate of Achievement

Plan Code: 3254

The Radio/Television Multimedia Production Certificate of Achievement is designed to teach the fundamentals of knowledge and skills needed for today's multimedia producer via Broadcast, Cable, Web, and other forms of digital multimedia program content. Students prepare for producing multimedia productions either independently or in a production environment. The Certificate of Achievement will prepare students for career advancement in this field. Employment and internship opportunities include audio/video technicians, camera operators, producers/directors, writers, editors, computer graphics operators, website design, and a plethora of other audio/video/multimedia support staff for all forms of digital media content.

## Program Student Learning Outcomes

- Demonstrate collaboration skills related to personnel and timelines for an industry ready radio, television or multimedia segment.

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 | Television Production |  |
| R_TV 70WE | Work Experience-Radio,TV | $\mathbf{1 - 4}$ |
| DMA 1 | Introduction to Computer Graphics | 3 |
| Subtotal Units |  | $\mathbf{1 0 - 1 3}$ |

IN ADDITION, complete THREE (3) courses from the following:

| DMA 15 | Interaction and Web Design (3) |
| :--- | :--- |
| PHOT 43 | Photoshop and Lightroom Management (3) |
| R_TV 2 | Intro to Careers in Radio \& Television (2) |


| R_TV 4 | Writing and Production Planning (3) |  |
| :---: | :--- | ---: |
| R_TV 14 | Electronic Field Production (3) |  |
| R_TV 16 | Non-Linear Video \& Film Editing (3) |  |
| R_TV 21 | Radio Production (3) | $\mathbf{8 - 9}$ |
| Subtotal Units |  | $\mathbf{1 8 - 2 2}$ |
| Total Units |  |  |

# RADIO/TELEVISION SPORTS BROADCASTING 

The Radio/Television Sports Broadcasting program is designed to teach the fundamentals of knowledge and skills needed for today's sports broadcasting technicians and other production jobs. Students are successfully prepared for employment with entry and mid-level sports production companies, local stations, cable and broadcast networks, and video streaming companies. Students will be engaged in live multiple camera sports productions and sports entertainment productions.

Potential careers students may pursue: Play-By-Play Announcer, Color Commentator, Sideline Reporter, Studio Camera Operator, Handheld Camera Operator, Camera Assistant, Production Assistant, Audio Mixer, Audio Assistant, Replay Operator, Editor, Technical Director, Floor Director, Director, Producer, Associate Producer, Video Operator, and Computer Graphics Operator, amongst others.

This program provides academic (AA) degrees, certificates, and the personal preparation for successful transfer to a university to further study Sports Broadcasting at a four-year college or university, such as CSU, UC, Chapman University, USC, and others.

## Radio/Television Sports Broadcasting - Associate in Arts

## Plan Code: 1249

The Radio/Television Sports Broadcasting Associate in Arts degree is designed to teach the fundamentals of knowledge and skills needed for today's sports broadcasting technicians and other production jobs. The degree is designed to successfully prepare students for employment with entry and mid-level sports broadcasting production companies, local stations, cable and broadcast networks, and streaming companies dealing in this genre. Potential careers students may enter: Studio Camera Operator, Handheld Camera Operator, Camera Assistant, Audio Mixer, Audio Assistant, Slo-Motion Replay Operator, Technical Director, Floor Director, Director, Producer, Assistant Producer, Video Operator, and Computer Graphics Operator. It encompasses sports broadcasting essentials such as camera operation, video switching, slo-motion replay, audio mixing, video operation, computer graphics production, and onair announcing. This AA involves the preparation of students for one or more baccalaureate majors. Baccalaureate majors or related majors include Sports Broadcasting, Television Production, and Digital Media Production. These courses will meet the lower division requirements of a major baccalaureate institutions; private colleges and universities, as well as UC and CSU Systems.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate knowledge of theory and skillsets related to Sports Broadcasting.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


## Radio/Television Sports Broadcasting - Certificate of Achievement

Plan Code: 3249

The Radio/Television Sports Broadcasting Certificate of Achievement is designed to teach the fundamentals of knowledge and skills needed for today's sports broadcasting technicians and other production jobs. This certificate is designed to successfully prepare students for employment with entry and mid-level sports broadcasting production companies, local stations, cable and broadcast networks, and streaming companies dealing in this genre. It encompasses sports broadcasting essentials such as camera operation, video switching, slo-motion replay, audio mixing, video operation, computer graphics production, and onair announcing. Potential careers students may enter. Studio Camera Operator, Handheld Camera Operator, Camera Assistant, Audio Mixer, Audio Assistant, Slo-Motion Replay Operator, Technical Director, Floor Director, Director, Producer, Assistant Producer, Video Operator, and Computer Graphics Operator.

## Program Student Learning Outcomes

- Demonstrate knowledge of theory and skillsets related to Sports Broadcasting.


## Program Requirements

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| R_TV 1 | Introduction to Broadcasting | 3 |
| R_TV 8 | Introduction to Media Production | 3 |
| or R_TV 13 | Television Production |  |
| R_TV 14 | Electronic Field Production | 3 |
| R_TV 15 | Sports Production | 3 |
| R_TV 21 | Radio Production | 3 |
| R_TV 70WE | Work Experience-Radio,TV | 1-4 |
| Subtotal Units |  | 16-19 |
| IN ADDITION, complete 5.5-6 units from the following, which have not already been taken as a required course: |  |  |
| $\text { R_TV } 8$ <br> or R_TV 13 | Introduction to Media Production Television Production (3) |  |
| R_TV 36 | Broadcast News Production (2.5) |  |
| R_TV 40 | On-Camera Performance (3) |  |
| R_TV 60 | Pro Tools (Digital Audio Recording |  |
| Subtotal Units |  | 5.5-6 |
| Total Units |  | 21.5-25 |

## READING AND TEACHER PREPARATION

The Reading and Teacher Preparation Department offers a variety of courses to help students successfully navigate the rigorous demands of college-level academic texts. Classes focus on vocabulary development, reading comprehension and critical analysis and interpretation while students engage in individual and collaborative learning environments. The program curriculum fosters critical and strategic reading and thinking to enhance student confidence, concentration and understanding of text in a variety of formats and genres. Dedicated faculty empower students for success across academic disciplines, careers and lifelong learning.

## Adult Literacy - Certificate of Competency

## Plan Code: 6611

This program equips students with essential literacy skills and strategies with an emphasis on reading, writing, listening, and speaking so that students are able to comprehend, analyze and respond to a variety of text. Upon completing the program, students can earn a Certificate of Competency.

## Program Student Learning Outcomes

- Identify and analyze key ideas and details in reading and writing with both literary and information texts.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| READ 680 | Reading Foundations | 36 |
| READ 681 | Reading Essentials | 54 |
| Total Hours |  | 90 |

## Reading in the Health Sciences Certificate of Completion

## Plan Code: 6151

This program will provide students with an opportunity to prepare for success in health science programs. Students will be supported by a reading instructor and develop critical reading skills to understand and apply the concepts presented in health science textbooks. Students will also learn how to monitor and clarify their thinking while taking written and multiple-choice assessments. Upon successful completion students will be equipped to take health science courses, complete necessary assessments such as ATI TEAS, and apply study habits to their health science courses at LBCC and beyond. Students will be required to take BIO 602 Introduction to Health Career Sciences and READ 602 Reading for Health Career Sciences simultaneously.

## Program Student Learning Outcomes

- Apply varied reading strategies to comprehend and retain fundamentals of health sciences related to anatomy and physiology.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BIO 602 | Introduction to Health Career Sciences | 36 |
| READ 602 | Reading for Health Career Sciences | 27 |
| Total Hours |  | $\mathbf{6 3}$ |

## SOCIAL JUSTICE STUDIES

This program is designed for students who care deeply about an array of social justice issues related to race, ethnicity, gender, sexuality, and intersectionality. The program provides a Social Sciences understanding of systemic roots of inequality as well as potential solutions and remedies to social injustices. This program links students to social justice issues in the greater Long Beach community.

## Social Justice Studies - Associate in Arts Transfer Degree

Plan Code: 5020B/C

This program will provide students with a deep interdisciplinary understanding of the concepts, theories, and methods related to social injustices based on social class, gender, sexuality, race, culture, ethnicity, religion, disability, language, and other statuses in order to create a more equitable society. The A.A.-T in Social Justice Studies is designed to prepare students to transfer to the California State University (CSU) system and they will receive preferential transfer status for the Social Justice Studies major or a related discipline.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Analyze the causes and consequences of social inequality, oppression, and social justice movements through social science perspectives.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


AREA 2: Arts and Humanities

| MUSIC 32 | History of Jazz (3) |
| :--- | :--- |
| PHIL 10 | Introduction to Feminist Philosophy (3) |
| or PHIL 10H | Honors Intro to Feminist Philosophy (3) |

AREA 3: Social Science
COMM 25 Elements of Intercultural Communication
(3)

AREA 4: Quantitative Reasoning and Research Methods

| MATH 21B | Statistics Pathway B (5) |
| :---: | :--- |
| or STAT 1 | Elementary Statistics (4) |
| or STAT 1H | Honors Elementary Statistics (4) |
| or PSYCH 2 | Research Methods for Psychology (4) |

Subtotal Units ..... 9-11
Required Subtotal ..... 18-20
Complete one of the following: ${ }^{1}$ ..... 37-39
Plan B
Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$
Degree Total60

1 Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## SOCIAL WORK

This program prepares students for careers in the helping professions, may prepare students for the first two years of their transferable Social Work education and enhance the skills of persons already employed in this field. In addition, students will be provided with several personal/ interpersonal skills needed to live healthy lives and deal with the stressful demands of daily living.

## Social Work - Associate in Arts

## Plan Code: 1810

This program will prepare students for an entry-level position in the human services/social work field and for career advancement for those already employed in these occupations. Jobs may include case management, caregiver, advocate, and activities coordinator. Students learn the skills and knowledge necessary to potentially transfer to upper division programs in social work or human services and to be employed at the paraprofessional, entry level in social work and human services agencies.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate an ability to work with a diverse population to resolve chronic and crisis issues that are likely to have a detrimental impact on the health and well-being of families and the community.
- Demonstrate an understanding of the knowledge and skills required of a Social Work professional.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| SW 1 | Introduction to Social Work | 3 |
| SW 7 | Introduction to Victimology | 3 |
| SW 15 | Social Welfare: People with Disabilities | 3 |
| SW 26 | Introduction to Gerontology | 3 |
| SW 45 | Stress, Change \& Managing Roles | 3 |
| SW 207 | Development of Helping/Listening Skills | 3 |
| SW 242 | Conflict Resolution/Mediation | 3 |
| SW 260 | Domestic/Intimate Partner Violence | 3 |
| ETHST 1 <br> or ETHST 1H <br> or SOCIO 11 <br> or SOCIO 11H | Introduction to Ethnic Studies Honors Introduction to Ethnic Studies Race \& Ethnic Relations in the U.S. Honors Race \& Ethnic Relations in the US | 3 |
| Required Subtotal |  | 27 |
| Complete one of the following: ${ }^{1}$ |  |  |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |

Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Social Work - Certificate of Achievement

Plan Code: 3810

This program will prepare students for an entry-level position in the human services/social work field and for career advancement for those already employed in these occupations. Jobs may include case management, caregiver, advocate, and activities coordinator. Students learn the skills and knowledge necessary to potentially transfer to upper division programs in social work or human services and to be employed at the paraprofessional, entry level in social work and human services agencies.

## Program Student Learning Outcomes

- Demonstrate an ability to work with a diverse population to resolve chronic and crisis issues that are likely to have a detrimental impact on the health and well-being of families and the community.
- Demonstrate an understanding of the knowledge and skills required of a Social Work professional.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  | 3 |
| SW 1 | Introduction to Social Work | 3 |
| SW 7 | Introduction to Victimology | 3 |
| SW 15 | Social Welfare: People with Disabilities | 3 |
| SW 26 | Introduction to Gerontology | 3 |
| SW 45 | Stress, Change \& Managing Roles | 3 |
| SW 207 | Development of Helping/Listening Skills |  |
| SW 242 | Conflict Resolution/Mediation | 3 |
| SW 260 | Domestic/Intimate Partner Violence | 3 |
| ETHST 1 | Introduction to Ethnic Studies | 3 |
| or ETHST 1H | Honors Introduction to Ethnic Studies |  |
| or SOCIO 11 | Race \& Ethnic Relations in the U.S. |  |
| or SOCIO 11H | Honors Race \& Ethnic Relations in the US |  |
| Total Units |  | $\mathbf{2 7}$ |

## Aides, Assistants and Caregivers Certificate of Achievement

Plan Code: 3809

This certificate prepares students to work with persons who are aging or experiencing disabilities.

## Program Student Learning Outcomes

- Explain and apply skills related to providing care for the aging population and people living with disabilities.

Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| BCOM 262 | Soft Skills for the Workplace | 3 |
| BCOM 263 | Customer Service | 3 |
| CDECE 47 | Human Development | 3 |
| SW 15 | Social Welfare: People with Disabilities | 3 |
| SW 26 | Introduction to Gerontology | 3 |
| SW 207 | Development of Helping/Listening Skills | 3 |
| Total Units |  | $\mathbf{1 6}$ |

## Family Violence Specialist Certificate of Achievement

## Plan Code: 3808

This program prepares students to work with children and families who are impacted by sexual and physical violence.

## Program Student Learning Outcomes

- Explain and apply skills related to working with families who are impacted by violence.


## SOCIOLOGY

Sociology coursework introduces students to modern social problems, sociology of race and ethnicity, the social experience of Latinos, and issues of marriage and family life.

## Sociology - Associate in Arts Transfer Degree

## Plan Code: 5001B/C

This program is designed to prepare students with a general education in the principles, concepts and methodologies of Sociology. A variety of Sociology courses are offered to familiarize students with diverse yet interrelated Sociology sub-fields. The Associate in Arts in Sociology for Transfer degree will prepare students for career advancement and will facilitate transfer in a related major if desired.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Apply sociological imagination and sociological theories to contemporary analysis of public issues.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| SOCIO 1/1H | Introduction to Sociology | 3 |
| SOCIO 2 | Modern Social Problems | 3 |
| STAT 1/1H | Elementary Statistics | 4 |
| Subtotal Units |  | 10 |
| IN ADDITION, complete TWO (2) courses from LIST A: |  |  |
| LIST A |  |  |
| PSYCH 11 | Social Psychology (3) |  |
| SOCIO 11/11H | Race \& Ethnic Relations in the U.S. (3) |  |
| SOCIO 17 | Introduction to Sociology of Gender (3) |  |
| SOCIO 40 | Sociology of the Family (3) |  |
| Subtotal Units |  | 6 |
| IN ADDITION, complete ONE (1) course from LIST B: |  |  |
| LIST B |  |  |
| Any course not already used above |  |  |
| ANTHR 2/2H | Cultural Anthropology (3) |  |
| GEOG 2 | Elements of Cultural Geography (3) |  |
| PSYCH 1/1H | Introduction to Psychology (3) |  |
| Subtotal Units |  | 3 |
| Required Subtotal |  | 19 |
| Complete one of the | following: ${ }^{1}$ | 37-39 |
| Plan B |  |  |
| Plan C |  |  |
| Transferable Electives (as needed to reach 60 transferable units) ${ }^{2}$ |  |  |
| Degree Total |  | 60 |

${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## SPATIAL DESIGN

See Architectural Design (p. 110)
Interior Design (p. 229)
Design Management (p. 167)

## TEAS PREPARATION

## TEAS Preparation - Certificate of Competency

Plan Code: 6545
The Test of Essential Academic Skills (TEAS) Preparation program prepares students with the essential skills for the TEAS. Students gain knowledge and skills in the four areas of the test: Reading, Math, Science, English and Language Usage. Students who reach competencies may advance to develop skills for the workplace and to prepare for future educational opportunities.

## Program Student Learning Outcomes

- Demonstrate understanding of the science, math, reading, and/or English-language skills required for the TEAS.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| TEAS 600 | TEAS Preparation English and Reading | 18 |
| TEAS 605 | TEAS Preparation Math and Science | $\mathbf{1 8}$ |
| Total Hours |  | $\mathbf{3 6}$ |

## THEATRE ARTS

Students completing our program should be fully prepared to move on to a more advanced level in post-secondary institution or in the workforce. Students learn skills necessary for jobs in the Theatre Arts field related to acting.

# Theatre Arts - Associate in Arts Transfer Degree 

Plan Code: 5017B/C

The Theatre Arts courses offer degree preparation with exciting hands-on acting and technical theatre skills that prepare students for transfer and career options in Theatre Management, Stage Management, Box Office Management, Wardrobe, Make-up Artists, Performance, Teaching, and Apprenticeships. Students also develop important technical skills and learn vital production processes while building social skills. Students are trained to be knowledgeable of the variety of jobs, functions and production process of the theatre industry. The overall mission of this program is to aid students in developing the requisite knowledge and skills to excel upon transfer to the CSU and UC systems.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop a basic knowledge and experience of live performance synthesizing lower-division level principles and theories of the theatre art form.
- Develop a respect for theatre as a means of personal, cultural, or social expression.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED CORE COURSES |  |  |
| Complete NINE (9) units from the following: |  |  |
| TART 1 | Acting 1-Introduction to Acting (3.5) |  |
| TART 25 | Introduction to Theatre (3) |  |
| TART 39AD or TART 49AD | Theatre Practicum (1) ${ }^{1}$ <br> Rehearsal and Performance (2.5) |  |
| Subtotal Units |  | 9-9.5 |
| Complete NINE (9) units from LIST A |  |  |
| LIST A |  |  |
| The 9 unit requirement for LIST A must include the REQUIRED CORE COURSE not already used above |  |  |
| TART 2 | Acting 2-Technique \& Characterization (3.5) |  |
| TART 39AD or TART 49AD | Theatre Practicum (1) ${ }^{1}$ <br> Rehearsal and Performance (2.5) |  |
| TART 40 | Stage Craft (3) |  |
| TART 42 | Introduction to Stage Lighting (3) |  |
| TART 55 | Stage Makeup (3) |  |
| Subtotal Units |  | 9 |
| Required Subtotal |  | 18-18.5 |

Complete one of the following: ${ }^{2}$
Plan B
Plan C
Transferable Electives (as needed to reach 60 transferable units) ${ }^{3}$
Degree Total
${ }^{1}$ TART 39AD and TART 49AD are repeatable courses.
${ }^{2}$ Units for the major may be double-counted for CSU GE, or IGETC; see counselor for limitations.
${ }^{3}$ Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Theatre-Acting Academy - Associate in Arts

Plan Code: 1272
Upon successful completion of the following courses, the acting student will have earned an Associate in Arts degree in Theatre Arts. The acting student will not only have gained a broad knowledge of acting, movement, and voice, but also, the academic general education and opportunity for successful transfer to a university or conservatory. The intense curriculum demands self-discipline, organization and a determination to challenge one's own limits.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop a comprehensive knowledge and experience of live performance synthesizing lower-division level principles and theories of acting, production techniques, and creativity.
- Develop a respect for theatre as a means of personal, cultural, or social expression.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

## Code Number Course Title Units

First Semester REQUIRED COURSES:

| TART 1 | Acting 1-Introduction to Acting | 3.5 |
| :--- | :--- | ---: |
| TART 25 | Introduction to Theatre | 3 |
| TART 39AD | Theatre Practicum | $\mathbf{1}$ |
| TART 49AD | Rehearsal and Performance | $\mathbf{2 . 5}$ |
| TART 51 | Theatre Forum | $\mathbf{1}$ |
| TART 55 | Stage Makeup | 3 |
| Subtotal Units |  | $\mathbf{1 4}$ |
| Second Semester REQUIRED COURSES: |  |  |


| TART 4A | Acting 1 - Voice | 2 |
| :--- | :--- | ---: |
| TART 5A | Acting 1 - Movement | 2 |
| TART 6 | Acting 1-Improvisation | 2 |
| TART 2 | Acting 2-Technique \& Characterization | 3.5 |
| TART 39AD | Theatre Practicum | $1-2.5$ |
| or TART 49AD | Rehearsal and Performance |  |

Subtotal Units 10.5-12

Third Semester REQUIRED COURSES:

| DANCE 3 | Musical Theatre Dance | 2 |
| :--- | :--- | ---: |
| or DANCE 20 | Jazz Dance 1 | 2 |
| TART 4B | Acting 2-The Spoken Text | 2 |
| TART 5B | Acting 2-Movement, Mime and Mask | 3.5 |
| TART 3A | Acting 3-Scene Study | 2.5 |
| TART 50 | Major Production Performance | $\mathbf{1 2}$ |
| Subtotal Units |  |  |

Fourth Semester REQUIRED COURSES:
TART 5C Acting 2-Movement, Mime and Mask
TART 3B Acting 3-Scene Study 3.5

| or TART 3C | Acting Workshop-Style |  |
| :---: | :--- | :--- |
| TART 49AD | Rehearsal and Performance | 2.5 |

TART 50/3 Major Production Performance 2
TART 205 Auditions for Theatre and Film 3.5

| Subtotal Units | $\mathbf{1 3 . 5}$ |
| :--- | ---: |
| Required Subtotal | $\mathbf{5 0 - 5 1 . 5}$ |
| Complete one of the following: ${ }^{1}$ | $19-39$ |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Theatre-General - Associate in Arts

## Plan Code: 1271

This program is designed to provide students with an overall appreciation of theatre arts as well as an emphasis in acting and technical theatre. The Associate Degree will prepare students for auditions and careers in Theatre Management, Stage Management, Box Office Management, Wardrobe, Make-up Artists, Performance, Teaching, Apprenticeships, and more.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Develop a basic knowledge and experience of live performance synthesizing lower-division level principles and theories of acting, production techniques, and creativity.
- Develop a respect for theatre as a means of personal, cultural, or social expression.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


Minimum Degree Total
${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Deploy the Arts - Certificate of Accomplishment

Plan Code: 4278

This program introduces student Veterans and non-Veterans to the fundamental elements and techniques of beginning, intermediate, and advanced acting techniques to develop both an understanding and appreciation of acting for the theatre along with weekly therapist classroom insights to address PTSD. The student actor will explore the theory and practice of acting through exercises, improvisation, theatre games, solo and two-person or group scenes as well as their own and discovered service narratives. This process creates for student Veterans and non-Veterans a bridge of mutual understanding and successful college re-integration.

## Program Student Learning Outcomes

- Synthesize acting techniques of personal or discovered narratives in a successful theatrical performance.

| Subtotal Units | 6 |
| :--- | ---: |
| Total Units | 16 |

## 6

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| TART 14 | Beginning Acting - Deploy the Arts | 3 |
| TART 15 | Intermediate Acting - Deploy the Arts | 3 |
| TART 16 | Advanced Acting - Deploy the Arts | 3 |
| Total Units |  | $\mathbf{9}$ |

## Show Business - Commercials, Voice-Over, Film Acting - Certificate of Achievement

Plan Code: 3274

This program will provide students a singular exposure to show business careers, i.e. acting, writing, producing, in television markets both network and cable, as well as positions in commercials, animation performance, and voice acting arenas.

Students will earn the skillsets and competencies required to earn gainful employment in the entertainment industry. These can include but are not limited to, commercial content and structure, microphone and camera techniques, sight-reading material, techniques for connecting to audiences, blocking, teleprompter reading techniques, and actor-to-actor communication.

Upon completion of the courses, the student will have a broad-based and factual knowledge of the world of "Show Business" and the specialties to pursue gainful employment.

## Program Student Learning Outcomes

- Demonstrate the skills to successfully audition at an acceptable industry level
- Identify the different styles of voice acting and the studio recording techniques required to complete a successful audition.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| SHOWB 201 | Show Business Careers-How to Start | 1.5 |
| SHOWB 204 | Marketing Yourself for Show Business | 1.5 |
| TART 1 | Acting 1-Introduction to Acting | 3.5 |
| TART 205 | Auditions for Theatre and Film | 3.5 |
| Subtotal Units |  | $\mathbf{1 0}$ |

IN ADDITION, complete SIX (6) units from the following:

| SHOWB 208A | Breaking into Commercials - Beginning (1.5) |
| :--- | :--- |
| SHOWB 208B | Breaking Into Commercials - Advanced (1.5) |
| SHOWB 210A | Voice-Over Techniques - Beginning (1.5) |
| SHOWB 210B | Voice-Over Techniques-Advanced (1.5) |
| SHOWB 212A | Acting in Film - Beginning (1.5) |

## WEB DEVELOPMENT

The Web Development program prepare students for employment in web development and web programming positions within an organization. Students will learn the skills to plan, create, and implement websites for a wide variety of businesses and organizations. Emphasis will be placed on mobile application development, responsive design and usability.

## Web Development - Associate in Science

Plan Code: 2128
Students will learn relevant and current web technologies including HTML, CSS, JavaScript/jQuery and database concepts. Other topics include mobile web application development, responsive design, accessibility and user-centered design. This program is designed to prepare students for employment in Web Development related fields including both front-end development and back-end development. Students interested in a bachelor's degree (transfer program) should meet with a counselor to discuss how this program fully articulates with other schools.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Create websites by employing several web design tools and programming languages including HTML, CSS, JavaScript, SQL, and PHP.
- Demonstrate and apply effective web development skills for a variety of industries and organizational situations.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

## Code Number Course Title Units

| REQUIRED COURSES |  |  |
| :--- | :--- | ---: |
| COSP 7 | Programming Concepts and Methodologies | 4 |
| COSP 38 | Database Concepts | 4 |
| COSW 10 | Beginning Website Development | 4 |
| COSW 20 | Front End Website Development | 4 |
| COSW 30 | Web Development with PHP/MySQL | 4 |
| COSW 200 | Introduction to JavaScript | 4 |
| COSW 230 | Web Development Frameworks | 4 |
| COSW 240 | Intro to Content Management Systems | 3 |
| Required Subtotal |  | $\mathbf{3 1}$ |
| Complete one of the following: ${ }^{1}$ | $19-39$ |  |

Plan A
Plan B
Plan C
Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$
Minimum Degree Total

2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Web Development-Full Stack Certificate of Achievement

Plan Code: 3128

This program is designed to prepare students for\#beginning\#employment in\#Web Development related fields in both front-end development and back-end development. Topics include modern website development, responsive design, best practices, database-driven web applications, accessibility and user-centered design.

## Program Student Learning Outcomes

- Create websites by employing several web design tools and programming languages including HTML, CSS, JavaScript, SQL, and PHP.
- Demonstrate and apply effective web development skills for a variety of industries and organizational situations.


## Program Requirements

## Code Number Course Title Units

 REQUIRED COURSES| COSP 7 | Programming Concepts and Methodologies | 4 |
| :--- | :--- | ---: |
| COSP 38 | Database Concepts | 4 |
| COSW 10 | Beginning Website Development | 4 |
| COSW 20 | Front End Website Development | 4 |
| COSW 30 | Web Development with PHP/MySQL | 4 |
| COSW 200 | Introduction to JavaScript | 4 |
| COSW 230 | Web Development Frameworks | 4 |
| COSW 240 | Intro to Content Management Systems | 3 |
| Total Units |  | $\mathbf{3 1}$ |

## Front End Web Developer - Certificate of Achievement

Plan Code: 3134
Students will learn modern web development skills including HTML, CSS,
JavaScript, and responsive design for a variety of screen sizes.

## Program Student Learning Outcomes

- Create websites by employing several web design technologies and programming languages including Responsive Design using HTML and CSS, JavaScript, web frameworks, and WordPress CMS.
- Demonstrate and apply effective web development skills for a variety of industries and organizational situations.

1 Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.

## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| COSW 10 | Beginning Website Development | 4 |
| COSW 20 | Front End Website Development | 4 |
| COSW 200 | Introduction to JavaScript | 4 |
| COSW 230 | Web Development Frameworks | 4 |
| COSW 240 | Intro to Content Management Systems | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 9}$ |

## PHP Web Programmer - Certificate of Achievement

Plan Code: 3138
This program provides students with entry-level back-end web programming skills to build data driven website applications using HTML, CSS, PHP, and SQL languages.

## Program Student Learning Outcomes

- Design, run, and analyze new and existing SQL programs according to commonly practiced industry standards.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| COSP 38 | Database Concepts | 4 |
| COSW 10 | Beginning Website Development | 4 |
| COSW 30 | Web Development with PHP/MySQL | 4 |
| COSW 200 | Introduction to JavaScript | $\mathbf{4}$ |
| Total Units |  | $\mathbf{1 6}$ |

## Android App Developer - Certificate of Accomplishment

Plan Code: 4119
Students will learn programming skills in Java or C++, Android App Development, and Database hands-on concepts.

## Program Student Learning Outcomes

- Demonstrate the ability to create, design, and implement java-based Android applications (apps) using the Android API.
- Show the skills to create, manage, and use databases and SQL for Android applications (apps).
- Be able to complete the full development process for Android Applications (apps).


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| CS 11 | Introduction to Computer Science- C++ | 3 |
| or CS 21 | Introduction to Computer Science-Java |  |
| or CS 31 | Introduction to Computer Science-Python |  |


| COSP 230 | Android App Development in Java | 3 |
| :--- | :--- | :--- |
| Total Units | $\mathbf{6}$ |  |

## WELDING TECHNOLOGY

The Welding Technology program provides the necessary technical skills, knowledge, and attitude to prepare students for employment and to provide advanced training in a variety of occupations in the welding and metal fabrication industry.

## Welding Technology - Associate in Science

Plan Code: 2988
This program is designed to prepare students for a variety of entrylevel positions in today's construction and fabrication industries. Upon completion students will have a thorough knowledge of welding safety, theory and procedures, in accordance with the American Welding Society SENSE Entry Welder program, as well as the skill to perform a variety of welding processes. Successful completion of this degree will prepare students for the following career opportunities: welder, welding inspector, welding technician/fitter, pipe fitter/welder, and metal fabricator.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using the SMAW (Shielded Metal Arc Welding) process.
- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


[^9]${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

# Welding Technology - Certificate of Achievement 

Plan Code: 3988

This program is designed to prepare students for a variety of entrylevel positions in today's construction and fabrication industries. Upon completion students will have a thorough knowledge of welding safety, theory and procedures, in accordance with the American Welding Society SENSE (Schools Excelling through National Skills Education) Entry Welder program, as well as the skill to perform a variety of welding processes. Successful completion of this degree will prepare students for the following career opportunities: welder, welding inspector, welding technician/fitter, pipe fitter/welder, and metal fabricator.

## Program Student Learning Outcomes

- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using the SMAW (Shielded Metal Arc Welding) process.
- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MTFAB 50 | Introduction to Metalworking | 4 |
| MTFAB 204 | Power Metalworking Machine Operations | 4 |
| MTFAB 260 | Blueprint Reading for Metal Fabrication | 3 |
| MTFAB 270 | Metallurgy | 2.5 |
| WELD 50 | Introduction to Welding | 4 |
| WELD 211 | Oxy-fuel Welding and Cutting Technology | 2 |
| WELD 212 | Introduction to Shielded Metal Arc Welding | 4 |
| WELD 213 | Introduction to Semi-Automatic Welding | 4 |
| WELD 214 | Introduction to Gas Tungsten Arc Welding | 4 |
| Total Units |  | $\mathbf{3 1 . 5}$ |

## Semi-Automatic Welding - Certificate of Achievement

Plan Code: 3979
This program will emphasize advance welding skills in the GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding) processes. Course work includes a comprehensive study with an emphasis on application of fundamental welding techniques and safe industry practices. Potential careers that the program prepares students for include, but are not limited to, Pipe Fitters and Steamfitters, Sheet Metal Workers, as well as Structural Iron and Steel Workers.

## Program Student Learning Outcomes

- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using semi-automatic
welding processes: GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding).


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MTFAB 260 | Blueprint Reading for Metal Fabrication | 3 |
| MTFAB 270 | Metallurgy | 2.5 |
| WELD 50 | Introduction to Welding | 4 |
| WELD 213 | Introduction to Semi-Automatic Welding | 4 |
| WELD 471 | Semi-Automatic Welding (GMAW and | 1 |
|  | FCAW) |  |
| WELD 472 | Gas Metal Arc Welding | 2 |
| WELD 483 | Gas Metal Arc/Flux Core Arc Welding | 2 |
| Total Units |  | $\mathbf{1 8 . 5}$ |

## Basic Semi-Automatic Welding Certificate of Completion

## Plan Code: 6038

This program is designed for those interested in learning basic Gas Metal Arc Welding and Flux-Core Arc Welding. Course work includes an entrylevel study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student for an entry-level position as a Semi-Automatic Welder. The student will also be required to provide all PPE safety gear (personal protective gear) required to safely perform welds in the lab.

## Program Student Learning Outcomes

- Demonstrate basic level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using semi-automatic welding processes: GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding).


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| WELD 600 | Welding (General) | 72 |
| WELD 671 | Semi-Automatic Welding (GMAW and | 54 |
| Total Hours | FCAW) | $\mathbf{1 2 6}$ |

# Basic Arc Welding - Certificate of Completion 

Plan Code: 6039

This program is designed for those interested in learning basic Arc Welding. Course work includes an entry level study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student for an entry level position as a Shielded Metal Arc Welder. The student will be required to provide all PPE safety gear (personal protective gear) required to safely perform SMAW welds in the lab.

## Program Student Learning Outcomes

- Demonstrate entry level skills to produce quality welds in the flat and horizontal positions using SMAW (Shielded Metal Arc Welding) process.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| WELD 600 | Welding (General) | $\mathbf{7 2}$ |
| WELD 611 | Welding (ARC) | $\mathbf{5 4}$ |
| Total Hours |  | $\mathbf{1 2 6}$ |

## Basic Oxy-Acetylene Welding Certificate of Completion

## Plan Code: 6041

This program is designed for those interested in learning basic OxyAcetylene Welding. Course work includes an entry level study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student for an entry level position as a Oxy-Acetylene Welder. The student be required to provide all PPE safety gear (personal protective gear) required to safely perform OxyAcetylene welds in the lab.

## Program Student Learning Outcomes

- Demonstrate entry level skills to produce quality welds in the flat and horizontal positions using the Oxy-Acetylene process.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| WELD 600 | Welding (General) | 72 |
| WELD 661 | Oxygen Acetylene Welding | 54 |
| Total Hours |  | $\mathbf{1 2 6}$ |

# Exploring Welding and Metal Fabrication - Certificate of Completion 

Plan Code: 6035
This program is designed for those interested in exploring the welding and metal fabrication fields. Course work includes an entry-level study with an emphasis on the safe application of fundamental metal fabrication and welding techniques and practices. This program prepares the student for an entry-level position in the metal fabrication and/or welding industry.

## Program Student Learning Outcomes

- Demonstrate the basic skills to safely model, fabricate and weld a metal part.

| Program Requirements |  |
| :--- | ---: |
| Pode Number Course Title |  |
| REQUIRED CoURSES Hours <br> WELD 601 Exploring Welding |  |
| MTFAB 601 Exploring Metal Fabrication <br> Total Hours  | 18 |

## Gas Tungsten Arc Welding (GTAW) Certificate of Achievement

Plan Code: 3989
This program is designed for those interested in entry level welding skills to required GTAW Aluminum, low carbon, and stainless steels. Course work includes a comprehensive study with an emphasis on application of fundamental welding techniques and safe industry practices.

## Program Student Learning Outcomes

- Demonstrate introductory level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| MTFAB 260 | Blueprint Reading for Metal Fabrication | 3 |
| WELD 50 | Introduction to Welding | 4 |
| WELD 214 | Introduction to Gas Tungsten Arc Welding | 4 |
| WELD 480 | Welding (Inert Gas) | 2 |
| WELD 481 | Welding (Inert Gas) | 1 |
| WELD 482 | Gas Tungsten Arc Welding Basic Joints | $\mathbf{2}$ |
| Total Units |  | $\mathbf{1 6}$ |

## Introduction to Gas Tungsten Arc Welding (GTAW) - Certificate of Achievement

Plan Code: 3977
This program is designed for those interested in entry level welding skills to required GTAW Aluminum, low carbon, and stainless steels. Course work includes a comprehensive study with an emphasis on application of fundamental welding techniques and safe industry practices.

## Program Student Learning Outcomes

- Demonstrate introductory level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| WELD 50 | Introduction to Welding | 4 |
| WELD 214 | Introduction to Gas Tungsten Arc Welding | 4 |


| WELD 411 | Welding (ARC) | 1 |
| :--- | :--- | ---: |
| WELD 481 | Welding (Inert Gas) | 1 |
| Total Units |  | $\mathbf{1 0}$ |

# Basic Gas Tungsten Arc Welding Certificate of Completion 

Plan Code: 6040
This program is designed for those interested in learning basic GTAW Welding. Course work includes an entry level study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student for an entry level position as a GTAW Welder. The student will be required to provide all PPE safety gear (personal protective gear) required to safely perform GTAW welds in the lab.

## Program Student Learning Outcomes

- Demonstrate entry level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.


## Program Requirements

| Code Number | Course Title | Hours |
| :--- | :--- | ---: |
| REQUIRED COURSES |  |  |
| WELD 600 | Welding (General) | $\mathbf{7 2}$ |
| WELD 681 | Welding (Inert Gas) | $\mathbf{5 4}$ |
| Total Hours |  | $\mathbf{1 2 6}$ |

## Shielded Metal Arc Welding (SMAW) Certificate of Achievement

## Plan Code: 3985

This program is designed for those interested in welding structural steel. Coursework includes a comprehensive study with an emphasis on application of fundamental welding techniques and safe industry practices. Potential careers that the program prepares students for include, but are not limited to, Pipe Fitters and Steamfitters, Sheet Metal Workers, as well as Structural Iron and Steel Workers.

## Program Student Learning Outcomes

- Demonstrate introductory level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using SMAW (Shielded Metal Arc Welding) process.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| MTFAB 260 | Blueprint Reading for Metal Fabrication | 3 |
| :--- | :--- | :--- |
| WELD 212 | Introduction to Shielded Metal Arc Welding | 4 |
| WELD 221 | Arc Welding Structural Certification | 3 |
| WELD 410 | Welding (ARC) | 2 |
| WELD 413 | SMAW Flat/Horz Groove Welds with | 2 |
|  | Backing |  |

# Introduction to Shielded Metal Arc Welding (SMAW) - Certificate of Achievement 

## Plan Code: 3978

This program is designed for those interested in welding structural steel. Course work includes a comprehensive study with an emphasis on application of fundamental welding techniques and safe industry practices. Potential careers that the program prepares students for include, but are not limited to, Pipe Fitters and Steamfitters, Sheet Metal Workers, as well as Structural Iron and Steel Workers.

## Program Student Learning Outcomes

- Demonstrate introductory level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using SMAW (Shielded Metal Arc Welding) process.


## Program Requirements

Code Number Course Title Units

## REQUIRED COURSES

| WELD 50 | Introduction to Welding | 4 |
| :--- | :--- | ---: |
| WELD 212 | Introduction to Shielded Metal Arc Welding | 4 |
| WELD 411 | Welding (ARC) | $\mathbf{1}$ |
| WELD 481 | Welding (Inert Gas) | $\mathbf{1}$ |
| Total Units |  | $\mathbf{1 0}$ |

## WORLD LANGUAGES

The World Languages program offers formal transfer requirement courses in Chinese, French, German, Italian, Japanese, and Spanish. The program is designed to teach students to communicate effectively in a foreign language and to appreciate culture; to promote international understanding and exchange; and to provide a pool of students to fill positions in the community.

## Spanish - Associate in Arts Transfer Degree

## Plan Code: 5010B/C

This program aligns with the college's mission to provide a transfer path for student success. It prepares both non-native students and heritage learners to communicate effectively in Spanish in a wide range of situations in both personal and professional settings. Students will broaden their cultural awareness and develop sensitivity to diverse Hispanic cultures within the global community. The skills obtained through this degree promote equitable learning and achievement, and will prepare a diverse population of students for career advancement and transfer to a four-year college or university.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate effective skills in the four major areas of Spanish language study (reading, writing, speaking, listening comprehension) in order to perform elementary everyday communicative functions.
- Demonstrate the ability to analyze and to think critically in written and oral communication in Spanish in order to effectively enter into the global economy.
- Demonstrate understanding of the interrelationship between culturespecific behaviors.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

## Code Number <br> Course Title

## REQUIRED CORE COURSES

(See Substitution Courses for advanced students who place out of Required Core Courses)

| SPAN 1 | Elementary Spanish (5) |
| :--- | :--- |
| SPAN 2 | Elementary Spanish (5) |
| SPAN 3 | Intermediate Spanish (5) |
| or SPAN 9 | Spanish for Spanish Speakers (5) |
| or SPAN 9H | Honors Spanish for Spanish Speakers (5) |
| SPAN 4 | Intermediate Spanish (5) |
| or SPAN 10 | Spanish for Spanish Speakers (5) <br> or SPAN 10H <br> Honors Spanish for Spanish Speakers (5) |
| IN ADDITION, complete ONE (1) course from LIST A: |  |
| LIST A |  |
| SPAN 25A | Advanced Spanish: Culture in Literature (3) |
| SPAN 25B | Advanced Spanish: History (3) |


| SPAN 25C | Advanced Spanish: Politics, Current Event <br> (3) |  |
| :--- | :--- | ---: |
| SPAN 25D | Advanced Spanish: Literature (3) |  |
| Required Subtotal | $\mathbf{2 1 - 2 3}$ |  |
| Complete one of the following: ${ }^{1}$ | $37-39$ |  |
| Plan B |  |  |
| Plan C | Transferable Electives (as needed to reach 60 transferable units) $^{2}$ |  |

Degree Total
${ }^{1}$ Units for the major may be double-counted for CSU GE or IGETC; see counselor for limitations.
2 Elective units from course(s) numbered 1-99, if needed, to reach 60 transferable units.

To earn an associate degree for transfer, a student must complete 60 semester units that are eligible for transfer to a CSU that consist of either the IGETC pattern or CSU GE breadth and a major of at least 18 units. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

## Substitution Courses

For advanced students who place out of the Required Core Courses, the following are CSU baccalaureate-level courses that may be used to replace required course units:

| Code Number | Course Title | Units |
| :--- | :--- | ---: |
| ART 11 | Latin American Art and Architecture | 3 |
| HIST 8A/8AH | History of the Americas | 3 |
| HIST 8B/8BH | History of the Americas (Modern Era) | 3 |
| HIST 1B | History of Western (European) Civilization | 3 |
| HUMAN 1/1H | Comparative World Cultures | 3 |
| LING 1 | Linguistics 1 | 3 |
| LING 3 | Introduction to World Languages | 3 |
| SOCIO 11 | Race \& Ethnic Relations in the U.S. | 3 |
| SOCIO 13 | Sociology of Latinos and Latinas | 3 |

## Spanish - Certificate of Achievement

## Plan Code: 3428

This program certifies that the student can communicate effectively, both verbally and in writing, in a wide range of situations, in both professional and personal settings. Students who enter the program with advanced skills may complete the Prerequisite Challenge form to enter a higher level of language study in the program.

## Program Student Learning Outcomes

- Demonstrate effective skills in the four major areas of Spanish language study (reading, writing, speaking, listening comprehension) in order to perform elementary everyday communicative functions.
- Organize thinking and writing by using facts, ideas and events to ask questions, assemble evidence, and evaluate conclusions with clarity and coherence.
- Demonstrate understanding of the interrelationship between culturespecific behaviors.


## Program Requirements

| Code Number <br> REQUIRED COURSES | Course Title | Units |
| :--- | :--- | :--- |
| Complete FIFTEEN to SIXTEEN (15-16) units from the following: |  |  |
| SPAN 1/1H | Elementary Spanish (5) |  |
| SPAN 2/2H | Elementary Spanish (5) |  |
| SPAN 3 | Intermediate Spanish (5) |  |
| SPAN 4 | Intermediate Spanish (5) |  |
| SPAN 8 | Spoken Spanish (3) |  |
| SPAN 9/9H | Spanish for Spanish Speakers (5) |  |
| SPAN 10/10H | Spanish for Spanish Speakers (5) |  |
| SPAN 25A | Advanced Spanish: Culture in Literature (3) |  |
| SPAN 25B | Advanced Spanish: History (3) | $\mathbf{1 5 - 1 6}$ |
| SPAN 25C | Advanced Spanish: Politics, Current Event <br> (3) |  |
| SPAN 25D | Advanced Spanish: Literature (3) |  |
| Subtotal Units |  |  |

IN ADDITION, complete THREE (3) units from the following:

| ART 11 | Latin American Art and Architecture (3) |
| :--- | :--- |
| HIST 8A/8AH | History of the Americas (3) |
| HIST 18 | History of Mexico (3) |
| HUMAN 1/1H | Comparative World Cultures (3) |
| LING 1/1H | Linguistics 1 (3) |
| LING 3 | Introduction to World Languages (3) |
| Subtotal Units |  |
| Total Units |  |

## Spanish for Medical Professionals Certificate of Achievement

Plan Code: 3430

This program ensure that students have the linguistic and cultural competency skills and training needed for medium advanced level conversations in Spanish in a variety of medical contexts. Students who earn this certificate have demonstrated that they possess the speaking, listening, reading, and writing skills necessary to communicate effectively with Spanish-speaking patients while implementing cultural competency specific to the needs of the population they are serving.

## Program Student Learning Outcomes

- Apply cultural competency specific to the needs of the Latinx population and communicate effectively, orally, and in writing, in a variety of medical contexts at a medium advanced level.


## Program Requirements

Code Number Course Title Units REQUIRED COURSES

| SPAN 1 | Elementary Spanish | 5 |
| :--- | :--- | :--- |
| SPAN 2 | Elementary Spanish | 5 |


| SPAN 200 | Spanish for Medical Professionals | 3 |
| :--- | :--- | ---: |
| SPAN 201 | Spanish for Medical Professionals II | 3 |
| Total Units |  | $\mathbf{1 6}$ |

# Spanish for Medical Professionals Certificate of Accomplishment 

Plan Code: 4430

This program ensures that students have the linguistic and cultural competency skills and training needed for medium advanced level conversations in Spanish in a variety of medical contexts. Students who earn this certificate have demonstrated that they possess the speaking, listening, reading, and writing skills necessary to communicate effectively with Spanish-speaking patients while implementing cultural competency specific to the needs of the population they are serving.

## Program Student Learning Outcomes

- Apply cultural competency specific to the needs of the Latinx population and communicate effectively, orally, and in writing, in a variety of medical contexts at a medium advanced level.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :---: |
| REQUIRED COURSES |  |  |
| SPAN 200 | Spanish for Medical Professionals | 3 |
| SPAN 201 | Spanish for Medical Professionals II | 3 |
| Total Units |  | $\mathbf{6}$ |

## Japanese - Associate in Arts

Plan Code: 1964
This program aligns with the college's mission to provide a transfer path for student success. It prepares students to communicate effectively in Japanese in a wide range of situations in both personal and professional settings. Students will broaden their cultural awareness and develop sensitivity to the Japanese culture within the global community. The skills obtained through this degree promote equitable learning and achievement, and will prepare a diverse population of students for career development and transfer to a four-year college or university. Japanese companies are some of the largest companies in the world, requiring knowledge of the Japanese language and culture. Students who enter the program with advanced skills may complete the Prerequisite Challenge form to enter a higher level of language study in the program.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate effective skills in the four major areas of Japanese language study (reading, writing, speaking, listening comprehension) in order to perform elementary everyday communicative functions.
- Organize thinking and writing by using facts, ideas and events to ask questions, assemble evidence, and evaluate conclusions with clarity and coherence.
- Demonstrate understanding of the interrelationship between culturespecific behaviors.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:

| Code Number | Course Title | Units |
| :---: | :---: | :---: |
| REQUIRED COURSES |  |  |
| Complete FIFTEEN (15) units from the following: |  |  |
| JAPAN 1 | Elementary Japanese (5) |  |
| JAPAN 2 | Elementary Japanese (5) |  |
| JAPAN 3 | Intermediate Japanese (5) |  |
| JAPAN 4 | Intermediate Japanese (5) |  |
| Subtotal Units |  | 15 |
| IN ADDITION, complete THREE (3) units from the following: |  |  |
| ANTHR 2/2H | Cultural Anthropology (3) |  |
| ANTHR 4 | Linguistic Anthropology (3) |  |
| ART 5 | History of Asian Art (3) |  |
| HIST 9B | History of Japan and Korea (3) |  |
| LING 1/1H | Linguistics 1 (3) |  |
| LING 3 | Introduction to World Languages (3) |  |
| Subtotal Units |  | 3 |
| Required Subtotal |  | 18 |
| Complete one of the | following: ${ }^{1}$ | 19-39 |
| Plan A |  |  |
| Plan B |  |  |
| Plan C |  |  |
| Electives (as needed to reach 60 degree-applicable units) ${ }^{2}$ |  |  |
| Minimum Degree To |  | 60 |
| ${ }^{1}$ Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations. <br> ${ }^{2}$ Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units. |  |  |

## Japanese - Certificate of Achievement

## Plan Code: 3426

This program certifies that the student can communicate effectively, both verbally and in writing, in a wide range of situations, in both professional and personal settings. Students who enter the program with advanced skills may complete the Prerequisite Challenge form to enter a higher level of language study in the program.

## Program Student Learning Outcomes

- Demonstrate effective skills in the four major areas of Japanese language study (reading, writing, speaking, listening comprehension) in order to perform elementary everyday communicative functions.
- Organize thinking and writing by using facts, ideas and events to ask questions, assemble evidence, and evaluate conclusions with clarity and coherence.
- Demonstrate understanding of the interrelationship between culturespecific behaviors.


## Program Requirements

Code Number Course Title Units
REQUIRED COURSES
Complete FIFTEEN (15) units from the following:

| JAPAN 1 | Elementary Japanese (5) |  |
| :--- | :--- | ---: |
| JAPAN 2 | Elementary Japanese (5) |  |
| JAPAN 3 | Intermediate Japanese (5) | $\mathbf{1 5}$ |
| JAPAN 4 | Intermediate Japanese (5) |  |
| Subtotal Units |  |  |
| IN ADDITION, complete THREE (3) units from the following: |  |  |
| ANTHR 2/2H | Cultural Anthropology (3) |  |
| ANTHR 4 | Linguistic Anthropology (3) |  |
| ART 5 | History of Asian Art (3) | $\mathbf{3}$ |
| HIST 9B | History of Japan and Korea (3) | $\mathbf{1 8}$ |
| LING 1/1H | Linguistics 1 (3) |  |
| LING 3 | Introduction to World Languages (3) |  |
| Subtotal Units |  |  |
| Total Units |  |  |

## Foreign Languages - Associate in Arts

Plan Code: 1420
Students following the Proficiency Emphasis develop a competency in at least one foreign language, providing an important entry-level skill for those aspiring to work in the international arena as well as preparing for baccalaureate work. The degree would benefit those wishing to enter a variety of industries or business settings that compete in an international market, and may prepare students for transfer to a four-year university in a foreign language program. The degree also offers an added dimension of cultural knowledge and understanding in regions where the language is spoken.

## Program Student Learning Outcomes

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Demonstrate effective skills in the four major areas of the language being studied (reading, writing, speaking, listening comprehension) in order to perform elementary everyday communicative functions.
- Demonstrate the ability to analyze and to think critically in written and oral communication in the language being studied in order to effectively enter into the global economy.
- Demonstrate understanding of the interrelationship between culturespecific behaviors.


## Program Requirements

This degree requires the completion of General Education coursework plus the following:


## Minimum Degree Total

 IGETC; see counselor for limitations.2 Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

## Proficiency Emphasis

Options in French, Japanese, and Spanish at the Intermediate or Advanced Level. For students who are studying French, Japanese or Spanish and who want to achieve a level of competency for baccalaureate work, and/or to combine their foreign languages with another skill.

## French - Certificate of Achievement

## Plan Code: 3427

This program certifies that the student can communicate effectively, both verbally and in writing, in a wide range of situations, in both professional and personal settings. Students who enter the program with advanced skills may complete the Prerequisite Challenge form to enter a higher level of language study in the program.

## Program Student Learning Outcomes

- Demonstrate effective skills in the four major areas of French language study (reading, writing, speaking, listening comprehension) in order to perform elementary everyday communicative functions.
- Organize thinking and writing by using facts, ideas and events to ask questions, assemble evidence, and evaluate conclusions with clarity and coherence.
- Demonstrate understanding of the interrelationship between culturespecific behaviors.


## Program Requirements

| Code Number | Course Title | Units |
| :--- | :--- | :--- |
| REQUIRED COURSES |  |  |
| Complete THIRTEEN to FIFTEEN (13-15) units from the following: |  |  |
| FREN 1 | Elementary French (5) |  |
| FREN 2 | Elementary French (5) |  |
| FREN 3 | Intermediate French (5) |  |
| FREN 4 | Intermediate French (5) | $\mathbf{1 3 - 1 5}$ |
| FREN 25A | Advanced French: Culture in Literature (3) |  |
| Subtotal Units |  |  |

Subtotal Units
IN ADDITION, complete THREE (3) units from the following:

| HIST 1A/1AH | History of Western (European) Civilization <br> $(3)$ |
| :--- | :--- |
| HIST 1B/1BH | History of Western (European) Civilization <br> $(3)$ |
| HUMAN 1/1H | Comparative World Cultures (3) |
| LING $1 / 1$ H | Linguistics 1 (3) |
| LING 3 | Introduction to World Languages (3) |
| PHIL 9 | Introduction to Existentialism (3) |


| Subtotal Units | 3 |
| :--- | ---: |
| Total Units | $16-18$ |

Total Units 16-18

## COURSE DESCRIPTIONS

## A

- Accounting (ACCTG) (p. 302)
- Administration of Justice (ADJUS) (p. 303)
- Advanced Manufacturing Tech (ADMT) (p. 305)
- Allied Health (AH) (p. 305)
- American Sign Language (ASL) (p. 306)
- Anatomy (ANAT) (p. 307)
- Anthropology (ANTHR) (p. 307)
- Architectural Design (ARCHT) (p. 308)
- Art (ART) (p. 313)
- Astronomy (ASTR) (p. 318)
- Automotive Technology (AUTO) (p. 318)


## B

- Baking (BAKE) (p. 321)
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## C-ID NUMBERING

The Course Identification Numbering System (C-ID) is a statewide numbering system that assigns a common number to comparable courses within the California community college system. This number is independent from the course numbers assigned by LBCC or any other community college in the state. When a C-ID number is listed in the catalog students can be assured the course will be accepted in lieu of a course bearing the same C-ID designation at another community college. Many courses with C-ID descriptors may also meet requirements for the Associate Degree for Transfer to the California State University system.

The following table lists the LBCC courses that currently have a C-ID number. As courses are approved for a C-ID, they will be added to this table and noted in the catalog addendum.
*Indicates a CSU course that requires more than one LBCC course to satisfy the transfer requirement.

| LBCC Course | Course Title | C-ID \# |
| :---: | :---: | :---: |
| ACCTG 1A | Financial Accounting | ACCT 110 |
| ACCTG 1B | Managerial Accounting | ACCT 120 |
| ADJUS 2 | Introduction Administration of Justice | AJ 110 |
| ADJUS 3 | Introduction to Criminal Procedures | AJ 122 |
| ADJUS 4 | Criminal Law | AJ 120 |
| ADJUS 6 | Introduction to Evidence | AJ 124 |
| ADJUS 8 | Introduction to Investigation | AJ 140 |
| ADJUS 20 | Introduction to Corrections | AJ 200 |
| ANAT 1 | Human Anatomy | BIOL 110B |
| ANTHR 1 | Physical Anthropology | ANTH 110 |
| ANTHR 1H | Honors Physical Anthropology | ANTH 110 |
| ANTHR 2 | Cultural Anthropology | ANTH 120 |
| ANTHR 2H | Honors Cultural Anthropology | ANTH 120 |
| ANTHR 3 | Intro to Archaeology | ANTH 150 |
| ANTHR 3H | Honors Intro to Archaeology | ANTH 150 |
| ANTHR 11 | Physical Anthropology Lecture and Lab | ANTH 110 |
| ART 1 | Art and Civilization | ARTH 110 |
| ART 1H | Honors Art and Civilization | ARTH 110 |
| ART 2 | Art and Civilization | ARTH 120 |
| ART 2 H | Honors Art and Civilization | ARTH 120 |
| ART 3 | Modern and Contemporary Art | ARTH 150 |
| ART 4 | African, Oceanic, Native American Art | ARTH 140 |
| ART 5 | History of Asian Art | ARTH 130 |


| ART 11 | Latin American Art and Architecture | ARTH 145 |
| :---: | :---: | :---: |
| ART 15 | Beginning Drawing | ARTS 110 |
| ART 16 | Intermediate Drawing | ARTS 205 |
| ART 19 | Life Drawing | ARTS 200 |
| ART 23 | Beginning Painting | ARTS 210 |
| ART 30 | Three Dimensional Design | ARTS 101 |
| ART 31 | Two Dimensional Design | ARTS 100 |
| AUTO 200 | Introduction to Automotive Technology | AUTO 110X |
| AUTO 212 | Automotive Automatic Transmission | AUTO 120X |
| AUTO 213 | Automotive Manual Transmission | AUTO 130X |
| AUTO 214 | Automotive Wheel Alignment | AUTO 140X |
| AUTO 215 | Automotive Brake Systems | AUTO 150X |
| AUTO 217 | Automotive Air Conditioning | AUTO 170X |
| AUTO 270 | Intro to Hybrid and Electric Vehicles | ALTF 100X |
| BCOM 20 | Business Writing | BUS 115 |
| $B \mathrm{O} 1 \mathrm{~A}+\mathrm{BIO} 1 \mathrm{~B}$ | Biology for Science Majors | BIOL 135S* |
| CDECE 19 | Health, Safety and Nutrition DS7 | ECE 220 |
| CDECE 45 | Child \& Adolescent Development DS1 | CDEV 100 |
| CDECE 47 | Human Development | PSY 180 |
| CDECE 48 | Child, Family and Community D2 | CDEV 110 |
| CDECE 50 | Intro to Curriculum for Young Children | ECE 130 |
| CDECE 53 | Principles and Practices | ECE 120 |
| CDECE 61 | Teaching in a Diverse Society D3 | ECE 230 |
| CDECE 66 | Observation and Assessment DS3 | ECE 200 |
| CDECE 68 | Practicum D3 | ECE 210 |
| CHEM 1A | General Chemistry | CHEM 110 |
| CHEM 1A + CHEM 1B | General Chemistry | CHEM 120S* |
| CHEM 2 | Elementary Chemistry | CHEM 101 |
| CHEM 3 | Intro to Gen, Organic and Biochemistry | CHEM 102 |
| CHEM 4 | Survey of Chemistry and Physics | CHEM 140 |
| CHEM 12A | Organic Chemistry | CHEM 150 |
| CHEM 12A + CHEM 12B | Organic Chemistry | CHEM 160S* |
| COMM 10 | Elements of Public Speaking | COMM 110 |
| COMM 10H | Honors Elements of Public Speaking | COMM 110 |


| COMM 20 | Elements of Interpersonal Communication | COMM 130 |
| :---: | :---: | :---: |
| COMM 25 | Elements of Intercultural Communication | COMM 150 |
| COMM 30 | Elements of Group Communication | COMM 140 |
| COMM 40 | Elements of Communication Theory | COMM 180 |
| COMM 45 | Elements of Persuasion | COMM 190 |
| COMM 50 | Elements of Oral Interpretation | COMM 170 |
| COMM 60 | Elements of Argumentation and Debate | COMM 120 |
| COSA 30 | Introduction to Computers | ITIS 120 |
| COSA 50 | Intro to IT Concepts and Applications | ITIS 120 |
| COSN 5 | Computer Hardware Fundamentals | ITIS 110 |
| COSN 10 | Networking Fundamentals | ITIS 150 |
| COSP 7 | Programming Concepts and Methodologies | COMP 112 |
| COSP 36 | Systems Analysis and Design | ITIS 140 |
| COSP 38 | Database Concepts | ITIS 180 |
| COSS 71 | Network Security Fundamentals | ITIS 160 |
| COSS 272 | Computer Forensics and Investigation | ITIS 165 |
| COSS 273 | Ethical Hacking and Countermeasures | ITIS 164 |
| CS 11 | Introduction to <br> Computer Science - C++ | COMP 122 |
| CS 21 | Introduction to Computer Science Java | COMP 122 |
| CS 22 | Data Structures and Algorithms | COMP 132 |
| CS 31 | Introduction to Computer Science Python | COMP 122 |
| CS 51 | Introduction to Computer Architecture | COMP 142 |
| CS 61 | Discrete Structures | COMP 152 |
| CULAR 10 | Intro to Hospitality | HOSP 100 |
| CULAR 20 | App. Food Serv. Sanit in Hotel/Rstr. Mgmt. | HOSP 110 |
| CULAR 30 | Cost Control in Hospitality | HOSP 120 |
| CULAR 90 | Intro to Culinary Skills \& Principles | HOSP 160, HOSP 130 |
| DMA 1 | Introduction to Computer Graphics | ARTS 250 |


| ECON 1 | Macro Economic Analysis | ECON 202 |
| :---: | :---: | :---: |
| ECON 1H | Honors Macro Economic Analysis | ECON 202 |
| ECON 2 | Micro Economic Analysis | ECON 201 |
| ECON 2H | Honors Micro Economic Analysis | ECON 201 |
| EDUC 20 | Intro to Elementary Classroom Teaching | EDUC 200 |
| ENGL 1 | Reading and Composition | ENGL 100 |
| ENGL 1H | Honors Reading and Composition | ENGL 100 |
| ENGL 1S | Reading and Composition with Support | ENGL 100 |
| ENGL 2 | Introduction to Literature/Composition | ENGL 120 |
| ENGL 3 | Argumentative and Critical Writing | ENGL 105 |
| ENGL 3H | Honors Argumentative and Critical Writing | ENGL 105 |
| ENGL 4 | Critical Analysis of Literature | ENGL 110 |
| ENGL 26 | Creative Writing I | ENGL 200 |
| ENGL 41 | American Literature I | ENGL 130 |
| ENGL 42 | American Literature II | ENGL 135 |
| ENGL 44 | World Literature I | ENGL 140 |
| ENGL 44H | Honors World Literature I | ENGL 140 |
| ENGL 45 | World Literature II | ENGL 145 |
| ENGL 45H | Honors World Literature II | ENGL 145 |
| ENGL 46 | Survey of British Literature I | ENGL 160 |
| ENGL 47 | Survey of British Literature II | ENGL 165 |
| ESL 1S | College Writing for NonNative Speakers | ENGL 100 |
| FILM 1 | Introduction to Film Studies | FTVE 105, FTVE 100 |
| FILM 20 + R_TV 14 | Fundamentals of Digital Film Production + Electronic Field Production | FTVE 130* |
| FILM 21 | Intermediate Digital Film Production | FTVE 150 |
| GBUS 5 | Introduction to Business | BUS 110 |
| GEOG 2 | Elements of Cultural Geography | GEOG 120 |
| GEOG 10 | Intro to Geographic Information Systems | GEOG 155 |
| GEOG 40 | World Regional Geography | GEOG 125 |


| GEOG 48 | Geography of California | GEOG 140 |
| :---: | :---: | :---: |
| GEOL 1 | General Physical Geology | GEOL 101 |
| GEOL 1H | Honors General Physical Geography | GEOL 101 |
| GEOL 2 | General Geology, Physical | GEOL 100 |
| GEOL 2L | General Geology, <br> Physical Geology Lab | GEOL 100L |
| GEOL 3 | Historical Geology | GEOL 111 |
| GEOL 3H | Honors Historical Geology | GEOL 111 |
| GEOL 10 | Earth Science for Educators | GEOL 121 |
| GLST 1 | Introduction to Global Studies | GLST 101 |
| GLST 2 | Global Issues | GLST 102 |
| HIST 1A | History of Western (European) Civilization | HIST 170 |
| HIST 1AH | Honors History of Western (European) Civilization | HIST 170 |
| HIST 1B | History of Western (European) Civilization | HIST 180 |
| HIST 1BH | Honors History of Western (European) Civilization | HIST 180 |
| HIST 2B | World History to 1500 | HIST 150 |
| HIST 2 C | World History Since 1500 | HIST 160 |
| HIST 2CH | Honors World History Since 1500 | HIST 160 |
| HIST 10 | Hist./Early America (Colonial-Reconstr) | HIST 130 |
| HIST 10H | Honors Hist./Early America (ColonialReconstr) | HIST 130 |
| HIST 11 | Hist./Modern America (Reconstr-Present) | HIST 140 |
| HIST 11H | Honors Hist./Modern America (ReconstrPresent) | HIST 140 |
| HLED 3 | Contemporary Health Issues | PHS 100 |
| HLED 10 | Human Sexuality | PHS 130 |
| HLED 21 | Introduction to Public Health | PHS 101 |
| HLED 22 | Health and Social Justice | PHS 102 |
| HLED 24 | Drugs, Health and Society | PHS 103 |
| JOURN 5 | Introduction to Public Relations | JOUR 150 |
| JOURN 10 | Intro to Global Media Communications | JOUR 100 |


| JOURN 20 | Beginning Newswriting and Reporting | JOUR 110 |
| :---: | :---: | :---: |
| JOURN 35 | Photojournalism | JOUR 160 |
| JOURN 80 | Multimedia Newsroom: News | JOUR 130 |
| JOURN 86 + JOURN 87 <br> + JOURN 88 | Multimedia Editors: <br> Design + Multimedia <br> Editors: Visuals + <br> Multimedia Editor <br> Training: Management | JOUR 131* |
| KINPP 1 | Introduction to Kinesiology | KIN 100 |
| KINPP 23 | First Aid and Safety | KIN 101 |
| LAW 18 | Fundamentals of Business Law | BUS 125 |
| MATH 21A + MATH 21B | Statistics Pathway A + <br> Statistics Pathway B | MATH 110* |
| MATH 28 | Mathematics for Elementary Teaching I | MATH 120 |
| MATH 37 | Finite Mathematics | MATH 130 |
| MATH 47 | Calculus for Business | MATH 140 |
| MATH 60 | First Calculus Course | MATH 210 |
| MATH 60H | Honors First Calculus Course | MATH 210 |
| MATH 70 | Second Calculus Course | MATH 220 |
| MATH 70H | Honors Second Calculus Course | MATH 220 |
| MATH 60 + MATH 70 | First Calculus Course + Second Calculus Course | MATH 900 S |
| MATH 60H + <br> MATH 70H | Honors First Calculus <br> Course + Honors <br> Second Calculus <br> Course | MATH 900 S |
| MATH 80 | Third Calculus Course | MATH 230 |
| MATH 84 | Intro Differential Eqns and Linear Alg | MATH 240, MATH 910S |
| MUSIC 1A | Music Theory I | MUS 120 |
| MUSIC 1B | Music Theory II | MUS 130 |
| MUSIC 2A | Music Theory III | MUS 150 |
| MUSIC 1B + MUSIC 2A | Music Theory II + Music Theory III | MUS 140* |
| MUSIC 5 | Musicianship I | MUS 125 |
| MUSIC 6 | Introduction to Music Theory | MUS 110 |
| MUSIC 9 | Musicianship II | MUS 135 |
| MUSIC 10 | Musicianship III | MUS 145 |
| MUSIC 11AD | Long Beach City College Viking Chorale | MUS 180 |
| MUSIC 12AD | Long Beach City College Viking Singers | MUS 180 |
| MUSIC 13AD | College Symphony Orchestra | MUS 180 |
| MUSIC 16 | Musicianship IV | MUS 155 |


| MUSIC 23AD + | Jazz Choir + Vocal Jazz | MUS 180* |
| :---: | :---: | :---: |
| MUSIC 24AD + | Ensembles + Jazz Big |  |
| MUSIC 54AD + | Band + Jazz Combos |  |
| MUSIC 57AD |  |  |
| MUSIC 38AD | Wind Ensemble | MUS 180 |
| MUSIC 40 | Appreciation of Music | MUS 100 |
| MUSIC 40H | Honors Appreciation of Music | MUS 100 |
| MUSIC 92AD | Applied Vocal \& Instrumental Music | MUS 160 |
| NUTR 20 | Nutrition and Life | NUTR 110 |
| NUTR 21 | Food Selection and Meal Preparation | NUTR 120 |
| PGEOG 1 | Physical Geography | GEOG 110 |
| PGEOG 1L | Physical Geography Lab | GEOG 111 |
| PGEOG 2 | Weather and Climate | GEOG 130 |
| PHIL 1 | Philosophy of LGBTQIA <br> + Studies | SJS 130 |
| PHIL 1H | Honors Philosophy of LGBTQIA+ Studies | SJS 130 |
| PHIL 4 | History of Ancient Philosophy | PHIL 130 |
| PHIL 5 | History of Modern Philosophy | PHIL 140 |
| PHIL 6 | Introduction to Philosophy | PHIL 100 |
| PHIL 6H | Honors Introduction to Philosophy | PHIL 100 |
| PHIL 7 | Introduction to Ethics | PHIL 120 |
| PHIL 7H | Honors Introduction to Ethics | PHIL 120 |
| PHIL 10 | Introduction to Feminist Philosophy | SJS 120 |
| PHIL 10H | Honors Intro to Feminist Philosophy | SJS 120 |
| PHIL 12 | Introduction to Logic | PHIL 110 |
| PHIL 22 | Symbolic Logic | PHIL 210 |
| PHYS 2A | General Physics | PHYS 105 |
| PHYS 2B | General Physics | PHYS 110 |
| PHYS 3A | Physics for Sci. \& Eng. Mechanics | PHYS 205 |
| PHYS 3B | Physics for Sci. \& Eng. <br> - E \& M | PHSY 210 |
| PHYS 3C | Physics for Sci. \& Eng. Modern Physics | PHYS 215 |
| PHYS 4 | Survey of Chemistry and Physics | PHYS 140 |
| PHYSI 1 | Human Physiology | BIO 120B |
| POLSC 1 | Introduction to Government | POLS 110 |
| POLSC 1H | Honors Introduction to Government | POLS 110 |
| POLSC 2 | Comparative Government | POLS 130 |


| POLSC 2H | Honors Comparative Government | POLS 130 |
| :---: | :---: | :---: |
| POLSC 4 | World Politics | POLS 140 |
| POLSC 4H | Honors World Politics | POLS 140 |
| POLSC 10 | Introduction to Political Science | POLS 150 |
| POLSC 11 | Introduction to Political Theory | POLS 120 |
| PSYCH 1 | Introduction to Psychology | PSY 110 |
| PSYCH 1H | Honors Introduction to Psychology | PSY 110 |
| PSYCH 2 | Research Methods for Psychology | PSY 205B |
| PSYCH 6 | Physiological <br> Foundations of Psychology | PSY 150 |
| PSYCH 11 | Social Psychology | PSY 170 |
| R_TV 1 | Introduction to Broadcasting | FTVE 100 |
| R_TV 4 + FILM 40 | Writing and Production Planning + Introduction to Screenwriting | FTVE 110* |
| R_TV 13 | Television Production | FTVE 135 |
| R_TV 21 | Radio Production | FTVE 125 |
| R_TV 60 | Pro Tools (Digital Audio Recording/Edit) | FTVE 120 |
| SOCIO 1 | Introduction to Sociology | SOCI 110 |
| SOCIO 1H | Honors Introduction to Sociology | SOCI 110 |
| SOCIO 2 | Modern Social Problems | SOCI 115 |
| SOCIO 11 | Race \& Ethnic Relations in the U.S. | SOCI 150 |
| SOCIO 11H | Honors Race \& Ethnic Relations in the U.S. | SOCI 150 |
| SOCIO 17 | Introduction to Sociology of Gender | SOCI 140 |
| SOCIO 40 | Sociology of the Family | SOCI 130 |
| SPAN 1 | Elementary Spanish | SPAN 100 |
| SPAN 1H | Honors Elementary Spanish | SPAN 100 |
| SPAN 2 | Elementary Spanish | SPAN 110 |
| SPAN 2H | Honors Elementary Spanish | SPAN 110 |
| SPAN 3 | Intermediate Spanish | SPAN 200 |
| SPAN 4 | Intermediate Spanish | SPAN 210 |
| SPAN 9 | Spanish for Spanish Speakers | SPAN 220 |
| SPAN 9H | Honors Spanish for Spanish Speakers | SPAN 220 |
| SPAN 10 | Spanish for Spanish Speakers | SPAN 230 |
| SPAN 10H | Honors Spanish for Spanish Speakers | SPAN 230 |


| STAT 1 | Elementary Statistics | MATH 110 |
| :--- | :--- | :--- | :--- |
| STAT 1H | Honors Elementary <br> Statistics | MATH 110 |
| SW 1 | Introduction to Social <br> Work | SWHS 110 |
| TART 1 | Acting 1-Introduction <br> to Acting | THTR 151 |
| TART 2 |  <br> Characterization | THTR 152 |
| TART 25 | Introduction toTheatre | THTR 111 |
| TART 39AD | Theatre Practicum | THTR 192 |
| TART 40 | Stage Craft | THTR 171 |
| TART 42 | Introduction to Stage <br> Lighting | THTR 173 |
| TART 43 | Introduction to Stage <br> Costume | THTR 174 |
| TART 49AD | Rehearsal and <br> Performance | THTR 191 |
| TART 55 | Stage Makeup | THTR 175 |

## Accounting (ACCTG)

## ACCTG 1A (C-ID ACCT 110) 5 units

## Financial Accounting

90 hours lecture
Recommended Preparation: ACCTG 200 or one year of bookkeeping.
Grading: letter grade.
This course is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics.

Transferable to both UC and CSU; see counselor for limitations
ACCTG 1B (C-ID ACCT 120) 5 units
Managerial Accounting

## 90 hours lecture

Prerequisite: ACCTG 1A.
Grading: letter grade.
This course is the study of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning and performance analysis in manufacturing and service environments. This course also provides students with techniques used by management in evaluating daily operations and related costs of a business in planning future operations, making decisions, and developing overall business strategies.
Transferable to both UC and CSU; see counselor for limitations

ACCTG 2003 units
Introduction to Accounting
54 hours lecture
Grading: letter grade.
Formerly ACCTG 200A. This course provides a general overview and understanding of the accounting principles for a business enterprise, with a focus on those business activities for both service and merchandising businesses, using a double entry system and the accrual method for recording financial transactions. The course will introduce students to key accounting terms, the accounting equation and related impact of business accounting transactions, the integration of the business transactions into the financial statement framework, along with an understanding of cash activities, receivables, inventories, fixed assets, liabilities, shareholders' equity, revenues and expenses. The course will cover the primary financial statements utilized by a business, including financial statement analysis. This course will give students a fundamental foundation of accounting and its importance to a business, a general understanding of the activities of a business and the financial reporting of a business.

## ACCTG 2053 units <br> Fundamentals of Tax <br> 54 hours lecture

Grading: letter grade.
Students will learn to prepare federal income tax returns for individuals.
This course emphasizes the practical use of tax forms and supporting schedules and also reflects the most recent changes in the Internal Revenue Code.

## ACCTG 2282 units

Computerized Gen Ledger Account Systems
36 hours lecture, 18 hours laboratory
Prerequisite: ACCTG 1A or 200.
Grading: letter grade.
This course provides students with experience using a commercial general ledger accounting program.

## ACCTG 2293 units

Spreadsheet Accounting
54 hours lecture, 18 hours laboratory
Prerequisite: ACCTG 1A.
Recommended Preparation: Working knowledge of Microsoft Excel or COSA 15.
Grading: letter grade or pass/no pass.
The course will cover the functions and features of Excel most commonly used in Accounting/Finance applications. Many of the routine manual functions studied in the Financial Accounting course will be automated by using Microsoft Excel. Instruction will focus on preparing financial Excel models and templates that are functional, flexible, and easily maintainable. Refresher lectures will be presented on the Accounting topics specific to the Excel modeling assignments.

## ACCTG 2302 units Quickbooks Accounting <br> 36 hours lecture

Recommended Preparation: General familiarity and use of a PC. Grading: letter grade or pass/no pass.
Intro to basic small business accounting concepts and to a complete accounting software system. Provides hands-on exposure to the major features of the Quickbooks accounting software accompanied by instruction in the accounting concepts being employed.

# Administration of Justice (ADJUS) 

ADJUS 2 (C-ID AJ 110) 3 units<br>Introduction Administration of Justice<br>54 hours lecture<br>Grading: letter grade.<br>The history and philosophy of the criminal justice process and its relationship to our dual court system is discussed. The role relationship and inter-dependency of the Criminal Justice System components is reviewed. The historical concepts of criminality, punishment and rehabilitation are compared and contrasted. The significance of professionalism and its impact upon the relationship between the community and agents of the Criminal Justice System is emphasized. Transferable to both UC and CSU; see counselor for limitations

ADJUS 3 (C-ID AJ 122) 3 units
Introduction to Criminal Procedures
54 hours lecture
Grading: letter grade.
This course covers legal processes from pre-arrest through trial, sentencing and correctional procedures. The course will review the history of case and common law, conceptual interpretations of law as reflected in court decisions, case law methodology and case research as the decisions impact upon the procedures of the justice system. Transferable to CSU Only

ADJUS 4 (C-ID AJ 120) 3 units
Criminal Law
54 hours lecture
Grading: letter grade.
This course offers an analysis of the doctrines of criminal liability in the United States and the classification of crimes against persons, property, morals and public welfare. Special emphasis is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law and the nature of acceptable evidence. This course utilizes case law and case studies to introduce students to criminal law. The completion of this course offers a foundation upon which upper-division criminal justice courses will build. The course will also include some limited discussion of prosecution and defense decision making, criminal culpability and defenses to crimes.
Transferable to both UC and CSU; see counselor for limitations
ADJUS 53 units
Community and Human Relations
54 hours lecture
Grading: letter grade.
The course is designed to explore the changing role and relationship between the agents of the Criminal Justice System and the community. Human behavior, cultural diversity, communication skills and the discretionary enforcement of the law are discussed in conjunction with the need to maintain community trust, faith and confidence. Styles of policing and their impact upon communities and citizen support and cooperation are also discussed in detail.
Transferable to both UC and CSU; see counselor for limitations

ADJUS 6 (C-ID AJ 124) 3 units
Introduction to Evidence

## 54 hours lecture

Grading: letter grade.
The course covers the historical development, philosophy and constitutional basis of evidence, constitutional and procedural considerations affecting arrest, search and seizure, kinds and degrees of evidence and rules governing admissibility. Judicial decisions interpreting case studies of individual rights are also evaluated from a conceptual perspective.
Transferable to CSU Only
ADJUS 8 (C-ID AJ 140) 3 units
Introduction to Investigation

## 54 hours lecture

Grading: letter grade.
The course covers fundamentals of investigation, techniques of crime scene search, recording and documentation, and collection and preservation of physical evidence. Modus operandi processes, sources of information, suspect interviewing and interrogation and follow-up investigation are additionally covered.
Transferable to CSU Only

## ADJUS 103 units

Writing for Criminal Justice

## 54 hours lecture

Grading: letter grade.
The course focus is developing effective communication skills in writing for the Criminal Justice System. The elements of effective report writing, including grammar, punctuation and spelling are emphasized. The importance of crime scene interviewing, recording and documentation are covered relating to the preparation of report writing and courtroom testimony.
Transferable to CSU Only

## ADJUS 143 units

## Juvenile Law and Procedures

## 54 hours lecture

Grading: letter grade.
The course focus is juvenile justice and delinquency in America and how our Juvenile Justice System deals with juvenile offenders. Juvenile delinquency prevention and repression techniques are also covered. Delinquency diagnosis and referral is reviewed in conjunction with the availability of community resources to combat the problem. Juvenile law and related court procedures are also discussed.
Transferable to CSU Only

## ADJUS 163 units

Vice, Narcotics and Organized Crime

## 54 hours lecture

Grading: letter grade.
This course will focus on the relationship between organized crime and the community. Covert criminal activities and their impact upon our social structure is also reviewed. Related criminal activities to organized crime, including vice, narcotics and white collar crime and their political influence on our legal system, are also discussed.
Transferable to CSU Only

## ADJUS 173 units

## Computer Use in Criminal Justice

## 54 hours lecture

Grading: letter grade.
The course focus is communications technology in the Criminal Justice System. Computer operations, wireless communications and geographic systems are emphasized. Ethical, legal and privacy issues that impact communications technology will also be covered. The computer assisted dispatch system, terminology, concepts and technology will also be included in this course.
Transferable to CSU Only

## ADJUS 183 units

## Police Field Operations

## 54 hours lecture

Grading: letter grade.
Through the use of classroom lecture and scenario training this course covers policing in America. Specific areas to include, patrol, traffic, preliminary investigations, interviewing and interrogation, search and seizure, civil and domestic disturbances and requests for community service. Most importantly, it focuses on the relationship between citizens in the community and the police who serve them.
Transferable to CSU Only

## ADJUS 193 units

## Fingerprint Classif \& Identification

## 54 hours lecture

Grading: letter grade.
This interactive course provides an introduction to the science of fingerprint pattern recognition, comparison and identification. Focus is on fingerprints of record, with an emphasis on the history and application of science to fingerprints and their role in the forensic domain. Students participate in recording, developing, and comparing fingerprints, and are exposed to crime scene type latent prints and learn basic development techniques. Field trips to local crime labs to observe forensic science/ fingerprint unit organization and operation may be required.
Transferable to CSU Only
ADJUS 20 (C-ID AJ 200) 3 units
Introduction to Corrections

## 54 hours lecture

Grading: letter grade.
The course focus is a survey of the correctional science field. The early history and development of corrections is reviewed. Correctional theory and practice are discussed relative to potential causes of criminal behavior. Additionally, the criminal justice system processes relating to incarceration, probation and parole and their influence upon the offender's behavior and career opportunities are evaluated.

## Transferable to CSU Only

## ADJUS 403 units

## Street Gangs and Law Enforcement

## 54 hours lecture

Grading: letter grade.
This course provides an overview of the "Gang" problem in society. The historical perspective and cultural and societal dynamics of gang involvement will be reviewed. Law enforcement tactics, court injunctions, prosecution, intelligence gathering and gang intervention are all emphasized.
Transferable to CSU Only

## ADJUS 453 units

## Drug Abuse and Law Enforcement

## 54 hours lecture

Grading: letter grade.
This course is designed to create an awareness of drug abuse in society.
The historical perspective of controlled substance abuse is reviewed. Classification of drugs, symptomatic indicators of drug abuse and addiction are emphasized. The relationship between drug abuse, crime and law enforcement intervention is further discussed. Controlled substance abuse and the tactical response of the Criminal Justice System is also covered.
Transferable to CSU Only

## ADJUS 2553 units

Introduction to Forensics

## 54 hours lecture

## Grading: letter grade.

This course is an introduction to multiple contemporary scientific methodologies utilized in the development of criminal case investigations. This class is appropriate for Administration of Justice majors, and others with a specific interest in forensic methods.

## ADJUS 2693 units

Pre-Employment Preparation for Law Enforcement

## 54 hours lecture

Grading: letter grade.
Students contemplating a future within the Criminal Justice System will receive practical and realistic opportunities to gain insight and understanding into the initial preparation, testing, evaluation, academy curriculum content and processing for entry level positions.

## ADJUS $600 \quad 0$ units

Powers of Arrest/Weapons of Destruction

## 9 hours lecture

Grading: non graded.
This course familiarizes and instructs the individual on the training topics delineated in Business and Professions Code section 7583.7, including legal aspects, techniques, liability, and company requirements relating to the arrest of an individual. The training utilizes the Department of Consumer Affairs' Power to Arrest Training Manual. In addition the students learn the subject matter and observation skills required to identify and report precursor activities to a terrorist event, react appropriately, report the occurrence of a terrorist event, and remain safe while helping control the scene after a terrorist event. The training utilizes the Department of Consumer Affairs' Weapons of Mass Destruction \& Terrorism Awareness for Security Professionals course consisting of a Digital Video Disk (DVD), Student Workbook, and Facilitator Manual.

## ADJUS 6010 units

## Public Relations \& Liability

## 9 hours lecture

Grading: non graded.
This course covers the required learning domains outlined by the CA Bureau of Security and Investigative Services for newly licensed security officers concerning the importance of public relations with both community and customer. The course provides important information concerning discrimination, diversity, substance abuse, and the mentally ill. The course includes communication skills and de-escalation techniques for crisis intervention. The course also provides the required learning domains surrounding security officers and liability in the course of their duties.

## ADJUS 6020 units

Communication/Observation/Documentation
9 hours lecture
Grading: non graded.
This course covers the required learning domains outlined by the CA Bureau of Security and Investigative Services in section 7583.6(b) of the Business and Professions Code in reference to communication, observation and documentation.

## ADJUS 6030 units

Search, Seizure, Scene Preservation
9 hours lecture
Grading: non graded.
This course covers the required learning domains outlined by the CA Bureau of Security and Investigative Services in reference to the legal powers of a security/proprietary officer to perform a search and/or seizure. The course also covers the methods for, and importance of, preserving the incident scene

ADJUS 6040 units
Officer Safety \& First Aid CPR
9 hours lecture
Grading: non graded.
This course covers the required learning domains outlined by the CA Bureau of Security and Investigative Services in reference to the knowledge and skills required to identify potentially hazardous situations including environmental, chemical, biological and situational dangers. The student also receives instruction in basic first aid and CPR.

ADJUS 6050 units
Conflict Management \& Crowd Control
9 hours lecture
Grading: non graded.
This course provides the student with the knowledge and skills necessary for conflict management in a private security setting. The course provides information on verbal diffusion and negotiations. The student also learns the various tactics and tools employed in crowd control situations.

# Advanced Manufacturing Tech (ADMT) 

ADMT 503 units

## Advanced Manufacturing, Introduction

36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly MACHT 50. Introduction to the basic principles and operation of machine tools with a focus on bench operations, drilling, mills, lathes, and grinding machines, with a focus on computer automated machine
tools. Standard industry practices and tool set-ups will be emphasized and applied.
Transferable to CSU Only

## ADMT 2003 units

Advanced Manufacturing Math
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly MACHT 201. This course covers the study of machine shop problems involving the solution of formulas related to screw threads, feeds and speeds, spur gears, simple and angular indexing. Geometric figures, angles, triangles, circles, arcs, trigonometric functions, compound angles and oblique triangles will also be introduced.

## ADMT 2512 units

Advanced Manufacturing, CNC Mills/Lathes
18 hours lecture, 54 hours laboratory
Prerequisite: ADMT 50.
Grading: letter grade or pass/no pass.
Formerly MACHT 203. This course covers Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Computer Numerical Control (CNC) machines. Concepts studied will include interactive geometry construction, tool motion, machine functions, repetitive programming, graphic output and graphic editing. Students will process programs using interactive graphics computer systems.

## ADMT $252 \quad 2$ units

Advanced Manufacturing, Sheet Metal CNC
18 hours lecture, 54 hours laboratory
Grading: letter grade.
This course covers the study of Computer Numerical Control (CNC) programming with emphasis on programming to support CNC machinery supporting the sheet metal industry. These machines include punch press, brakes, laser cutters and plasma cutters and pipe benders.

ADMT 2532 units<br>Advanced Manufacturing, Capstone<br>18 hours lecture, 54 hours laboratory<br>Grading: letter grade or pass/no pass.<br>Formerly MACHT 204. This course covers Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Computer Numerical Control (CNC) machines. Students will utilize various techniques of creating geometry on multiple work planes, three dimensional ( $3-\mathrm{D}$ ) surface tool path creation and manipulation, implementing 4th and 5th axis machining, generating surface to surface intersections, creating blends between surfaces, creating roughing operations for 3D, and CAD data conversion for the purpose of 3D machining.

## Allied Health (AH)

## AH 603 units <br> Medical Terminology <br> 54 hours lecture <br> Grading: letter grade.

This course is designed to develop a comprehensive medical vocabulary. Emphasis will be placed on spelling, definitions, and pronunciation of terms related to the body systems and medical specialties. In order to assist students with the challenges of the course content, students are required to complete 3 hours of Supplemental Learning Assistance activities in a Multidisciplinary Success Center over the course of the semester.
Transferable to CSU Only

## AH 612 units

Integration of Patient Care
18 hours lecture, 54 hours laboratory
Grading: letter grade.
This course is designed to develop the fundamental aspects of interpersonal relations as related to the health care professions, as well as, basic skills in selected patient care procedures. This course is designed for students in the Diagnostic Medical Imaging Program. Transferable to CSU Only

## AH 2202 units

## Phlebotomy

27 hours lecture, 27 hours laboratory
Grading: pass/no pass.
This course provides instruction in the principles and practices of blood specimen collection as required by the health care regulations in California. Completion of the course meets the following requirements: 1) complete didactic and partial practice to qualify for the examination for Certified Phlebotomy Technician I as defined by the Department of Health Services; 2) complete didactic and partial practice for Medical Assistant certification as defined by the California Society of Medical Assistants; 3) complete didactic and practice for Blood Withdrawal certificate as defined by the Board of Vocational Nursing and Psychiatric Technicians.
AH 2231 units
Phlebotomy Practicum
54 hours laboratory
Prerequisite: AH 220.
Grading: pass/no pass.
Formerly AH 220AD. This course provides the clinical laboratory experience in phlebotomy required to qualify for the examination of Certified Phlebotomy Technician I. This course and AH 220 are approved as a phlebotomy program by the State of California Department of Health Services Field Laboratory Services.

## AH 2250.5 units

Basic Arrhythmia Recognition

## 9 hours lecture

Prerequisite: ADN 11B and ADN 11BL or Licensed RN, VN 255 or VN 265 or Licensed VN, EMT 251 and EMT 251L or Licensed EMT.
Grading: pass/no pass.
This course provides instruction in the interpretation of the single lead electrocardiogram. This course includes the relationship between cardiac physiology and the development of cardiac rhythm, as well as the correlation of electrocardiogram status to patient condition and expected treatment. This course is designed for health care workers or students interested in the care of patients with cardiac problems. Successful completion prepares the student for the ECG component of the American Heart Association Advanced Cardiac Life Support class. This course would be suitable for health care students and registered nurses, vocational nurses, radiologic technologists and emergency medical technicians.

## AH 2761 units

Health Care Law

## 18 hours lecture

Grading: letter grade.
This course is designed to develop a basic understanding of health care law, medical ethics and how they relate to health care providers.

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# American Sign Language (ASL) 

## ASL 14 units

American Sign Language 1
72 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly SIGN 1 and SIGN 1B. This course is an introduction to the fundamentals of American Sign Language and Deaf culture. It includes development of appropriate linguistic/cultural behaviors and awareness of and respect for Deaf culture.
Transferable to both UC and CSU; see counselor for limitations

## ASL 24 units

## American Sign Language 2

## 72 hours lecture, 18 hours laboratory

Prerequisite: ASL 1 or SIGN 1 or SIGN 1B.
Grading: letter grade or pass/no pass.
Formerly SIGN 2 and SIGN 2B. This course is an advanced-beginning American Sign Language class. It includes receptive and expressive conversational skills without voice, grammatical structures of American Sign Language, development of appropriate linguistic/cultural behaviors, and awareness of and respect for Deaf culture.
Transferable to both UC and CSU; see counselor for limitations

## ASL 34 units

## American Sign Language 3

72 hours lecture, 18 hours laboratory
Prerequisite: ASL 2 or SIGN 2 or SIGN 2B.
Grading: letter grade or pass/no pass.
Formerly SIGN 3. This course is a low-to-mid intermediate-level American Sign Language and Deaf culture class focusing on receptive and expressive conversational skills without voice, using manual and nonmanual, spatial, and temporal grammatical structures. Further study of vocabulary, structure, and narrative techniques will help students develop language fluency to discuss abstract ideas and environments outside the classroom.
Transferable to both UC and CSU; see counselor for limitations

## ASL 44 units

## American Sign Language 4

72 hours lecture, 18 hours laboratory
Prerequisite: ASL 3 or SIGN 3.
Grading: letter grade or pass/no pass.
Formerly SIGN 4.This course is a mid-to-high intermediate-level ASL class focusing on receptive and expressive ASL skills without voice, using manual and non-manual, spatial, and temporal grammatical structures, and Deaf culture. This course provides an expanded review of ASL vocabulary, syntactical structures, grammatical patterns and current linguistic research and will help students develop language fluency at the advanced level.
Transferable to both UC and CSU; see counselor for limitations

## ASL 243 units

## American Deaf Cultures

54 hours lecture
Grading: letter grade.
Formerly SIGN 24. This course will explore the experiences of Deaf people in the United States. This course will foster the investigation of the issues of language, consciousness, cultures, self-representation, identity, and social construction within and between Deaf groups. Focus will be on cultural oppression, power, contributions of folklore, literature, plays, Deaf art, and the impact of modern technology on multiple discourses of Deaf cultures within America.
Transferable to both UC and CSU; see counselor for limitations

## Anatomy (ANAT)

ANAT 1 (C-ID BIOL 110B) 4 units<br>Human Anatomy<br>54 hours lecture, 54 hours laboratory<br>Grading: letter grade or pass/no pass.<br>This course is the study of the structures of the human body. This course provides the basic knowledge and lab skills to meet the needs of prenursing, physical education, physical therapy, and other allied health majors. Dissection of a cat or mink is required.<br>Transferable to both UC and CSU; see counselor for limitations

## ANAT 415 units

Anatomy \& Physiology
72 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course is an introduction to the study of the structures and functions of the human body. Knowledge learned in lecture is reinforced by laboratory experiments and dissections. This course is designed for students in certain health related majors as well as students not majoring in the life sciences. Dissection of the fetal pig is required.
Transferable to both UC and CSU; see counselor for limitations

## Anthropology (ANTHR)

## ANTHR 1 (C-ID ANTH 110) 3 units Physical Anthropology <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course introduces the concepts, methods of inquiry, and theory of biological evolution and their application to the human species. Issues and topics will include the principles of genetics and evolution, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The philosophy of science and the scientific method serve as foundations to the course. Transferable to both UC and CSU; see counselor for limitations

## ANTHR 1H (C-ID ANTH 110) 3 units <br> Honors Physical Anthropology

54 hours lecture
Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course introduces the concepts, methods of inquiry, and theory of biological evolution and their application to the human species. Issues and topics will include the principles of genetics and evolution, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The philosophy of science and the scientific method serve as foundations to the course. Transferable to both UC and CSU; see counselor for limitations

ANTHR 1L 2 units
Physical Anthropology Laboratory
18 hours lecture, 54 hours laboratory
Corequisite: ANTHR 1 or ANTHR 1H.
Grading: letter grade or pass/no pass.
This laboratory course is offered as a supplement to Physical Anthropology. Laboratory exercises emphasize the scientific method, and are designed to explore cellular structure, genetics, the evolutionary process, human variation, human and non-human primate anatomy and behavior, the primate/hominin fossil record, and analysis of human skeletal material.
Transferable to both UC and CSU; see counselor for limitations

## ANTHR 2 (C-ID ANTH 120) <br> 3 units

Cultural Anthropology

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is an introduction to the study of the concepts, theories, and methods used in the comparative study of sociocultural systems. This course includes a comparison of subsistence patterns, social structure, political organization, language, family, kinship, religion, and the arts as practiced by different cultures. It also explores social inequality, ethnicity, and gender and the application of anthropological perspectives to contemporary issues in the midst of culture change.
Transferable to both UC and CSU; see counselor for limitations
ANTHR 2H (C-ID ANTH 120) 3 units
Honors Cultural Anthropology

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is an introduction to the study of the concepts, theories, and methods used in the comparative study of sociocultural systems. This course includes a comparison of subsistence patterns, social structure, political organization, language, family, kinship, religion, and the arts as practiced by different cultures. It also explores social inequality, ethnicity, and gender and the application of anthropological perspectives to contemporary issues in the midst of culture change.
Transferable to both UC and CSU; see counselor for limitations

## ANTHR 3 (C-ID ANTH 150) <br> 3 units <br> Intro to Archaeology

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is an introduction to the study of concepts, theories, and methods of anthropological archaeology as well as a review of significant data and models that contribute to knowledge of the human past. The course includes a discussion of the history and interdisciplinary nature of archaeological research; dating techniques and methods of survey, excavation, and analysis; cultural resource management; ethical considerations; and selected cultural sequences.
Transferable to both UC and CSU; see counselor for limitations

## ANTHR 3H (C-ID ANTH 150) <br> Honors Intro to Archaeology 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is an honors introduction to the study of concepts, theories, and methods of anthropological archaeology as well as a review of significant data and models that contribute to knowledge of the human past. The course includes a discussion of the history and interdisciplinary nature of archaeological research; dating techniques and methods of survey, excavation, and analysis; cultural resource management; ethical considerations; and selected cultural sequences.
Transferable to both UC and CSU; see counselor for limitations

## ANTHR 43 units

Linguistic Anthropology

## 54 hours lecture

Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S. Grading: letter grade.
This introductory course serves as a foundation for understanding the intrinsic connection of language and culture using anthropological methodologies. Language is presented as a shared system of symbols that encodes various cultural realities in Western and non-Western societies. This course surveys three core areas in linguistic anthropology: Structural Linguistics-phonology, morphology, syntax, and semantics; Historical linguistics-origins and evolution of language, the development of language over time including its changes, variations, and language loss; and Sociolinguistics-language acquisition in a cultural context, how culture shapes language, and the intersection of language and systems of power.
Transferable to both UC and CSU; see counselor for limitations

## ANTHR 103 units

Magic, Witchcraft and Religion

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a survey of systems of magic, witchcraft and religion from past and present societies around the world. The course examines beliefs and practices in cultural settings with respect to the role of the supernatural in people's lives.
Transferable to both UC and CSU; see counselor for limitations

## ANTHR 11 (C-ID ANTH 110) 5 units

Physical Anthropology Lecture and Lab
72 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course is a combined lecture and laboratory course and may be taken in place of Anthropology 1 and Anthropology 1L. Issues and topics will include the principles of genetics and evolution, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The philosophy of science and the scientific method serve as foundations to the course. Laboratory exercises will explore cellular structure, genetics, the evolutionary process, human variation, human and non-human primate anatomy and behavior, the primate/hominin fossil record, and analysis of human skeletal material.
Transferable to both UC and CSU; see counselor for limitations

ANTHR 203 units

## Archaeology Field Survey Methods

36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course will introduce students to archaeological survey methods through lectures and supervised field experience. Instruction will focus on compass reading, topographic map orientation, research design, and creating maps using various survey instruments, including a pocket transit, automatic level, and electronic total station. Transferable to CSU Only

## ANTHR 304 units

## Maritime Archaeology Survey Technology

## 54 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
This is a lecture/lab course designed to introduce students to the various survey methodologies and technologies used in maritime archaeology. Instruction will focus on the utilization of remote sensing technological equipment including; side scan sonar, sub bottom profiler, \& proton magnetometer. Students will learn the background and history of maritime exploration, navigation and archaeology. Students will also learn how to create a survey research design utilizing this equipment as well as how to create maps of the surveyed area. Students will be trained in the set-up and deployment of the remote sensing instruments in mandatory field laboratory sessions. This course will also focus on the ethical and legal framework of submerged cultural heritage preservation. Mandatory field laboratory sessions will be scheduled at predetermined dates and locations and will be announced in the Schedule of Classes for the relevant semester.
Transferable to both UC and CSU; see counselor for limitations

## Architectural Design (ARCHT)

## ARCHT 203 units <br> Visual Literacy and Civilization <br> 36 hours lecture, 54 hours laboratory <br> Grading: letter grade.

This course is a visual exploration of civilization with a focus on culture in the built environment. This course analyzes the rules of representational conventions in the context of their rich cultural history, and contrasts them with non-western traditions. Introduction to several of 20th century's schools of thought that have been critical of the hegemonic visual regime of modernity, and its role in colonial expansion and domination of non-western cultures. Opportunities to discuss the readings and to conduct drawing exercises that will illustrate these readings.
Transferable to both UC and CSU; see counselor for limitations

## ARCHT 213 units

## Design Methods and Theories

## 36 hours lecture, 54 hours laboratory

Grading: letter grade.
This course introduces students to the process of architectural design, exploring the built environment through lectures, readings, film and activities that address different design approaches. It includes studies of historical precedents; an exposition of various design philosophies; and an introduction to the tools, techniques, and methods relevant in the design process.
Transferable to both UC and CSU; see counselor for limitations

## ARCHT $32 \quad 1.5$ units

## SketchUp I

18 hours lecture, 36 hours laboratory
Grading: letter grade.
Formerly ARCHT 252. This entry-level SketchUp course is aimed at individuals with a drafting background employed in engineering, and other related fields who wish to upgrade their skills in the area of Computer Aided Modeling (CAM). CAM training will utilize a recent version SketchUp in the Windows environment. The purpose of the class is to prepare students to use SketchUp to model and present architectural ideas in a timely manner, use V-Ray for SketchUp to create renderings with proper lighting and photo realism.
Transferable to CSU Only
ARCHT $33 \quad 1.5$ units
SketchUp II
18 hours lecture, 36 hours laboratory
Prerequisite: ARCHT 32.
Grading: letter grade.
Formerly ARCHT 253. This intermediate SketchUp course is aimed at individuals with a drafting background employed in engineering, and other related fields who wish to upgrade their skills in the area of Computer Aided Modeling (CAM). CAM training will utilize a recent version SketchUp in the Windows environment. The purpose of the class is to prepare students to use SketchUp to perform advanced modeling and learn to use SketchUp layouts to create presentations including the renders, floor plans, sections and elevations in an organized manner. Transferable to CSU Only

## ARCHT $34 \quad 1.5$ units

## AutoCAD Basics

18 hours lecture, 36 hours laboratory
Grading: letter grade.
Formerly ARCHT 254. This course is an architectural documentation class for Computer Aided Drafting (CAD). This introductory CAD training will utilize a recent version AutoCAD in the Windows environment. This course introduces CAD fundamentals: user interface, basic draw and edit commands, and other architectural industry standards.
Transferable to CSU Only

## ARCHT $35 \quad 1.5$ units

## Rhino Basics

18 hours lecture, 36 hours laboratory
Grading: letter grade.
Formerly ARCHT 251. This entry-level Rhinoceros course is aimed at individuals with a drafting background employed in engineering, and other related fields who wish to upgrade their skills in the area of Computer Aided Modeling (CAM). CAM training will utilize a recent version Rhinoceros in the Windows environment. This course introduces Rhinoceros fundamentals: user interface, basic draw and edit commands, basic modeling commands, geometry development, geometry modification, and visualization strategies. Exercises cover drawings for industrial and architectural applications.
Transferable to CSU Only

## ARCHT 363 units

## Visualization and Communication

36 hours lecture, 54 hours laboratory
Recommended Preparation: ARCHT 62.
Grading: letter grade.
Formerly ARCHT 255. A study of advanced individual student architectural design projects for portfolio preparation. Exploration and analysis of portfolio presentation principles and techniques. Development of digital portfolios using computer illustration, photo imaging and page layout programs. Evaluation of printing and binding techniques. Transferable to CSU Only

## ARCHT $37 \quad 1.5$ units

Advanced AutoCAD
18 hours lecture, 36 hours laboratory
Prerequisite: ARCHT 34.
Grading: letter grade.
This course introduces advanced techniques and teaches students to be proficient in the use of AutoCAD. Students learn how to recognize the best tool for the task, the best way to use that tool, and how to create new tools to accomplish tasks more efficiently. Students construct a variety of 2D and 3D drawings and 3D models and learn how to incorporate their models into a variety of printable layouts.
Transferable to CSU Only

## ARCHT 614 units

Fundamental Design Studio

## 54 hours lecture, 54 hours laboratory

Recommended Preparation: ARCHT 35 or ARCHT 635.
Grading: letter grade.
This course is an introductory architectural class utilizing a range of software to document design solutions both graphically and through model building techniques. The class prepares students for careers in the field of architecture and related fields such as interior and environmental design. Students apply elements of design and characteristics of style to create a small structure and develop a corresponding graphic presentation consisting of architectural drawings and precedent studies. Transferable to CSU Only

## ARCHT 624 units

Social Design Studio

## 54 hours lecture, 54 hours laboratory

Prerequisite: ARCHT 61.
Grading: letter grade.
This course is an architectural class that uses CAM/BIM software to document design solutions both graphically and through model building techniques. The class prepares students for careers in the field of architecture and related fields such as interior and environmental design. Students apply elements of design and characteristics of style to create a partial set of preliminary architectural drawings for a prefabricated housing project, engaging socio and cultural conditions as an impetus for design.
Transferable to CSU Only

## ARCHT 654 units

## Context Design Studio

54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 61.
Grading: letter grade.
This is an intermediate architectural design course for the transfer, occupational or returning student. It is a design course where students will create 2D and 3D architectural designs, 2D construction drawings and build physical models. Students will focus on landscape and ecological issues, developing a detailed residential structure.
Transferable to CSU Only

## ARCHT 664 units

Architectural Design Studio IV
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 65.
Grading: letter grade.
This is an intermediate level architecture courses for the transfer, occupational or returning student. It is a design course focused on institutional scale project with an introduction to ADA code. Students will create 2D and 3D architectural designs, 2D construction drawings and build digital models utilizing sketches and the latest 2D \& 3D software. Transferable to CSU Only

## ARCHT 714 units

## Design/Build Studio

54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 61.
Grading: letter grade.
Formerly ARCHT 71AD. This is an intermediate level architecture course for transfer, occupational or continuing student. It is a design/build course that utilizes computation, freehand sketching and various fabrication techniques. Students will create complex 2D and 3D architectural designs, complete 2D building plans and build physical and digital models. Students will engage basic construction techniques for hands on experience, cumulating in an installed design/build project.

## Transferable to CSU Only

## ARCHT $80 \quad 3$ units

Arch. History - Ancient to Medieval

## 54 hours lecture

Grading: letter grade.
This course presents an overview of the history of architecture from the Prehistoric period through the 16th century from a global perspective.
The survey covers 5 distinct regions - Africa, Asia, Europe, The Americas and West Asia - proving a wide cross section of global cultural traditions through materials, practice and idea dissemination. Discusses premodern western and non-western architectural ideas and practices in their social, cultural, and representational contexts. The course is appropriate for art majors and non-art majors.
Transferable to both UC and CSU; see counselor for limitations

## ARCHT 813 units

Arch. History - Medieval to Renaissance

## 54 hours lecture

Prerequisite: ARCHT 80.
Grading: letter grade.
This course will examine the architectural history of the Italian Renaissance from its origins in the 14th Century. Students will be guided through the political, economic and social issues that determined the rupture between two main historical eras: the Middle Ages and Modern times.
Transferable to both UC and CSU; see counselor for limitations

## ARCHT 913 units

## Environmental Controls Systems

## 54 hours lecture

Prerequisite: ARCHT 61.
Grading: letter grade.
This course will discuss Climate Change and the critical role architects play in the discussion in the context of understanding and designing for the thermal environment of buildings. Through the semester, students will discuss and review basic concepts of sustainability, gaining an understanding of climate-appropriate design, passive heating and cooling, and renewable energy systems. At the same time, through weekly readings and assignments, students will use tools to help them understand, measure and design better buildings. They will be exposed to and will learn the international language of sustainability.
Transferable to CSU Only

## ARCHT 923 units

## Building Construction

36 hours lecture, 54 hours laboratory
Recommended Preparation: ARCHT 61.
Grading: letter grade.
Students will learn about various building systems, and how these systems assist in the expression of a design concept, through an examination of precedent projects whose design concepts were generated by material logics and systems. Students will work handson with building materials (concrete, wood, metal, etc.) to get an understanding of each material's properties.
Transferable to CSU Only

## ARCHT $93 \quad 3$ units

Structures 1

## 36 hours lecture, 54 hours laboratory

Prerequisite: ARCHT 62 and PHYS 2A and MATH 40.
Grading: letter grade.
This course previews the historic evolution of structures, considering the influence of cultural, economic, and resource factors. The four S's for required for architectural structures: Synergy, Strength, Stiffness and Stability. This class studies existing structures determining synergy and load paths, load on buildings (dead- and live load) dynamic and thermal loads, as well as structural responses to loads. With static equilibrium as basis of analysis students calculate the strength of materials and mechanics, examining stress, strain, and stress-strain relations.
Transferable to CSU Only
ARCHT 2304 units
REVIT I
54 hours lecture, 54 hours laboratory
Grading: letter grade.
Formerly ARCHT 230AD. This is a beginning class in a series of five, aimed at individuals with a drafting background employed in architecture, interior design and other related fields, who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will emphasize the fundamentals of developing a BIM architectural modeling project and extracting formatted working drawings and a rendered presentation from the 3D model.

## ARCHT 2314 units

REVIT II
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 230.
Grading: letter grade.
Formerly ARCHT 231 AD. This is an intermediate class second in a series of five aimed at individuals with a drafting background employed in architecture, interior design and other related fields who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will emphasize collaboration tools, advanced design development tools, and advanced construction document tools through the development of a high-rise commercial structure project.

## ARCHT 2324 units <br> REVIT III

54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 231.
Grading: letter grade.
Formerly ARCHT 232AD. This is an advanced class the third in a series of five aimed at individuals with a drafting background employed in architecture, interior design and other related fields who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will enable students who have worked with BIM to expand their knowledge in the areas of Dynamo, a parametric plugin, virtual reality, and cross platform integration

## ARCHT 2334 units

## REVIT IV

## 54 hours lecture, 54 hours laboratory

Prerequisite: ARCHT 232.
Grading: letter grade.
This is an advanced class the fourth in a series of five aimed at individuals with a drafting background employed in architecture, interior design and other related fields who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Students will learn about other disciplines and their BIM tools, and develop best practices for worksharing.

## ARCHT 2344 units

## REVIT V

54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 232.
Grading: letter grade.
This is an advanced class, the fifth in a series of five, aimed at individuals with a drafting background employed in architecture, interior design and other related fields. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will enable students who have worked with BIM to expand their knowledge in the areas of Historical Building Information Modeling (HBIM) and point cloud management from 3D scanned sites.

## ARCHT 6010 units

ARE Exam Prep I
27 hours lecture
Grading: non graded.
This course introduces students to key concepts on the Practice Management division exam, such as the business of architecture and the intricacies of managing an architectural practice. Topics common to this exam include employee allocation per project, asset allocation and business development, various contracts and fee structures, responsibilities, and regulations.

## ARCHT 6020 units

ARE Exam Prep II
27 hours lecture
Grading: non graded.
This course introduces students to key concepts on the Project Management division exam, such as the processes and procedures for managing architectural projects. This includes understanding the role of contracts and how they fit into project management regarding the organization and managing personnel and consultants. This division also examines strategies for improving the delivery of services through quality control, scheduling, and project teams.

## ARCHT 6030 units

ARE Exam Prep III

## 27 hours lecture

Grading: non graded.
This course introduces students to key concepts on the Programming and Analysis division exam, such as the opportunities, constraints, and requirements for projects. This division examines the multitude of aspects in developing a project, including establishing the criteria (qualitative and quantitative) affecting projects and subsequent analysis of project type, site, and associated context and economics.

## ARCHT 6040 units <br> ARE Exam Prep IV <br> 27 hours lecture <br> Grading: non graded.

This course introduces students to key concepts on the Project Planning and Design division exam, such as the preliminary design of buildings and sites through conceptual design, design associated with sustainability and the environment, and with codes and regulations such as universal design.

## ARCHT 6050 units

ARE Exam Prep V
27 hours lecture
Grading: non graded.
This course introduces students to key concepts on the Project Development and Documentation division exams, such as building system integration, materials and assemblies, and their selection in a project. Additionally, this division evaluates the integration of systems such as structural, mechanical, electrical, plumbing, and civil-as well as specialty systems-into design and documentation.

## ARCHT 6060 units

ARE Exam Prep VI

## 27 hours lecture

Grading: non graded.
This course introduces students to key concepts on the Construction and Evaluation division exam, such as the process of construction administration including contract administration, execution, and services such as submittal reviews, construction observation, and payment requests, project close-out, and post-occupancy activities.

## ARCHT 6070 units

ARE Exam Prep VII
27 hours lecture
Grading: non graded.
This course introduces students to key concepts on the California Supplemental Examination exam, such as the architectural implications of California's large physical size, large and diverse population, varied landscape and climate, high seismicity, and other regulations and entitlements.

## ARCHT 6100 units

## Design 101

9 hours lecture, 18 hours laboratory
Grading: non graded.
This course introduces Design to students interested in careers in Architecture, Construction Management, and Interior Design. Students will engage in key design strategies, critical thinking, and problem assessing by completing a short design project. Students will gain knowledge about each profession and will understand what to expect in the educational setting.
ARCHT 6110 units
Modeling 101
9 hours lecture, 18 hours laboratory
Grading: non graded.
This course introduces physical and digital modeling to students interested in careers in Architecture, Construction Management, and Interior Design. Students will learn how to build architectural models out of a range of materials as well as the role computers play in design. Students will gain knowledge about each profession and will understand what to expect in the educational setting.

## ARCHT 6320 units

## SketchUp I

18 hours lecture, 36 hours laboratory
Grading: non graded.
This entry-level SketchUp course is aimed at individuals with a drafting background employed in engineering, and other related fields who wish to upgrade their skills in the area of Computer Aided Modeling (CAM). CAM training will utilize a recent version SketchUp in the Windows environment. The purpose of the class is to prepare students to use SketchUp to model and present architectural ideas in a timely manner, use V-Ray for SketchUp to create renderings with proper lighting and photo realism.

## ARCHT 633 <br> 0 units

SketchUp II
18 hours lecture, 36 hours laboratory
Prerequisite: ARCHT 632.
Grading: non graded.
This intermediate SketchUp course is aimed at individuals with a drafting background employed in engineering, and other related fields who wish to upgrade their skills in the area of Computer Aided Modeling (CAM). CAM training will utilize a recent version of SketchUp in the Windows environment. The purpose of the class is to prepare students to use SketchUp to perform advanced modeling and learn to use SketchUp layouts to create presentations including the renders, floor plans, sections and elevations in an organized manner.

## ARCHT 6340 units

## AutoCAD Basics

## 18 hours lecture, 36 hours laboratory

Grading: non graded.
This course is an architectural documentation class for Computer Aided Drafting (CAD). This introductory CAD training will utilize a recent version AutoCAD in the Windows environment. This course introduces CAD fundamentals: user interface, basic draw and edit commands, and other architectural industry standards.

## ARCHT 6350 units

## Rhino Basics

## 18 hours lecture, 36 hours laboratory

Grading: non graded.
This entry-level Rhinoceros course is aimed at individuals with a drafting background employed in engineering, and other related fields who wish to upgrade their skills in the area of Computer Aided Modeling (CAM). CAM training will utilize a recent version Rhinoceros in the Windows environment. This course introduces Rhinoceros fundamentals: user interface, basic draw and edit commands, basic modeling commands, geometry development, geometry modification, and visualization strategies. Exercises cover drawings for industrial and architectural applications.

## ARCHT 6370 units

Advanced AutoCAD
18 hours lecture, 36 hours laboratory
Prerequisite: ARCHT 34 or ARCHT 634.
Grading: non graded.
This course introduces advanced techniques and teaches students to be proficient in the use of AutoCAD. Students learn how to recognize the best tool for the task, the best way to use that tool, and how to create new tools to accomplish tasks more efficiently. Students construct a variety of 2D and 3D drawings and 3D models and learn how to incorporate their models into a variety of printable layouts.

## ARCHT $640 \quad 0$ units

REVIT I

## 54 hours lecture, 54 hours laboratory

Grading: non graded.
This is a beginning class in a series of three, aimed at individuals with a drafting background employed in architecture, interior design and other related fields, who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will emphasize the fundamentals of developing a BIM architectural modeling project and extracting formatted working drawings and a rendered presentation from the 3D model.

## ARCHT 641 <br> 0 units

REVIT II
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 230 or ARCHT 640.
Grading: non graded.
This is an intermediate class second in a series of three aimed at individuals with a drafting background employed in architecture, interior design, and other related fields who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will emphasize collaboration tools, advanced design development tools, and advanced construction document tools through developing a high-rise commercial structure project.

## ARCHT 6420 units

REVIT III
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 231 or ARCHT 641.
Grading: non graded.
This is an advanced class, the third in a series of three aimed at individuals with a drafting background employed in architecture, interior design, and other related fields who wish to upgrade their skills in the area of parametric Building Information Modeling, BIM. Students will be instructed in the essentials of REVIT Architecture or an equivalent BIM software. Instruction will enable students who have worked with BIM to expand their knowledge in the areas of Dynamo, a parametric plugin, virtual reality, and cross-platform integration.

## ARCHT $661 \quad 0$ units

## Fundamental Design Studio

54 hours lecture, 54 hours laboratory
Recommended Preparation: ARCHT 35 or ARCHT 635.
Grading: non graded.
This course is an introductory architectural class utilizing a range of software to document design solutions both graphically and through model building techniques. The class prepares students for careers in the field of architecture and related fields such as interior and environmental design. Students apply elements of design and characteristics of style to create a small structure and develop a corresponding graphic presentation consisting of architectural drawings and precedent studies.

## Art (ART)

## ART 1 (C-ID ARTH 110) 3 units

Art and Civilization

## 54 hours lecture

Recommended Preparation: Completion of or concurrent enrollment in ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course explores the artistic heritage of Western civilization from prehistory to the end of the Gothic period through the study of major monuments of painting, sculpture and architecture. It emphasizes the development of art forms as reflective of the social, political, religious, and aesthetic sensibilities of the historical periods covered. The course is appropriate for art majors and non-art majors.
Transferable to both UC and CSU; see counselor for limitations

## ART 1H (C-ID ARTH 110) 3 units <br> Honors Art and Civilization <br> 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Recommended Preparation: Completion of or concurrent enrollment in
ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course explores the artistic heritage of Western civilization from prehistory to the end of the Gothic period through the study of major monuments of painting, sculpture and architecture. It emphasizes the development of art forms as reflective of the social, political, religious, and aesthetic sensibilities of the historical periods covered. The course is appropriate for art majors and non-art majors.
Transferable to both UC and CSU; see counselor for limitations

## ART 2 (C-ID ARTH 120) <br> 3 units

## Art and Civilization

## 54 hours lecture

Recommended Preparation: Completion of or concurrent enrollment in
ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S .
Grading: letter grade or pass/no pass.
This course is a survey of western art history in Europe and America from the Renaissance to the modern era. Key artists, movements, and themes will be examined in painting, sculpture, and architecture. The development of art forms will be considered in relation to historical events and the cultural, religious, social, and political trends of the time period. ART 1 is NOT a prerequisite. This course is appropriate for art majors and non-majors.
Transferable to both UC and CSU; see counselor for limitations

## ART 2H (C-ID ARTH 120) 3 units

Honors Art and Civilization

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Recommended Preparation: Completion of or concurrent enrollment in
ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course is a survey of western art history in Europe and America from the Renaissance to the modern era. Key artists, movements, and themes will be examined in painting, sculpture, and architecture. The development of art forms will be considered in relation to historical events and the cultural, religious, social, and political trends of the time period. ART 1 is NOT a prerequisite. This course is appropriate for art majors and non-majors.
Transferable to both UC and CSU; see counselor for limitations

## ART 3 (C-ID ARTH 150) 3 units

Modern and Contemporary Art

## 54 hours lecture

Recommended Preparation: Completion of or concurrent enrollment in ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course surveys modern and contemporary art movements from their mid-19th century beginnings to the present. Painting, sculpture, architecture and new art forms are explored in their broader historical, cultural, and philosophical contexts.
Transferable to both UC and CSU; see counselor for limitations

## ART 4 (C-ID ARTH 140) 3 units <br> African, Oceanic, Native American Art <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a survey of the painting, sculpture, architecture and other cultural objects of sub-Saharan Africa, Australia, Polynesia, Melanesia, Micronesia and Native North America. These traditions will be experienced through lectures, PowerPoint presentations, videos and music. The relationship of these areas to the developments within modern Western art also will be discussed.
Transferable to both UC and CSU; see counselor for limitations

ART 5 (C-ID ARTH 130) 3 units

## History of Asian Art

## 54 hours lecture

Recommended Preparation: Completion of or concurrent enrollment in
ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course serves as a comprehensive introduction to the art traditions of India, Southeast Asia, China, Korea and Japan from prehistory to modern times. Works of art and architecture are discussed in relation to cultural, religious and socio-political contexts.
Transferable to both UC and CSU; see counselor for limitations
ART 93 units
Introduction to Art
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course provides a general approach to exploring a student's innate creative ability, a broad overview of historical and contemporary art concepts, and is an introduction to art processes and methods. This course is designed for the non-art major and is recommended for teaching majors.
Transferable to both UC and CSU; see counselor for limitations

## ART 103 units

Art Appreciation

## 54 hours lecture

Grading: letter grade or pass/no pass.
Students will be introduced to the major themes and concepts that have been the source for artistic expression in the visual arts. Ideas are viewed from a thematic exploration of art to express aesthetically human wants, needs and hopes. Through lectures and visual aids, students become aware of artistic ideas, media and techniques. The course is designed for the non-art major.
Transferable to both UC and CSU; see counselor for limitations

## ART 11 (C-ID ARTH 145) 3 units

## Latin American Art and Architecture

## 54 hours lecture

Grading: letter grade or pass/no pass.
An introductory historical survey of the visual art and architecture of Mexico, Central America, South America and parts of the Caribbean from 1500 BCE to the late 20th century. Major artworks, monuments and themes will be examined and interpreted using various analytical and contextual perspectives (formal, functional, iconographic, sociological, political and religious) in order to provide an understanding of the works in cultural context. The course is appropriate for art and non-art majors. Transferable to both UC and CSU; see counselor for limitations

## ART 123 units

Gallery and Exhibition Design
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 30 and ART 31.
Grading: letter grade.
Formerly ART 12AD. This course provides a theoretical investigation of and practical experience in gallery operation and art exhibition design. Students will have an opportunity to collaborate in all aspects of planning, designing, and installing art exhibitions in the LBCC Art Gallery and to visit and evaluate exhibitions at other local galleries and museums.
Transferable to CSU Only

## ART 15 (C-ID ARTS 110) 3 units

## Beginning Drawing

36 hours lecture, $\mathbf{7 2}$ hours laboratory
Grading: letter grade or pass/no pass.
This is an introductory studio experience in freehand drawing emphasizing accurate observation,light logic, perspective, spatial relationships, proportion and composition. Students develop the use of these skills as a means of personal expression.
Transferable to both UC and CSU; see counselor for limitations

## ART 16 (C-ID ARTS 205) 3 units

## Intermediate Drawing

36 hours lecture, 72 hours laboratory
Prerequisite: ART 15.
Grading: letter grade or pass/no pass.
This is an advanced studio drawing experience with emphasis on the employment of personal expression as applied to 20th Century concepts and trends.
Transferable to both UC and CSU; see counselor for limitations

## ART 173 units

## Illustration I

36 hours lecture, $\mathbf{7 2}$ hours laboratory
Recommended Preparation: ART 15.
Grading: letter grade or pass/no pass.
Formerly ART 17AD. This course serves as an introduction to illustration. It stresses the creative interpretation of subjects, situations, and themes within the context of commercial art such as advertising, editorial, and institutional. Special emphasis is placed on the creation of illustrations from rough concept through finished artwork. Production, media processes, color analysis and application, portfolio development and presentation are presented. Studio experience in the use of linear perspective to develop illustrative realistic representation is emphasized. Transferable to CSU Only

## ART 183 units

## Illustration II

## 36 hours lecture, $\mathbf{7 2}$ hours laboratory

Recommended Preparation: ART 15 and ART 17.
Grading: letter grade or pass/no pass.
Formerly ART 18AD. This course is a continuation of the concepts and techniques presented in Illustration I. Increasingly more advanced illustration projects, techniques, concepts and methods will be presented. Emphasis is placed on the development of original concepts, refinements of techniques, production methods and development and presentation of portfolio-quality artwork. In addition, rendering, or sharp focus drawing techniques will be presented and incorporated in several projects.
Transferable to CSU Only
ART 19 (C-ID ARTS 200) 3 units
Life Drawing
36 hours lecture, 72 hours laboratory
Prerequisite: ART 15.
Grading: letter grade or pass/no pass.
Formerly ART 19AD. This is a freehand figure drawing course focusing on observational skills, proportion, and anatomy as a means of personal expression. This course is recommended for those interested in illustration, drawing and painting and art majors interested in transferring to a university.
Transferable to both UC and CSU; see counselor for limitations

## ART 23 (C-ID ARTS 210) 3 units

## Beginning Painting

36 hours lecture, $\mathbf{7 2}$ hours laboratory
Recommended Preparation: ART 15.
Grading: letter grade or pass/no pass.
This is an introductory studio course emphasizing fundamental
techniques and concepts appropriate to the use of color and painting as a means to portray realistic images. Most of the work will be based upon observation of objects as a way to suggest volume, spatial relationships, light and mood. This course is required of all art majors.
Transferable to both UC and CSU; see counselor for limitations

## ART 243 units

## Watercolor, Beginning

36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 15.
Grading: letter grade or pass/no pass.
This course offers an opportunity to explore and develop creative attitudes, values and personal expression in the medium of watercolor. The course investigates and emphasizes unique techniques, methods and tools, using the elements and principles of two-dimensional pictorial composition in an imaginative, personal manner.
Transferable to both UC and CSU; see counselor for limitations

## ART 253 units

## Watercolor, Advanced

36 hours lecture, 72 hours laboratory
Prerequisite: ART 24.
Grading: letter grade or pass/no pass.
Formerly ART 25AD. This is an advanced course in watercolor painting with an emphasis on the employment of personal expression as applied to 20th century concepts and trends. For UC course limitations, see counselor.
Transferable to both UC and CSU; see counselor for limitations

## ART 263 units

Figure Painting
36 hours lecture, 72 hours laboratory
Prerequisite: ART 19.
Recommended Preparation: ART 23.
Grading: letter grade or pass/no pass.
Formerly ART 26AD. This course introduces and investigates painting the human figure from observation with the emphasis on anatomy, historical and contemporary issues and personal interpretation. Light logic and color theory systems as they pertain to the figure will be introduced and developed to create resolved compositions and accurate representations of the figure.
Transferable to both UC and CSU; see counselor for limitations

## ART 273 units

Intermediate Painting
36 hours lecture, 72 hours laboratory
Prerequisite: ART 23.
Grading: letter grade or pass/no pass.
Formerly ART 27AD. This course is a studio experience designed for students with basic painting skills. The course will introduce them to historical and contemporary visual art concepts and techniques.
The students will develop paintings that reflect personal expression, experimental media and current trends in painting.
Transferable to both UC and CSU; see counselor for limitations

## ART 283 units

## Portrait Drawing and Painting

37 hours lecture, 72 hours laboratory
Prerequisite: ART 15 and ART 23.
Grading: letter grade or pass/no pass.
Formerly ART 28AD. This is a drawing and painting course focusing on representing the human head. Emphasis will be placed on observational skills, proportion, and anatomy as a means of personal expression. This course is recommended for those interested in illustration, drawing and painting and art majors interested in transferring to a university.
Transferable to CSU Only
ART 30 (C-ID ARTS 101) 3 units
Three Dimensional Design
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
This course is a fundamental studio course designed to provide a basic understanding of the concepts, applications, and historical references of three-dimensional design and 3D spatial composition, which includes a focus on the interrelationship of the Organizing Principles of Design and the Elements of 3D Design. The course includes the development and translation of ideas and/or visual experience into tactile forms using both formal and conceptual approaches.
Transferable to both UC and CSU; see counselor for limitations

## ART 31 (C-ID ARTS 100) <br> 3 units

Two Dimensional Design

## 36 hours lecture, 72 hours laboratory

Grading: letter grade or pass/no pass.
This course is an introduction to the elements and principles of twodimensional design as they apply to the visual arts. The course is a beginning level studio experience designed to create understanding of line, shape, texture, pattern, value, color and composition. Principles of design; rhythm, harmony, balance, unity, variety, and emphasis will be explored.
Transferable to both UC and CSU; see counselor for limitations

## ART 323 units

Intermediate Design
36 hours lecture, 72 hours laboratory
Prerequisite: ART 30 or 31.
Grading: letter grade or pass/no pass.
This course is a creative studio experience for the student preparing to enter a field of applied design, graphic design, product design, interior design, photography and fine art. Emphasis is on problem solving and refinement of images and objects in the context of art and design. Transferable to both UC and CSU; see counselor for limitations

## ART $33 \quad 1.5$ units

## Skills for Jewelry

18 hours lecture, 36 hours laboratory
Recommended Preparation: ART 30.
Grading: letter grade or pass/no pass.
This course introduces students to foundational skills in jewelry design and fabrication and includes on-campus lab practice. The course is recommended for students who have no experience in jewelry or who wish to explore and develop an individual approach to studio projects in the area of jewelry and metalwork.
Transferable to CSU Only

## ART 343 units

## Applied Design/Crafts

36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly ART 34AD. This course is an introduction to media in the design and creation of decorative and/or functional objects. Emphasis is on skill acquisition and refinement in a context of art and functional design.
Transferable to both UC and CSU; see counselor for limitations

## ART $35 \quad 3$ units

Beginning Jewelry
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 30 and ART 31.
Grading: letter grade or pass/no pass.
Formerly ART 35AD. This course introduces the scope of contemporary metalsmithing through the design and construction of original projects. Knowledge of various specialized soldering, forming and surface techniques is demonstrated in the construction of projects. Emphasis is on skill acquisition and refinement in a context of art and design.
Transferable to CSU Only

## ART 364 units

Casting for Jewelry
36 hours lecture, 126 hours laboratory
Prerequisite: ART 35.
Grading: letter grade or pass/no pass.
Formerly ART 36AD. This course introduces the scope and exploration of wax-working, casting and mold making in contemporary jewelry and metalwork through the design and construction of original projects. Knowledge of various direct and indirect processes, wax working, and mold making techniques is demonstrated in the construction of projects. Emphasis is on skill acquisition and refinement in a context of art and design.
Transferable to CSU Only

## ART 374 units

Metalsmithing
36 hours lecture, 126 hours laboratory
Prerequisite: ART 35.
Grading: letter grade or pass/no pass.
This course introduces the scope and exploration of the basic hollowware techniques, die-forming, raising, chasing and repousse in contemporary jewelry and metalwork through the design and construction of original projects. Knowledge of various forming processes required for transposing two dimensional materials into three dimensional forms is demonstrated in the construction of projects. Emphasis is on skill acquisition and refinement in a context of art and design.
Transferable to CSU Only

## ART 384 units

Advanced Topics in Jewelry
36 hours lecture, 126 hours laboratory
Prerequisite: ART 35.
Grading: letter grade or pass/no pass.
This course is a continuation of studies to techniques and concepts introduced in 35,36 or 37 with an emphasis on refinement of skills. Included segments may cover facets such as enameling, professional practices or other advanced areas.
Transferable to CSU Only

## ART $39 \quad 1.5$ units

## Skills for Jewelry II

18 hours lecture, 36 hours laboratory
Recommended Preparation: ART 35.
Grading: letter grade or pass/no pass.
This course continues to develop skills in jewelry design and fabrication and includes on-campus lab practice. The course is recommended for students who have had ART 35 or equivalent and wish to explore further studio projects in the area of jewelry and metalwork.
Transferable to CSU Only

## ART 503 units

## Ceramics I

## 36 hours lecture, 72 hours laboratory

Grading: letter grade or pass/no pass.
This course provides an introduction to ceramics materials, concepts, and processes including basic design principles, creative development, forming techniques, surface decoration techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures.
Transferable to both UC and CSU; see counselor for limitations

## ART 513 units

## Ceramics II

36 hours lecture, 72 hours laboratory
Prerequisite: ART 50.
Recommended Preparation: ART 30 and ART 31.
Grading: letter grade or pass/no pass.
Formerly ART 51AD. This course serves as a creative experience in the visual arts using clay as a medium of expression. Students will apply knowledge gained in the first course (Ceramics I) to solve more complex problems of forming, decoration and glazing three-dimensional ceramic forms.
Transferable to both UC and CSU; see counselor for limitations

## ART 523 units

Ceramics III
36 hours lecture, 72 hours laboratory
Prerequisite: ART 51.
Recommended Preparation: ART 30 and ART 31.
Grading: letter grade or pass/no pass.
Formerly ART 52AD. In this course students develop a more intensive knowledge of ceramics along with the ability to produce well designed ceramic objects. Emphasis is placed on the creation of the clay objects, initial concept through finished artwork, including refinements of glazing techniques, aesthetic judgment and problem-solving capabilities. Kiln firing, glaze and clay technology will be presented.
Transferable to both UC and CSU; see counselor for limitations

## ART $53 \quad 3$ units

## Ceramics IV

## 36 hours lecture, 72 hours laboratory

Prerequisite: ART 51.
Recommended Preparation: ART 30 and ART 31.
Grading: letter grade or pass/no pass.
Formerly ART 53AD. In this course students develop a more intensive knowledge of ceramics along with the ability to produce well designed ceramic objects. This course emphasizes non-utilitarian form, related clay, glaze and firing technology, aesthetic judgment, problem-solving capabilities, skills and knowledge of materials.
Transferable to both UC and CSU; see counselor for limitations

## ART $60 \quad 3$ units

## Beginning Sculpture

36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 30.
Grading: letter grade or pass/no pass.
This is an introductory studio course structured to give students an understanding of the formal elements of sculpture, while investigating various materials and processes. Both additive and subtractive methods are explored using clay, plaster and wood, as well as non-traditional materials. This course is designed to allow students to investigate form, space, material and content through selected projects, readings, field trips, slides and discussions.
Transferable to both UC and CSU; see counselor for limitations

## ART 614 units

Intermediate Sculpture
36 hours lecture, 126 hours laboratory
Prerequisite: ART 60.
Grading: letter grade or pass/no pass.
This studio course is an introduction to a subjective approach to sculpture emphasizing the development of ideas in relation to personal/ individual intent. An investigation of both historical and contemporary sculpture that may include carving, casting, modeling, welding, fiberglass lamination, installation and non-studio pieces. There is an emphasis on the advancement of technical and material skills as well as the understanding of an overall art making process. Students continue their investigation of form, space, material and content through selected projects, readings, field trips, lectures, and discussions.
Transferable to both UC and CSU; see counselor for limitations

## ART 624 units

Metal Fabrication Sculpture
36 hours lecture, 126 hours laboratory
Prerequisite: ART 60.
Recommended Preparation: ART 30.
Grading: letter grade or pass/no pass.
This studio course is designed to increase understanding of contemporary sculpture through a focus on the fundamentals of metal fabrication. This is an investigation of both historical and contemporary sculpture that may include oxy-acetylene, arc and heli-arc welding, basic forging, bending and cold-joint metal fabrication techniques. There is an emphasis on the advancement of technical and material skills as well as the understanding of an overall art making process. Students continue their investigation of form, space, material, and content through selected projects, readings, field trips, lectures, and discussions.
Transferable to CSU Only

## ART 634 units

Metal Casting Sculpture
36 hours lecture, 126 hours laboratory
Prerequisite: ART 60.
Recommended Preparation: ART 30.
Grading: letter grade or pass/no pass.
This studio course is designed to investigate contemporary sculpture ideas through traditional, industrial and new metal casting processes. Students explore styrofoam/greensand and standard investment for casting aluminum and bronze. Instruction on surfacing includes patina, stains, paints and varnish application. Ceramic shell casting may also be explored.
Transferable to CSU Only

## ART 653 units

Introduction to Wood
36 hours lecture, 72 hours laboratory
Prerequisite: ART 60.
Recommended Preparation: ART 30.
Grading: letter grade or pass/no pass.
Introduction to concepts, tools, and techniques used in the creation of handcrafted, wooden objects. Students will explore the basic construction and reductive shaping techniques including, lamination, milling, woodturning, carving, and joinery used in the creation of both fine and applied art objects.
Transferable to CSU Only

## ART $70 \quad 3$ units

Printmaking, Silkscreen

## 36 hours lecture, 72 hours laboratory

Grading: letter grade or pass/no pass.
Formerly ART 70AD. This course introduces the scope of the graphic art of printmaking as a means of personal expression. Students will learn the basic techniques of water-based serigraphy; blockout stencil, paper stencil and photo-emulsion stencils. Emphasis is on skill acquisition and refinement in the context of art and design.
Transferable to both UC and CSU; see counselor for limitations

## ART 713 units

Printmaking, Intaglio
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly ART 71AD. This course is an introduction to the graphic art of printmaking as a means of personal expression. The Intaglio class includes techniques and processes for etching, drypoint, engraving,
multicolor plates, viscosity, aquatint, and photo etching. Emphasis is on skill acquisition and refinement in a context of art and design.
Transferable to both UC and CSU; see counselor for limitations

## ART 723 units

## Advanced Printmaking

## 36 hours lecture, 72 hours laboratory

Prerequisite: ART 70 or ART 71.
Grading: letter grade or pass/no pass.
Formerly ART 72AD. Students will work in special studies of advanced techniques and exploration of collagraphy, intaglio, serigraphy and/or woodcut. Students will develop and pursue individualized projects and gain competence in edition printing, darkroom techniques and mixed media.
Transferable to both UC and CSU; see counselor for limitations

## ART 803 units

## Elements of Photography

## 54 hours lecture

Grading: letter grade or pass/no pass.
This lecture-only course is a survey of photography as a creative, personal form of expression. The emphasis of the class is on acquisition of skills related to camera operation, selection of equipment, choosing appropriate subject matter and how to take and evaluate the final product, the photograph. This course is a lecture only format and does not include a lab component.
Transferable to both UC and CSU; see counselor for limitations

## ART 813 units

Introduction to Fine Art Photography
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 31.
Grading: letter grade or pass/no pass.
This course is an introduction to photography as a creative personal form of expression. The emphasis is on acquisition of traditional darkroom skills, operation of a camera, concepts and practices of fine art black and white photography. It is suitable for students with beginning to advanced photographic skill levels.
Transferable to both UC and CSU; see counselor for limitations

## ART $90 \quad 1.5$ units

## Special Projects in Art

18 hours lecture, 36 hours laboratory
Prerequisite: ART 19 or ART 26 or ART 27 or ART 36 or ART 37 or ART 38 or ART 51 or ART 61 or ART 62 or ART 63 or ART 70 or ART 71 or DMA 5 or DMA 40.
Grading: letter grade or pass/no pass.
Formerly ART 90AD. This course is designed to assist the student in the exploration and development of an individual approach to projects within specific fields of art.
Transferable to CSU Only

## ART 913 units

## Studio Projects in Art

36 hours lecture, 72 hours laboratory
Prerequisite: ART 19 or ART 26 or ART 27 or ART 36 or ART 37 or ART 38 or ART 51 or ART 61 or ART 62 or ART 63 or ART 70 or ART 71 or DMA 5 or DMA 40.
Grading: letter grade or pass/no pass.
Formerly ART 91AD. This course is designed to assist the student in the exploration and development of an individual approach to studio projects within the field of art.
Transferable to CSU Only

## ART 2923 units

Professional Skills for Artists
36 hours lecture, $\mathbf{7 2}$ hours laboratory
Recommended Preparation: Completion of at least three studio art courses.
Grading: letter grade or pass/no pass.
This course is designed to develop best practices in professional skills for artists. Lectures and demonstrations may include portfolio development, photographing and documentation of artwork, artist presentation and promotion, resume, artist statement and biography writing. Class lectures may also include general or discipline-specific information on schools, exhibitions, internship or grant opportunities, website development, social media, criticism, ethical and contractual issues.

## Astronomy (ASTR)

ASTR 13 units
Elementary Astronomy
54 hours lecture
Grading: letter grade or pass/no pass.
This course is an introduction to astronomy. Topics to be covered include the physical nature of the solar system, stars and stellar systems, galaxies and the universe as a whole, including not only their current state, but also theories of their origin and evolution.
Transferable to both UC and CSU; see counselor for limitations

## ASTR 1H 3 units

## Honors Elementary Astronomy

54 hours lecture
Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is an honors introduction to astronomy. Topics to be covered include the physical nature of the solar system, stars and stellar systems, galaxies and the universe as a whole, including not only their current state, but also theories of their origin and evolution.
Transferable to both UC and CSU; see counselor for limitations

## ASTR 1L 2 units

Astronomy Laboratory
18 hours lecture, 54 hours laboratory
Corequisite: ASTR 1 or ASTR 1H.
Grading: letter grade or pass/no pass.
This course provides an introduction to observational astronomy. Various projects provide training in astronomical observation, and in the analysis of numeric and graphical data. Passing both ASTR 1 and ASTR 1L satisfies a physical science lab requirement.
Transferable to both UC and CSU; see counselor for limitations

## Automotive Technology (AUTO)

AUTO 200 (C-ID AUTO 110 X) 3 units
Introduction to Automotive Technology
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly AMECH 421. This course is an introductory course covering the principles of the operation of the modern automobile. This course will provide practical experience in maintenance and repair at the owner operator level. Consumer awareness is emphasized.

## AUTO 2011 units

Automotive Lubrication Service
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly AMECH 801, ATT 801. This course prepares students with skills needed for performing oil changes, lubrication, under hood services and vehicle inspections.

## AUTO 2021 units

Automotive Tire Service
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly AMECH 802, ATT 802. This course prepares students with skills needed for doing tires rotation, repair, replacement, balancing and vehicle inspections.

## AUTO 2031 units

Automotive Brake Inspection
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly AMECH 803, ATT 803. This course prepares students with the skills needed to do basic Service Brake Inspection, brake pads replacement, and vehicle inspection.

## AUTO 2113 units

## Automotive Engine Repair

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 434, AMECH 461. This course teaches the students the skills needed to diagnose, service and repair late model engines and related systems. It focuses on all makes and models of gasoline engines with emphasis on using factory service manuals. It prepares the students to take the national A-1 Auto Engine Repair test which is part of the (ASE) Auto Service Excellence program that reflects industry standards.

AUTO 212 (C-ID AUTO 120 X) 3 units
Automotive Automatic Transmission 36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 436. This course covers the construction, operation, maintenance, adjustment, service and diagnostic of automatic transmissions and trans-axles. It prepares the students to take the national A-2 Automatic Transmissions and Trans-axles test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

AUTO 213 (C-ID AUTO 130 X) 3 units

## Automotive Manual Transmission

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200 or high school auto.
Grading: letter grade or pass/no pass.
This course covers the construction, operation, maintenance, adjustment, service and diagnostic of manual drive trains and axles. It prepares the students to take the national A-3 Manual Drive Trains and Axles test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 214 (C-ID AUTO 140 X) 3 units

## Automotive Wheel Alignment

## 36 hours lecture, 54 hours laboratory

Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 430. This course covers automotive wheel alignment theory, design, operation, power flow, suspension and steering in automotive vehicle and small truck. It prepares the students to take the national A-4 automotive suspension and steering test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 215 (C-ID AUTO 150 X) 3 units

## Automotive Brake Systems

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 432. This course covers automotive brake theory design, and operation of standard drum, disc and anti-lock brake systems common to most automotive vehicle and small truck. It prepares the students to take the national A-5 automotive brake test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 2163 units

## Automotive Electrical Systems

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 444. This course covers theory and components of automotive electrical systems, and operation of automotive electrical. It prepares the students to take the national A-6 Automatic Electrical test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 217 (C-ID AUTO 170 X) 3 units Automotive Air Conditioning <br> 36 hours lecture, 54 hours laboratory <br> Recommended Preparation: AUTO 200. <br> Grading: letter grade or pass/no pass.

Formerly AMECH 424. This course covers automotive tools, automotive equipment, automotive refrigeration fundamentals, automotive electrical systems, automotive air distribution, automatic air conditioning, installation, maintenance, and repair of modern automotive air conditioning systems. Emphasis is based on industrial repair and maintenance. It prepares the students to take the national A-7 automotive air conditioning test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 2183 units

Automotive Fuel Systems

## 36 hours lecture, 54 hours laboratory

Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 442. This course covers theory and components of automotive fuel systems, and operation of automotive fuel system. It prepares the students to take the national A-8 Automotive fuel system test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 2193 units

Automotive Light Diesel Engines
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200 or high school auto.
Grading: letter grade or pass/no pass.
This course covers the theory and components of automotive diesel technology. It prepares students to take the national A-9 Automotive Diesel Technology test which is part of the (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 2203 units

Automotive Emission Controls
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 438. This course covers the testing and repair of automotive emission control systems and operation of automotive computers scanner testing and oscilloscopes for (Conventional and computer assisted purposes). Prepare students to take the ASE (Automotive Service Excellence) test. This course will also explain electrical and fuel systems on Diesel, Hybrid, LNG (Liquid Natural Gas), CNG (Compressed Natural Gas) and Hydrogen Fuel cells.

## AUTO $230 \quad 3$ units

## Automotive Computer Systems

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 440. This course covers theory and components of automotive computer control system operation and testing of computer controlled oxygen feedback system. It prepares the students to take the national (ASE) Auto Service Excellence program which reflects industry standards.

## AUTO 270 (C-ID ALTF 100X) 3 units

Intro to Hybrid and Electric Vehicles

## 36 hours lecture, 54 hours laboratory

Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly ATT 480 and AMECH 480. This course provides a broad introduction to Hybrid, Fuel Cell, and Electric Vehicles. Discover how emerging vehicle technologies are finding solutions for existing fossil fueled engines. Examine existing vehicle technologies and peek into future technologies.

## AUTO 2713 units

Introduction to Alternative Fuel Systems
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 490 and ATT 490. Alternative fueled vehicles are extensively used in fleet service. This course covers the theory of operation, installation, testing, trouble-shooting, and repair of gaseous fuels with a focus on Compressed Natural Gas (CNG) as well as an introduction to Liquefied Natural Gas (LNG). This course discusses both dedicated and after-market systems. Gasoline and diesel powered vehicles are discussed with an emphasis on computer-controlled fuel injection. Components are heavily discussed in this course to include everything from storage up to the injector(s). Successful completion of this course will prepare students for the CNG Inspector's Certification.

## AUTO $280 \quad 3$ units

Light Duty Electric Vehicles
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly ATT 482. This course focuses on light-duty passenger electric vehicles (EVs). It provides a practical introduction to advanced EV designs and propulsion systems. The course includes: EV design and construction; the testing, assembly, operation, and maintenance of EVs; the influence of aerodynamic design; advanced technology batteries, super-capacitors, intelligent charging systems; hydrogen fuel cell technology, and alternative EV drive systems. Successful completion of this course will prepare students for the ASE L3 (Light Duty Hybrid/EV Vehicle Specialist Certification).

## AUTO 2813 units

## Light Duty Hybrid Vehicles

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 481 and ATT 481. This course focuses light-duty passenger hybrid electric vehicles (HEVs). It provides a practical introduction to advanced HEV design and propulsion systems. The course includes: HEV design and construction; the testing, assembly, operation, and maintenance of HEVs; the influence of aerodynamic design; advanced technology batteries, super-capacitors, intelligent charging systems; hydrogen fuel cell technology, and alternative EV drive systems. Successful completion of this course will prepare students for the ASE L3 (Light Duty Hybrid/EV Vehicle Specialist Certification).

## AUTO 2823 units

Light Duty Alternative Fuels
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 493 and ATT 493. This course focuses light-duty passenger with Compressed Natural Gas (CNG) applications. It provides a practical introduction to CNG and propulsion systems. The course includes: CNG design and construction; the testing, assembly, operation, and maintenance of CNG vehicles; the influence of aerodynamic design; slow fill and fast fill systems; cylinder design and construction, and Liquefied Natural Gas (LNG) systems. Successful completion of this course will prepare students for the ASE F1 (Light Vehicle Compressed Natural Gas Specialist Certification).

## AUTO 2833 units

Light Duty EV Powertrain Diagnostics
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 483 and ATT 483. Light Duty Electric Vehicle (EV) Powertrain Diagnostics involves extensive in-depth analysis for each EV component. Students will develop diagnostic strategies and perform repairs on specific components. This course covers the EV components of the Hybrid propulsion systems.

## AUTO 2923 units

## Heavy Duty Alternative Fuels

36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200.
Grading: letter grade or pass/no pass.
Formerly AMECH 491 and ATT 491. This course focuses on heavy-duty passenger with Compressed Natural Gas (CNG) applications used in transit and port vehicles. It provides a practical introduction to CNG and propulsion systems featuring the ISL-G Cummins 8.9 L engine. The course includes: CNG design and construction; the testing, assembly, operation, and maintenance of CNG vehicles; the influence of aerodynamic design; slow fill and fast fill systems; cylinder design and construction, and Liquefied Natural Gas (LNG) systems. Successful completion of this course will prepare students for the ASE F1 (Light Vehicle Compressed Natural Gas Specialist Certification).

## AUTO 2933 units

## Intro to Rivian

36 hours lecture, 72 hours laboratory
Recommended Preparation: AUTO 200, 216, 230, 270, 280 and 281.
Grading: letter grade.
This course provides a broad introduction to Rivian systems and applications, shop equipment and service center best practices, and high voltage safety overview. Students will perform and develop Vehicle walkaround/Product familiarity, customer relation experience, Compass values, and service center operation and company projection. This course covers the Beginner Trail Difficulty in the Rivian Trail Guide.

## AUTO 2943 units

Rivian Chassis Systems
36 hours lecture, 72 hours laboratory
Recommended Preparation: AUTO 200, 216, 230, 270, 280 and 281.
Grading: letter grade.
This course provides an in-depth coverage of Rivian systems such as: Alignments, Chassis, and Brakes. Students will perform and develop alignment adjustments and calibrations, suspension procedures, brake replacement and calibration, and chassis components replacements. This course covers the Intermediate Trail Difficulty in the Rivian Trail Guide.

## AUTO 2953 units

Rivian Electrical and Thermal Management
36 hours lecture, 72 hours laboratory
Recommended Preparation: AUTO 200, 216, 230, 270, 280 and 281.
Grading: letter grade.
This course provides an in-depth coverage of Rivian thermal and electrical systems such as wiring diagrams, control devices, modules and software programs, and thermal properties. Students will perform and develop electrical diagnosis, communications networks overview, software programming updates, and coolant replacements. This course covers the Advanced Trail Difficulty in the Rivian Trail Guide.

## AUTO 2963 units

Rivian HV Theory and Diagnosis
36 hours lecture, 72 hours laboratory
Recommended Preparation: AUTO 200, 216, 230, 270, 280 and 281. Grading: letter grade.
This course provides in-depth coverage of Rivian high voltage systems such as $A / C$ and D/C charging, inverters, converters, and motors.
Students will perform and develop high voltage systems diagnosis, onboard chargers overview, isolation fault diagnosis. HV disable and power down, and R\&R of heavy components. This course covers the Expert Trail Difficulty in the Rivian Trail Guide

AUTO 6000 units
Introduction to Automotive Technology
36 hours lecture, 54 hours laboratory
Grading: non graded.
This course is an introductory course covering the principles of the operation of the modern automobile. This course will provide practica experience in maintenance and repair at the owner operator level.
Consumer awareness is emphasized

## AUTO 6010 units

Automotive Lubrication Service
18 hours lecture, 18 hours laboratory
Grading: non graded.
This course prepares students with skills needed for performing oil changes, lubrication, under hood services and vehicle inspections.

## AUTO 6020 units

## Automotive Tire Service

18 hours lecture, 18 hours laboratory
Grading: non graded.
This course prepares students with skills needed for doing tires rotation, repair, replacement, balancing and vehicle inspections.

## AUTO 6030 units

Automotive Brake Inspection
18 hours lecture, 18 hours laboratory
Grading: non graded.
This course prepares students with the skills needed to do basic Service Brake Inspection, brake pads replacement, and vehicle inspection.

## AUTO $651 \quad 0$ units

Diesel Generator Engine Fundamentals
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 600.
Grading: non graded.
This course teaches students the fundamentals of diesel engine operation, service and repair of late model engines and related systems. It focuses on all makes and models of diesel generators engines with emphasis on using factory service manuals. It prepares students for entry level positions in the industry.

## AUTO $652 \quad 0$ units

Diesel Engine Maint. \& Troubleshooting
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 600.
Grading: non graded.
This course teaches students the skills needed to diagnose, service and maintain late model portable and stationary generators. It focuses on all makes and models of diesel engines with emphasis on using factory service manuals. It prepares students for entry level positions in the industry.

## Baking (BAKE)

BAKE 2303 units<br>Baking \& Pastry Skills for CUL Students<br>36 hours lecture, 72 hours laboratory<br>Grading: letter grade.<br>Materials Fee: \$50<br>Formerly CULAR 230. This course introduces the Culinary Arts student to baking \& pastry ingredients, equipment, and procedures in order to build a repertoire of basic baking \& pastry techniques for the restaurant and hotel industries. This includes the production of basic breads, pies, cakes, ce creams, sauces, and chocolate culminating in plated desserts. Note: Proof of TB clearance is required on the first day of class.

## BAKE 2415 units

Baking Skills and Principles
36 hours lecture, 162 hours laboratory
Corequisite: CULAR 20
Grading: letter grade.
Materials Fee: \$85
Formerly CULAR 241. This course covers basic baking principles, motor skills, equipment, ingredients, storage, and sanitation in the bakeshop. Students will learn the different mixing, make-up, and baking/cooking techniques that constitute the foundation of baking, including lean and rich yeast doughs, cookies, quick breads, sweet dough, laminated doughs, batters, and creams. Note: Proof of TB clearance is required on the first day of class.

## BAKE 2425 units

Pastry Skills and Principles
36 hours lecture, 162 hours laboratory
Corequisite: CULAR 20.
Grading: letter grade.
Materials Fee: \$85
Formerly CULAR 242.This course covers basic pastry-making principles, motor skills, equipment, ingredients, storage, and sanitation in the bakeshop. Students will learn the different mixing, baking, icing, and decorating techniques for a variety of cakes, tarts, and desserts. These include mousses, chocolate, ice cream, cooked creams, buttercreams, meringues, ganaches, génoise, sponges, and jocondes. Note: Proof of TB clearance is required on the first day of class.

## BAKE 243A 4 units

Advanced Bakery Operations
72 hours lecture
Prerequisite: CULAR 20 and BAKE 241 or CULAR 241 or CULAR 204, and
BAKE 242 or CULAR 242 or CULAR 205.
Corequisite: BAKE 243B or CULAR 243B.
Grading: letter grade.
Formerly CULAR 243A. This capstone course focuses on bakery and pastry production for a professional bakery/café outlet. Students learn the theories behind quantity production of baking and pastry products including a variety of breads, baked goods, savories, pastries, pies, cakes, tarts, celebration, and holiday desserts. Note: Proof of TB clearance is required on the first day of class.
BAKE 243B 4 units

## Advanced Bakery Practicum

216 hours laboratory
Prerequisite: CULAR 20 and BAKE 241 or CULAR 241 or CULAR 204, and BAKE 242 or CULAR 242 or CULAR 205.
Corequisite: BAKE 243A or CULAR 243A.
Grading: letter grade.
Formerly CULAR 243B. This capstone course gives students real-time professional bakery and pastry production and sales experience via LBCC's student-run Bakery. It immerses the student in hands-on practice of quantity production of baking and pastry products including a variety of breads, baked goods, savories, pastries, pies, cakes, tarts, celebration, and holiday desserts. Note: Proof of TB clearance is required on the first day of class.

## BAKE $246 \quad 1.5$ units <br> Specialty Cakes and French Pastries <br> 18 hours lecture, 36 hours laboratory <br> Prerequisite: CULAR 20 and BAKE 241 or CULAR 241 or CULAR 204, and BAKE 242 or CULAR 242 or CULAR 205. <br> Grading: letter grade. <br> Materials Fee: \$50 <br> Formerly CULAR 246. This course expands on basic pastry skills to produce a variety of intricate cakes, entremets, French pastries, and desserts. An array of advanced techniques will be used for baking different sponges, génoise, joconde, and meringue-based preparations, as well as advanced creams and fillings, assembly, and decorating techniques. Note: Proof of TB clearance is required on the first day of class.

## BAKE $247 \quad 1.5$ units

## Cake Decorating

18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and BAKE 242 or CULAR 242 or CULAR 205.
Grading: letter grade.
Materials Fee: \$50
Formerly CULAR 247. This course covers advanced skills in cakes. This includes preparation of a variety of cake bases and fillings and assembly of cakes. Advanced decorating skills include working with butter cream icing, royal icing, fondant, and gum paste flowers.

## BAKE $253 \quad 1.5$ units

Chocolate, Sugar, and Confections
18 hours lecture, 36 hours laboratory
Corequisite: CULAR 20.
Grading: letter grade.
Materials Fee: \$45
Formerly CULAR 253 and CULAR 254. This course explores the handson techniques of working with chocolate and sugar. It covers pastillage; cast, blown, and pulled sugar; and chocolate tempering. Included will be candy confections such as hand-shaped, piped, and cut ganaches; nutcentered and caramel candies; pâte de fruit, toffee, and nougat. Note: Proof of TB clearance is required on the first day of class.

## BAKE $255 \quad 1.5$ units

## Plated Desserts

18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and BAKE 241 or CULAR 241 or CULAR 204, and BAKE 242 or CULAR 242 or CULAR 205.
Grading: letter grade.
Materials Fee: \$45
Formerly CULAR 255. This course provides a study of the components that are involved in the creation of plated desserts: sauces, edible decorative elements, balance of colors and appropriate combination of flavors, size, temperature, theme, and consistency; and an introduction to frozen desserts: principles and techniques involved in making and processing ice cream, gelato, sorbet, granitas, frozen soufflés, parfaits, and bombes. Note: Proof of TB clearance is required on the first day of class.

## BAKE $256 \quad 1.5$ units

## Holiday Desserts

18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20.
Corequisite: BAKE 241 or CULAR 241 or CULAR 204 or BAKE 242 or CULAR 242 or CULAR 205.
Grading: letter grade.
Materials Fee: \$50
Formerly CULAR 256. This course explores the baking traditions that are closely associated with the holidays. It covers traditional and modern variations of recipes and techniques from different countries.

## BAKE $258 \quad 1.5$ units

## Artisan Breads

18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and BAKE 241 or CULAR 241 or CULAR 204.
Grading: letter grade.
Materials Fee: \$25
Formerly CULAR 258. This course provides an in-depth study of the principles and techniques for the preparation and baking of Artisan breads. All breads are mixed and shaped employing traditional techniques, and using pre-fermented dough, sponges, and sourdough starters. Note: Proof of TB clearance is required on the first day of class.

## BAKE $259 \quad 1.5$ units

## Viennese Pastries

18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and BAKE 241 or CULAR 241 or CULAR 204.
Grading: letter grade.
Materials Fee: \$45
Formerly CULAR 259.This course provides an in-depth study of the techniques, equipment, and ingredients used for the preparation of Viennese pastries. Viennese pastries include laminated and nonlaminated rich yeast dough. Note: Proof of TB clearance is required on the first day of class.

## Biology (BIO)

## BIO 1A 5 units

Biology for Science Majors
54 hours lecture, 108 hours laboratory
Prerequisite: CHEM 1A.
Grading: letter grade.
This is the first semester of a one-year survey of biology. It includes the chemistry of life, cellular organization, biological membranes, energetics, genetics, evolution and diversity of prokaryotes, protista, and fungi.
Transferable to both UC and CSU; see counselor for limitations
BIO 1B (C-ID BIOL 135S) 5 units
Biology for Science Majors
54 hours lecture, 108 hours laboratory
Prerequisite: BIO 1A.
Grading: letter grade.
This is the second semester of a one-year survey of biology. It includes an overview of structures and life processes in plants and animals, animal and plant taxonomies, ecology, and behavior.
Transferable to both UC and CSU; see counselor for limitations

## BIO 25 units

General Microbiology
54 hours lecture, 108 hours laboratory
Prerequisite: ANAT 1 or ANAT 41 or BIO 60 or BIO 1A or CHEM 3.
Grading: letter grade or pass/no pass.
This course is an introduction to the anatomy of bacteria, fungi, protozoa, viruses and prions. It covers microbial metabolism, pathogenesis of bacteria \& viruses, control of micro-organisms, microbial nutrition and growth,the most common genera of micro-organisms and their connection to disease processes,and the replication of viruses and prions. Aspects of the course that are particularly helpful to health fields include a study of epidemiology and human-microbe interactions, host defenses and the immune system, and the most common infectious diseases of the body systems. The course is designed to meet the requirements of health fields such as registered nursing as well as to serve as a general education laboratory science course, which is transferable to four-year universities.
Transferable to both UC and CSU; see counselor for limitations

## BIO 54 units

Plant Biology
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course utilizes lecture, laboratory, and fieldwork to present the student with fundamental concepts and principles of plant life, including a study of plant structure, function, and diversity. Intended for the nonscience major. Not open to students registered in or with credit in BIO 1A. Transferable to both UC and CSU; see counselor for limitations

## BIO 113 units

## Environmental Problems of Man

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a study of the effects of man's interaction with the environment, problems resulting from ignoring known ecological principles and socio-cultural implications of biological concepts. Selected crisis situations will be examined. Physical, biological and political means and methods of reversing environmental deterioration will be considered, as well as conservation and management of natural resources. Sustainable solutions and lifestyles will be emphasized. Transferable to both UC and CSU; see counselor for limitations

## BIO 204 units

Marine Biology

## 54 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
This course provides an introduction to marine natural history, incorporating biological concepts such as plants, animals and habitats of the marine environment. A variety of marine communities are discussed in relation to their biotic, physical and chemical components. Lab work and field trips are included.
Transferable to both UC and CSU; see counselor for limitations

## BIO 20H 4 units

Honors Marine Biology
54 hours lecture, 54 hours laboratory
Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course provides an introduction to marine natural history, incorporating biological concepts such as plants, animals and habitats of the marine environment. A variety of marine communities are discussed in relation to their biotic, physical and chemical components. Lab work and field trips are included.
Transferable to both UC and CSU; see counselor for limitations

## BIO 223 units

The Marine Environment

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course focuses on the marine environment as a unique feature of the Earth and investigates areas of scientific and public concern. Students will discover basic principles of oceanography including the ocean's dynamic structure, its properties and functions, as well as its effect on geopolitical and economic matters. Other topics will be explored including the diversity of marine life forms, ocean pollution, human exploitation, management and conservation of marine resources.
Transferable to CSU Only

## BIO 253 units

Biology and Society

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course covers a variety of basic biological concepts, discoveries and theories that also have important social, philosophical, ethical and religious implications. Students are introduced to critical thinking skills and scientific methods while exploring topics such as biological evolution, natural selection, bioethics, HIV and AIDS, genetic engineering, reproductive technologies, extinctions, overpopulation and major ecological issues.
Transferable to both UC and CSU; see counselor for limitations

## BIO 304 units

## Wildlife Biology

54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This natural history course utilizes lecture, laboratory, and field trips to provide a general survey of all major forms of life, characteristics and behaviors of selected forms, with a focus on California representatives. Various natural communities are discussed.
Transferable to both UC and CSU; see counselor for limitations

## BIO 312 units

Birds
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
This is an introductory course for the identification and recognition of the various bird species common to Southern California. This course discusses birding identification terminology including bird anatomy, behavior, variations, migrations and speciation. Emphasis is on field identification and use of the field guide. Habitats, behaviors, songs, ecology and natural history of the species will be summarized. This course includes at least three required field trips to local sites.
Transferable to CSU Only

## BIO $41 \quad 3$ units

Contemporary Biology

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course covers the general principles of biology, such as molecular biology, organic evolution, taxonomy, basic similarities of living patterns, genetic continuity and environmental biology. Significant problems of modern biology are included. Not open for credit to students registered in or with credit in BIO 1A-B or 5 .
Transferable to both UC and CSU; see counselor for limitations

## BIO 41H 3 units

Honors Contemporary Biology

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course covers the general principles of biology, such as molecular biology, organic evolution, taxonomy, basic similarities of living patterns, genetic continuity and environmental biology. Significant problems of modern biology are included. Not open for credit to students registered in or with credit in BIO 1A-B or 5 .
Transferable to both UC and CSU; see counselor for limitations

## BIO 41L 1 units

Contemporary Biology Laboratory

## 54 hours laboratory

Corequisite: BIO 41 or BIO 41 H .
Grading: letter grade or pass/no pass.
This is an audio tutorial lab that provides practical, hands on experience in the field of biology. Students complete a series of experiments and demonstrations that clarify the general principles developed in BIO 41 lecture. The BIO 41 Lab is not open for credit to students registered in or with credit in BIO 1A-B or 5 .
Transferable to both UC and CSU; see counselor for limitations

## BIO 604 units

## Human Biology

## 72 hours lecture

Grading: letter grade or pass/no pass.
This course combines the elementary principles of anatomy, physiology, microbiology, nutrition and very elementary chemistry. Students are expected to learn the basic terminology of these fields as a foundation for further study of medical problems and diseases. Biology 60 is designed to fulfill the general science requirement and to meet the pre-requisite needs of the health occupations student. This course is not open for credit to students registered in or with credit in ANAT 1 and PHYS 1. Transferable to both UC and CSU; see counselor for limitations
BIO 60L 1 units
Human Biology Laboratory
54 hours laboratory
Corequisite: BIO 60
Grading: letter grade or pass/no pass.
Human Biology lab provides hands-on experience for principles learned in BIO 60 through experiments, demonstrations and dissections. Not open for credit to students registered in or with credit in BIO 1A-B or 5 .
Transferable to both UC and CSU; see counselor for limitations

## BIO 613 units <br> Introduction to Pathophysiology <br> 54 hours lecture

Prerequisite: BIO 60 or ANAT 41, or ANAT 1 and PHYSI 1.
Grading: letter grade or pass/no pass.
This course is an introduction to the study of disease, including cause, prevention and symptoms of the common human diseases. The course assumes a basic understanding of anatomy and physiology. Biology 61 is designed for the general student and those in the health technology fields.
Transferable to both UC and CSU; see counselor for limitations

## BIO 6020 units

Introduction to Health Career Sciences
36 hours lecture
Corequisite: READ 602.
Grading: non graded.
This course provides instruction of literacy and science skills in preparation for prerequisite courses such as Human Anatomy, Physiology, and Microbiology, and prepares students to have good work habits on the job.

## Business, Communications (BCOM)

## BCOM 153 units

## Business Communications

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly CAOTO 15. This course covers the principles of collecting, organizing, analyzing, and presenting business information. Written and oral communication involving problem solving in business are emphasized.
Transferable to CSU Only

BCOM 20 (C-ID BUS 115) 3 units

## Business Writing

54 hours lecture
Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course delivers a basic understanding of business communication. The curriculum is designed to familiarize students with the techniques, strategies, and forms of writing used in the professional world. Emphasis will be placed on developing precise and persuasive language skills to achieve business goals. The course will prepare students for communication in the workplace and in other business classes.
Transferable to CSU Only

## BCOM $25 \quad 3$ units

Digital and Social Media

## 54 hours lecture

Grading: letter grade or pass/no pass.
In this course, students will explore the design and impact of digital and social media technologies for both personal and professional application in a wide variety of organizational situations. Additionally, students will learn to understand digital and social media etiquette and ethics. Both the potential and the limitations of this technology will be explored and students will have access to hands-on experience with several forms of social media technology. Those who complete this course will be prepared to use digital and social media productively and will have a framework for understanding and evaluating new technology tools and platforms as they are developed. This course is not open for credit to students who have completed GBUS 25.
Transferable to CSU Only

## BCOM 2223 units

Job Search Skills

## 54 hours lecture

Recommended Preparation: COSK 200.
Grading: letter grade or pass/no pass.
Formerly CAOTO 222. This course is designed to help students develop occupational competence for obtaining desired positions in the workforce. The course covers self-evaluation, researching specific careers and companies, conducting informational interviews, preparing required documents (resume, cover letter) that get the interview, interviewing to sell yourself as the best candidate, and applying follow-up procedures.

## BCOM 2601 units

Channels of Business Communication
18 hours lecture
Grading: letter grade or pass/no pass.
Formerly CAOTO 260. This course is designed for the person who needs instruction and practice in developing professional communication skills using modern technology.

## BCOM 2621 units

Soft Skills for the Workplace
18 hours lecture
Grading: letter grade or pass/no pass.
Formerly CAOTO 262. This course covers the fundamentals of human relations in various business environments and develops a basic proficiency using these principles in order to enhance success in the workplace.

## BCOM $263 \quad 3$ units

## Customer Service

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly CAOTO 263. This course covers customer service including its importance to a successful business, customers" needs and wants, support, as well as interactions and relationships. Students learn to develop multitasking skills, reduce stress, and maintain a positive attitude. Students will explore several different aspects of conflict and learn important skills that can help manage conflicts effectively as a customer service employee.

## BCOM 2643 units

## Business Telecommuting Fundamentals

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course focuses on careers involving virtual work for office environments. The course prepares students for business office work requiring remote workers, remote administrative assistance, and global support in contemporary business environments. Participants will learn how to utilize digital resources in telecommuting work, implement cloudbased productivity tools, and assess a remote working environment that fosters productivity, concentration, and professionalism.

## BCOM 6150 units

## Business Communications

## 54 hours lecture

Grading: non graded.
This course covers the principles of collecting, organizing, analyzing,
and presenting business information. Written and oral communication involving problem solving in business are emphasized.

## BCOM $621 \quad 0$ units

## Career Development for Tech Professions

## 54 hours lecture

Grading: non graded.
This course is aimed at helping students gain the necessary vocational skills to secure suitable work opportunities for tech professionals. The training includes self-evaluation, research into tech occupations and firms, informational interviews, generating marketable job materials (such as resumes and cover letters), personal branding, and implementing follow-up actions.

## BCOM 6220 units

The Job Search Process
18 hours lecture
Grading: non graded.
This course is designed to provide Computer and Office Studies (COS)/ Business Communication (BCOM) students with insight regarding steps to begin planning for their future careers. Students will conduct selfassessments, create a career plan, and discover who they are as future employees.

BCOM 6230 units
Job Search Tools
18 hours lecture
Grading: non graded.
The course will focus on creating, drafting, revising, and presenting workplace-related documents. Students will create a job portfolio related to business communications that includes a resume and cover letter.

## BCOM 6240 units

The Interview Process

## 18 hours lecture

Grading: non graded.
This course will focus on the development of business communication skills required in a job interview. Students will develop competency in the preparation for, participation in, and reflection on the job interview process.

## BCOM 6250 units

Digital and Social Media

## 54 hours lecture

Grading: non graded.
In this course, students will explore the design and impact of digital and social media technologies for both personal and professional application in a wide variety of organizational situations. Additionally, students will learn to understand digital and social media etiquette and ethics. Both the potential and the limitations of this technology will be explored and students will have access to hands-on experience with several forms of social media technology. Those who complete this course will be prepared to use digital and social media productively and will have a framework for understanding and evaluating new technology tools and platforms as they are developed.

## BCOM $660 \quad 0$ units

Channels of Business Communication

## 18 hours lecture

Grading: non graded.
This course provides instruction and practice in developing professional communication skills using modern technology.

## BCOM 6620 units

Interpersonal Skills for the Workplace

## 18 hours lecture

Grading: non graded.
This course examines the fundamentals of human relations in various corporate settings and provides essential skills in using these ideas to increase workplace success.

## BCOM 6630 units

## Customer Service

## 54 hours lecture

Grading: non graded.
This course covers customer service including its importance to a successful business, customers' needs and wants, support, as well as interactions and relationships. Students learn to develop multitasking skills, reduce stress, and maintain a positive attitude. Students explore several aspects of conflict and learn important skills that can help manage conflicts effectively as a customer service employee.

## BCOM 6640 units

Business Telecommuting Fundamentals

## 54 hours lecture

Grading: non graded.
This course focuses on careers involving virtual work for office environments. The course prepares students for business office work requiring remote workers, remote administrative assistance, and global support in contemporary business environments. Participants will learn how to utilize digital resources in telecommuting work, implement cloudbased productivity tools, and assess a remote working environment that fosters productivity, concentration, and professionalism.

# Business, General (GBUS) 

GBUS 5 (C-ID BUS 110) 3 units<br>Introduction to Business<br>54 hours lecture<br>Grading: letter grade.

This course is designed to provide a basic understanding of the business environment, with a special emphasis on globalization and ethics/social responsibility, as well as the prime operating functions of management/ organization, human resources, marketing, information/technology and accounting/finance. These skills are useful for both entry and mid-level positions.
Transferable to both UC and CSU; see counselor for limitations
GBUS 103 units
Personal Finance

## 54 hours lecture

Prerequisite: Elementary algebra or qualifying through the LBCC math placement process.
Grading: letter grade.
Fundamentals of personal finance including financial planning, money management, income and asset protection, and investments. Course material covered includes calculations and problem solving related to budgeting, managing income taxes, building and maintaining good credit, large personal assets purchases, managing property and liability risk, investment fundamentals, and retirement and estate planning. Transferable to CSU Only

## GBUS 253 units

## Digital and Social Media

## 54 hours lecture

Grading: letter grade or pass/no pass.
In this course, students will explore the design and impact of digital and social media technologies for both personal and professional application in a wide variety of organizational situations. Additionally, students will learn to understand digital and social media etiquette and ethics. Both the potential and the limitations of this technology will be explored and students will have access to hands-on experience with several forms of social media technology. Those who complete this course will be prepared to use digital and social media productively and will have a framework for understanding and evaluating new technology tools and platforms as they are developed. This course is not open for credit to students who have completed BCOM 25.
Transferable to CSU Only

## Business, International (IBUS)

## IBUS 13 units

Introduction to International Business

## 54 hours lecture

## Grading: letter grade.

This course offers an introduction to the global business macroenvironment and orients students toward a career in the field of international business. Topics covered include economic variables, cultural differences, political risk, regional trade agreements, foreign direct investment, and exchange rates.
Transferable to CSU Only

## IBUS 203 units

## Export-Import Business Practices

54 hours lecture
Grading: letter grade.
This class consists of the basics of the export-import business, how to handle money matters and how to buy and sell. It is designed for the person seeking an entry level position, contemplating the start of an export-import business or the manager who wishes to expand a company's marketing opportunities.
Transferable to CSU Only

## IBUS 523 units

Introduction to Supply Chain Management
54 hours lecture
Grading: letter grade.
This course orients the student to the alternative modes, systems, rates, services and regulations in global transport including ocean, air, and surface carriers and systems. It emphasizes the practical skills and techniques utilized to successfully market on an international basis. Transferable to CSU Only

IBUS 603 units
International Business Law
54 hours lecture
Recommended Preparation: LAW 18.
Grading: letter grade.
This course is designed to explore the fundamentals of international business law and examine the scope of how international disputes affect global trade. It is appropriate for students who wish to pursue a career in the business field, especially those students interested in international business.
Transferable to CSU Only
IBUS 753 units
Introduction to Logistics
54 hours lecture
Grading: letter grade.
This course will explore logistics systems and concepts, including inventory and warehouse management, logistics information systems facility location, and global logistics. It is designed for those who are interested in becoming logistics professionals as well as those who wish to update their knowledge in the field.
Transferable to CSU Only

## Business, Law (LAW)

LAW 18 (C-ID BUS 125) 3 units
Fundamentals of Business Law
54 hours lecture
Grading: letter grade.
Formerly LAW 18A. This course is designed to explore the overall fundamental understanding of business law today. It examines the scope of how contracts and tort law affect the civil legal process as well as the nature of our current business environment. It is appropriate for students who wish to pursue a career in the business field
Transferable to both UC and CSU; see counselor for limitations

## LAW 193 units <br> Legal Environment of Business <br> 54 hours lecture <br> Grading: letter grade

Formerly LAW 18B. This course is designed to explore the overall fundamental operations of several distinct legal business entities and corporate structures. It examines the scope of how agency and employment law affect the nature of how business decisions are made and their significance. It is appropriate for students who wish to pursue a career in the business field, especially those students interested in business management or business law.
Transferable to both UC and CSU; see counselor for limitations

## LAW 203 units

Property Law
54 hours lecture
Grading: letter grade.
Formerly REAL 83A. This course is designed to explore the overall fundamental understanding of the law of property. The course covers laws, regulations, and restrictions regarding the ownership and use of property. Topics include the nature of property, property descriptions, estates and other interests in property, co-ownership, methods of property transfer, landlord/tenant law, property contract, agency, and financing concepts., and government controls.
Transferable to CSU Only

## Business, Management (MGMT)

MGMT 493 units
Introduction to Management
54 hours lecture
Grading: letter grade.
Formerly MGMT 49A. Introduction to Management is the entry level management course designed to introduce the traditional management tasks of planning, organizing, leading and controlling. Course topics will include important issues such as innovation, technology, diversity, quality, ethics and the global environment.
Transferable to CSU Only

## MGMT 503 units

Human Resource Management
54 hours lecture
Grading: letter grade.
Formerly MGMT 49B. This course will provide an introduction to the theory and practical applications of Human Resource Management (HRM): planning, recruiting, selecting, training and evaluating. Course topics will include important issues such as staffing and development, compensation and benefits, safety and health, labor-management relations, ethics and legal requirements.
Transferable to CSU Only

## MGMT 583 units

Leadership and Supervision
54 hours lecture
Grading: letter grade
This course is designed for the first-line manager to develop necessary skills for success in a diverse workplace. Focus will be on human behavior issues such as ethics, motivation, personality, communication group dynamics, and leadership development. Organizational issues will include satisfaction, productivity and performance.
Transferable to CSU Only

## MGMT $60 \quad 3$ units

Management \& Organization Behavior

## 54 hours lecture

Grading: letter grade.
This course provides a comprehensive view of Organizational Behavior from three primary levels of analysis: individual behavior, group behavior and the organizational system. Of equal importance is the influence of globalization, diversity, ethics/social responsibility and technology on the organization.
Transferable to CSU Only
MGMT $80 \quad 3$ units
Small Business Entrepreneurship

## 54 hours lecture

Grading: letter grade.
This course is designed to provide an understanding of the entrepreneurial elements of starting a small business with an eventual focus on the traditional management skills necessary to extend the life of the startup business. Major emphasis is placed on the development of a coherent business plan.
Transferable to CSU Only

## Business, Marketing (MKTG)

## MKTG 403 units

## Salesmanship

54 hours lecture
Grading: letter grade.
This course is designed for those looking at a career in professional sales or as a refresher for current sales professionals. The course objective is to develop a thorough understanding of the importance of professional selling within the entire marketing process, with an emphasis on developing strong customer relationships.
Transferable to CSU Only

## MKTG 413 units

Marketing Communications
54 hours lecture
Grading: letter grade.
This course will help the student develop a thorough understanding of the various forms of marketing communications, such as advertising, sales promotion, direct-response and publicity/public relations. The focus will be on the concept of Integrated Marketing Communications as one of the functions of marketing strategy.
Transferable to CSU Only

## MKTG 473 units

Essentials of Marketing
54 hours lecture
Grading: letter grade.
This course will analyze the importance of the marketing concept throughout an organization. Students will develop the skills necessary to plan, organize and implement a marketing strategy for a product or service. These skills are useful for both entry and mid-level marketing positions.
Transferable to CSU Only

## Chemistry (CHEM)

CHEM 1A (C-ID CHEM 110) 5.5 units

General Chemistry

## 72 hours lecture, 90 hours laboratory

Prerequisite: (1) CHEM 2 or qualifying through the LBCC chemistry
placement process and (2) intermediate algebra or qualifying through the LBCC math placement process.
Grading: letter grade or pass/no pass.
This course is the first semester of a one year course which satisfies the general chemistry requirement for science, engineering, and premed majors. Topics covered include atomic theory and bonding, the periodic table and chemical properties, thermochemistry, chemical reactions, solids, liquids and solutions, gases and the ideal gas laws, and an introduction to equilibrium. There is an emphasis on stoichiometric calculations. The lab stresses quantitative measurements in chemical reactions.
Transferable to both UC and CSU; see counselor for limitations
CHEM 1B (C-ID CHEM 120S) 5.5 units

## General Chemistry

72 hours lecture, 90 hours laboratory
Prerequisite: CHEM 1A.
Grading: letter grade or pass/no pass.
This course is the second semester of a one-year course and fulfills the general chemistry requirement for students in science, engineering, physics, pre-dental, pre-medical, and pre-pharmacy programs. Topics covered include equilibrium of weak acids and bases, slightly soluble salts and complex ions in aqueous solution. The basic principles of thermodynamics and electrochemistry are presented, along with an introduction to coordination, nuclear and organic chemistry. The lab stresses descriptive inorganic chemistry, basic physical and organic chemistry and qualitative analysis.
Transferable to both UC and CSU; see counselor for limitations

## CHEM 2 (C-ID CHEM 101) <br> 4.5 units

Elementary Chemistry
72 hours lecture, 36 hours laboratory
Prerequisite: Elementary algebra or qualifying through the LBCC math placement process.
Grading: letter grade or pass/no pass.
This course is a prerequisite for CHEM 1A and prepares science or preprofessional majors, who are required to take Chem 1A, but lack adequate preparation or need to refresh knowledge. This course provides basic knowledge and problem-solving techniques necessary for CHEM 1AB. Formula and equation writing, basic gas laws and stoichiometry are stressed. Students should be aware that many schools (CSULB included) do not allow credit for Chem 2, once Chem 1A (or the equivalent course at that school) has been successfully completed.
Transferable to both UC and CSU; see counselor for limitations

CHEM 3 (C-ID CHEM 102) 5 units
Intro to Gen, Organic and Biochemistry
72 hours lecture, 54 hours laboratory
Prerequisite: Elementary algebra or qualifying through the LBCC math placement process.
Grading: letter grade or pass/no pass.
This course will introduce the principles of general, organic and biological chemistry. A variety of topics will be addressed, including atomic theory, chemical formulas, nomenclature, stoichiometry, solutions, acids and bases, hydrocarbons, alcohols and ethers, carbonyl compounds, carbohydrates, lipids, amino acids and proteins, nucleic acids, biochemical energetics and metabolism. Lab work will reinforce basic concepts and provide experience in manipulating lab equipment. This course satisfies the needs of Nursing and Allied Health Sciences. This course does not prepare students for CHEM 1A.
Transferable to both UC and CSU; see counselor for limitations
CHEM 4 (C-ID CHEM 140) 4 units
Survey of Chemistry and Physics

## 54 hours lecture, 54 hours laboratory

Prerequisite: Elementary algebra or qualifying through the LBCC math placement process.
Grading: letter grade.
This is a one semester, inquiry-based physical science course suitable for satisfying the general education requirements of non-science majors and especially of students who aspire to become elementary school teachers. Students construct a meaningful understanding of physics and chemistry concepts through lecture and laboratory activities. The course covers: matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The interdependence of chemistry and physics, their applications in everyday life, and the power and limitations of scientific inquiry will be emphasized. Not open to student who already have credit for PHYS 4.
Transferable to both UC and CSU; see counselor for limitations
CHEM 12A (C-ID CHEM 150) 5.5 units

## Organic Chemistry

72 hours lecture, 90 hours laboratory
Prerequisite: CHEM 1A and CHEM 1B.
Grading: letter grade or pass/no pass.
The course emphasizes bonding, structure, properties and reactions of organic compounds. Modern spectroscopic and analytical techniques are covered, and an emphasis is placed on reaction mechanisms and kinetics. The laboratory part of the course stresses the techniques involved in the synthesis of organic compounds. This is the first semester of a two-semester sequence of courses which satisfies the Chemistry requirement for science, engineering, and pre-medical or pre-dental majors.
Transferable to both UC and CSU; see counselor for limitations

CHEM 12B (C-ID CHEM 160) 5.5 units
Organic Chemistry
72 hours lecture, 90 hours laboratory
Prerequisite: CHEM 12A
Grading: letter grade or pass/no pass.
The course emphasizes bonding, structure, and reactions of organic compounds. Modern spectroscopic and analytical techniques are covered, and an emphasis is placed on reaction mechanisms and synthesis. The laboratory part of the course stresses techniques involved in the synthesis of organic compounds. This is the first semester of a two semester sequence of courses which satisfies the Chemistry requirement for science, engineering, and pre-medical, pre-pharmacy or pre-dental majors.
Transferable to both UC and CSU; see counselor for limitations

## Child Development-Early Childhood Education (CDECE)

CDECE 19 (C-ID ECE 220) 3 units

Health, Safety and Nutrition DS7
54 hours lecture
Recommended Preparation: KINPP 23M1.
Grading: letter grade or pass/no pass.
This course provides and introduction to the laws, regulations, standards, policies, procedures and early childhood curriculum related to child health, safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. The focus is on integrating the concepts into everyday planning and program development for all children. An additional three to five hours of child observation, outside of regular class hours is required for this course.
Transferable to CSU Only

## CDECE 312 units

Adult Supervision
36 hours lecture
Recommended Preparation: Current or prior experience as a teacher in an ECE program.
Grading: letter grade.
This course is a study of the methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders.
Transferable to CSU Only

## CDECE 343 units

Children's Literature DS3
54 hours lecture
Grading: letter grade.
This course examines traditional and contemporary children's literature including poetry, fiction, nonfiction, and folk literature from a variety of cultures. Criteria for literary and artistic evaluation as well as literary concepts such as theme and plot will be examined. Students will demonstrate presentation techniques and explore curriculum and community support for literature experiences with children.
Transferable to CSU Only

## CDECE 403 units

## Infant and Toddler Development D4

## 54 hours lecture

Prerequisite: CDECE 45 or 47.
Grading: letter grade.
This course is a study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. Students will apply theoretical frameworks to interpret behavior and interactions between heredity and environment. The course emphasizes the role of the family and relationships in development.
Transferable to CSU Only

## CDECE 413 units

Care and Education of Infants and Toddlers D4

## 54 hours lecture

Prerequisite: CDECE 45 or 47.
Grading: letter grade.
This course examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. Students will apply current theory and research to the care and education of infants and toddlers in group settings.
Transferable to CSU Only
CDECE 45 (C-ID CDEV 100) 3 units
Child \& Adolescent Development DS1

## 54 hours lecture

Grading: letter grade or pass/no pass.
This introductory course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. The course meets the State of California requirement for teaching in early childhood education programs.
Transferable to both UC and CSU; see counselor for limitations
CDECE 47 (C-ID PSY 180) 3 units

## Human Development

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the major physical, psychosocial, and cognitive/ language developmental milestones throughout the life span, both typical and atypical, from conception through death. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children and interview adults, evaluate individual differences and analyze characteristics of development at various stages. This course meets the State of California requirement for teaching preschool.
Transferable to both UC and CSU; see counselor for limitations

CDECE 48 (C-ID CDEV 110) 3 units
Child, Family and Community D2

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the developing child in a societal context focusing on the interrelationship of family, school and community and emphasizes historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. This course fulfills state licensing requirements for child, family and community D2.
Transferable to both UC and CSU; see counselor for limitations
CDECE 50 (C-ID ECE 130) 3 units
Intro to Curriculum for Young Children

## 54 hours lecture

Prerequisite: CDECE 45 or 47.
Grading: letter grade or pass/no pass.
This course explores the principles and methods of planning, implementing and evaluating developmentally and culturally appropriate curriculum environments for young children. The emphasis is on curricular approaches, observation, assessment, activity planning, and practice in all developmental domains. An overview of content areas will include but not be limited to: language and literacy, social studies, dramatic play, sensory learning, art, music and movement, math and science. An additional three to five hours of child observation, outside of regular class hours is required for this course. This course fulfills state requirements for programs/curriculum, DS3.
Transferable to CSU Only

## CDECE 53 (C-ID ECE 120)

3 units

## Principles and Practices

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity. Environments will be examined for influences of culture and inclusion on the developing child.
Transferable to CSU Only

## CDECE 543 units

Art \& Creative Dev. in Early Childhood D3

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores the principles and methods of providing creative expression and art experiences for young children, 3-5 years old. This course fulfills the state licensing requirements for programs/curriculum D3.
Transferable to CSU Only

## CDECE 553 units

## Music \& Movement in Early Childhood D3

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores the principles and methods of providing music and movement experiences for young children 3-5 years old. Students develop skills to effectively sing, play simple musical instruments and use movement activities with young children.
Transferable to CSU Only

## CDECE 573 units

## Constructivist STEM Ed Early Childhood

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores the principles and methods of planning, implementing and evaluating science and math experience for young children 3-5 years old. Students will develop strategies to foster the child's natural curiosity about the environment and quantity through activities that encourage exploration, experimentation, problem solving and discovery through play. This course fulfills state requirements for programs/curriculum D3.
Transferable to CSU Only

## CDECE 583 units

Language \& Literacy in Early Childhood

## 54 hours lecture

Grading: letter grade.
This course surveys the range of language and literacy theories, practices and activities that support young children's development. This course meets state licensing requirements for program curriculum D3.
Transferable to CSU Only

## CDECE 593 units

Guiding Young Children DS3

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course studies ways of approaching and understanding child guidance as it applies to children from birth to age 8 in family and community settings as well as developing a personal approach to child guidance based on current scientific research and theory concerning child development. The course utilizes lecture, discussion, small group work, observation, and research to explore the processes linked to the development of prosocial behavior in young children. The course focuses on the use of developmentally appropriate methods of guiding children to promote positive self-esteem.
Transferable to CSU Only

## CDECE 60A 3 units

Admin of Child Development Programs D6

## 54 hours lecture

Prerequisite: CDECE 45 or 47.
Grading: letter grade or pass/no pass.
Introduction to the administration of early childhood programs. Covers program types, budget, management, regulations, laws, development and implementation of policies and procedures. Examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. May be applied to degree, certificate or area of specialization requirements.
Transferable to CSU Only

## CDECE 60B 3 units

Advanced Supervision of ECE D6

## 54 hours lecture

Prerequisite: CDECE 45 or 47.
Grading: letter grade or pass/no pass.
Effective strategies for personnel management and leadership in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. May be applied to degree, certificate or area of specialization requirements.
Transferable to CSU Only

CDECE 61 (C-ID ECE 230) 3 units

## Teaching in a Diverse Society D3

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the relationship of culture, language, family structure, ability, socioeconomic status and other issues on the formation of the young child's concept of self and the learning process. Emphasis is on practical early childhood classroom applications for diverse populations, including the integration of cultures, generations, genders, and races into the classroom, facilitation of second language acquisition, and practical teaching strategies for implementing an anti-bias curriculum. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media and schooling.
Transferable to CSU Only
CDECE 66 (C-ID ECE 200) 3 units

## Observation and Assessment DS3

45 hours lecture, 45 hours laboratory
Prerequisite: CDECE 50 and CDECE 45 or CDECE 47.
Recommended Preparation: CDECE 48.
Grading: letter grade.
This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play, and learning in order to join with families and professionals in promoting children's success and maintaining quality programs. Recording strategies, rating systems, portfolios, and multiple assessment methods are explored. The course meets state licensing requirements for program curriculum DS3. Proof of current state mandated immunizations and negative TB status are required to participate.

## Transferable to CSU Only

CDECE 68 (C-ID ECE 210) 3 units

## Practicum D3

36 hours lecture, 72 hours laboratory
Prerequisite: CDLL 52 and CDECE 19, 48, 50, 53, 61, 66, instructor approval, proof of current state mandated immunizations, negative TB status, and fingerprint clearance are required to participate. Grading: letter grade or pass/no pass.
Under guided supervision, students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Reflective practice will be emphasized as student teachers design, implement, and evaluate approaches and strategies, and techniques that promote development and learning. There are 72 hours of lab experience over the course of the semester. Proof of current state mandated immunizations and negative TB status and fingerprint clearance are required to participate. Instructor approval required.
According to SB 792, effective September 1. 2016, a person may not be employed or volunteer at a child care center or family child care home unless he or she has been immunized against influenza, pertussis, and measles (Health and Safety Code sections 1596, 7995 (a) (2)). Transferable to CSU Only

CDECE 2593 units
Challenging Behavior in Early Childhood

## 54 hours lecture

Prerequisite: CDECE 59.
Recommended Preparation: CDECE 45 or CDECE 47.
Grading: letter grade.
This course is the study of the relationship between developmental, environmental, and social-emotional variables and the young child's challenging and/or extreme behaviors. Strategies, for use by the early childhood teacher or parent, which support the child's development of social competence, self-control and self-image will be covered. Methods of teaching children friendship skills, feelings vocabulary, problem solving, and anger management are included. Observations at a variety of sites in the community will be required in this course. An additional three to five hours of child observation, outside of regular class hours is required for this course.
CDECE 271WE 1-4 units
ECE Work Experience
72 hours laboratory
Grading: letter grade or pass/no pass.
Students learn and gain on-the-job experience in the field of Child Development/Early Care and Education. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of non-paid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1 to 4 units credit. *Note: Transfer limitations
CDECE 6340 units
Children's Literature

## 54 hours lecture

Grading: non graded.
This course examines traditional and contemporary children's literature including poetry, fiction, non-fiction and folk literature from a variety of cultures. Criteria for literary and artistic evaluation as well as literary concepts such as theme and plot will be examined. Students will demonstrate presentation techniques and explore curriculum and community support for literature experiences with children.

## CDECE $654 \quad 0$ units

## Art and Creative Dev in Early Childhood

54 hours lecture
Grading: non graded.
This course explores the principles and methods of providing creative expression and art experiences for young children, 3-5 years old.

## CDECE 6570 units

Constructivist STEM Ed Early Childhood

## 54 hours lecture

Grading: non graded.
This course explores the principles and methods of planning, implementing and evaluating science and math experience for young children 3-5 years old. Students will develop strategies to foster the child's natural curiosity about the environment and quantity through activities that encourage exploration, experimentation, problem solving and discovery through play.
CDECE 6580 units
Language and Literacy in Early Childhood
54 hours lecture
Grading: non graded.
This course surveys the range of language and literacy theories, practices and activities that support young children's development.

# Child Development-Family Day Care (CDFDC) 

CDFDC 212A 3 units

Family Child Care Management A

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course assists persons planning to become or currently involved in the group care of children in the home. This course focuses on setting up a child-centered environment that meets licensing and accreditation standards.

## CDFDC 212B 3 units

Family Child Care Management B

## 54 hours lecture

Grading: letter grade.
This is the third of three courses designed for prospective clinical medical assistants. Topics will include instruction in the advanced level of psychosocial skills, electrocardiograph techniques, phlebotomy, injections and in office laboratory skills.

## CDFDC 612A 0 units

Family Child Care Management A

## 54 hours lecture

Grading: non graded.
This course assists persons planning to become or currently involved in the group care of children in the home. This course focuses on setting up a child-centered environment that meets licensing and accreditation standards.
CDFDC 612B 0 units
Family Child Care Management B

## 54 hours lecture

Grading: non graded.
This course assists persons planning to become or are currently involved in the group care of children in the home. This course focuses on the child guidance as well as the business aspects of family child care including working with parents, record keeping, and communication.

## Child Development-Learning Lab (CDLL)

CDLL 523 units
Fieldwork/Preschool Techniques
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course is a study of current concepts and research in early childhood education through lectures and lab participation. It is designed for child development majors, early childhood education majors and parents. Proof of current state mandated immunizations and negative TB status are required to participate. This course provides the student with 3 units (48 hours lab) of supervised field work experience in ECE as defined by California Commission on Teacher Credentialing.
Transferable to CSU Only

CDLL 6030 units
LBCC Child Development Centers Participation
108 hours laboratory
Grading: non graded.
This is a non-credit lab experience for students participating in LBCC
Child Development Center Demonstration Lab Schools to apply Child
Development concepts to guided observations. Particular components, such as the age level, activities, and length of observation will vary and are determined by instructor.

# Child Development-Parent Education (CDPE) 

CDPE 601A 0 units
Intentional Parenting Practices
54 hours lecture
Grading: non graded.
This course supports individuals seeking to gain knowledge and skills in the area of parent education. In a supportive and stimulating educational environment, students will gain research-driven knowledge about effective communication, practices appropriate for different ages of children, foundational child development knowledge and general information about developing parenting programs.

## CDPE 601B 0 units

Behavior as Communication in Parenting
54 hours lecture
Grading: non graded.
This course supports individuals who are seeking to gain knowledge and skills in the area of parent education. In a supportive and stimulating educational environment, students will explore positive parenting methods that will support the understanding of child behavior as communication through the lens of developmental norms. Strategies will include building foundational knowledge of typical/atypical behaviors, behavioral guidance strategies, emotional literacy and developing empathy for children.

## Child Development-Special Education (CDSED)

CDSED 53 units

## Community Resources/Special Education

## 54 hours lecture

Recommended Preparation: CDECE 67 and CDECE 45 or CDECE 47. Grading: letter grade or pass/no pass.
This course covers community resources that identify, support, and enhance the lives of children and families with special needs. Agencies concerned with the health, education, and welfare of children and families with special needs are studied in depth along with the influence of culture and family structures on student outcome.
Transferable to CSU Only

## CDSED $67 \quad 3$ units

Intro to Children with Special Needs
54 hours lecture
Grading: letter grade or pass/no pass.
This is a survey course that introduces the spectrum in development of children with special needs ages birth through eight and the resulting impact on families. This course includes an overview of historical and societal influences, laws relating to children with special needs, early intervention as well as the identification and referral process.
Transferable to CSU Only

## CDSED 693 units

## Special Education Practicum

## 36 hours lecture, 54 hours laboratory

Prerequisite: CDSED 67, 5, 70 and CDECE 45 or 47 and instructor approval, proof of current state mandated immunizations, negative TB status, and fingerprint clearance are required to participate.
Grading: letter grade.
Students will plan, prepare, execute and evaluate various experiences with individuals with special needs in schools and agencies in the greater Long Beach area. Students will learn specific techniques of working with children, adults, parents and staff to provide an appropriate experience for the individual with special needs. There are 54 lab hours required for this course. Proof of current state mandated immunizations and negative TB status and fingerprint clearance are required to participate. Instructor approval required. According to SB 792, effective September 1. 2016, a person may not be employed or volunteer at a child care center or family child care home unless he or she has been immunized against influenza, pertussis, and measles (Health and Safety Code sections 1596, 7995 (a)
(2)).

Transferable to CSU Only
CDSED 703 units
Curriculum for Special Needs

## 54 hours lecture

Grading: letter grade.
This course covers curriculum and intervention strategies for working with children with special needs in partnership with their families. Focuses on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. Includes the role of the teacher as a professional working with families, collaboration with interdisciplinary teams, and cultural competence. Transferable to CSU Only

## Communication Studies (COMM)

COMM 10 (C-ID COMM 110)
3 units
Elements of Public Speaking

## 54 hours lecture

Grading: letter grade or pass/no pass.
Students will learn and practice the strategies to manage speech anxiety, and will understand and apply the concepts and skills of effective speaking through the analysis, construction and delivery of various types of speeches. An emphasis is placed on organizing speech content, audience analysis, critical thinking and speech delivery skills.
Transferable to both UC and CSU; see counselor for limitations

COMM 10H (C-ID COMM 110) 3 units
Honors Elements of Public Speaking

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
Students will learn and practice the strategies to manage speech anxiety and will understand and apply the concepts and skills of effective speaking through the analysis, construction and delivery of various types of speeches. An emphasis is placed on organizing speech content, audience analysis, critical thinking and speech delivery skills.
Transferable to both UC and CSU; see counselor for limitations
COMM 20 (C-ID COMM 130) 3 units
Elements of Interpersonal Communication

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly SP 20. This course takes an experiential learning approach to understanding the process of communication at both the intrapersonal and interpersonal levels. Time will be devoted to the study of theories, practices and concepts within the field of communication studies including, but not limited to: exploring one's self-concept, the process of perception, language meaning and interpretation, types of nonverbal communication, listening styles and skills, conflict resolution strategies, and electronic and social mediated communication.
Transferable to CSU Only
COMM 25 (C-ID COMM 150) 3 units
Elements of Intercultural Communication

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly SP 25. This course is designed to study the relationship between communication and culture. Emphasis is placed on the development of intercultural competence through the examination and understanding of the following: cultural worldviews, cultural identities, dominant U.S. cultural patterns, diverse value orientations, cultural rules of interaction, verbal and nonverbal intercultural communication. Transferable to both UC and CSU; see counselor for limitations

COMM 30 (C-ID COMM 140) 3 units
Elements of Group Communication

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly Speech Communication 30 (SP30). This course examines small group communication theories and principles. Students will learn to use problem-solving, critical thinking, and team-building strategies to achieve group goals in a variety of contexts. Students will develop their interpersonal and presentation skills to improve their performance as group members.
Transferable to both UC and CSU; see counselor for limitations
COMM 313 units
Elements of Leadership Communication

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly Speech Communication 31 (SP31), this course explores definitions, theories, and styles of leadership; purposes and functions of leaders in various settings; and provides opportunities for the practical application of the techniques of leadership toward understanding the role of leaders in organizational success.
Transferable to CSU Only

COMM 40 (C-ID COMM 180) 3 units
Elements of Communication Theory

## 54 hours lecture

Grading: letter grade.
This course surveys the discipline of communication studies with emphasis on multiple theoretical issues relevant to the systematic inquiry and pursuit of knowledge about human communication. This course explores the basic history, assumptions, principles, processes, variables, methods, and specializations of human communication as an academic field of study.
Transferable to both UC and CSU; see counselor for limitations
COMM 45 (C-ID COMM 190) 3 units
Elements of Persuasion

## 54 hours lecture

Grading: letter grade.
This course will examine historical and contemporary approaches to persuasive messages. Students will also focus on the presentation of persuasive appeals and learn to construct, deliver, and critique persuasive messages in various contexts.
Transferable to both UC and CSU; see counselor for limitations

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COMM 50 (C-ID COMM 170) 3 units
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Elements of Oral Interpretation

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly SP 50. The basic principles of oral communication are explored through oral reading of prose, poetry and dramatic literature.
Transferable to both UC and CSU; see counselor for limitations
COMM 60 (C-ID COMM 120) 3 units
Elements of Argumentation and Debate

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly Speech Communication 60 (SP 60). This course explores the nature, functions, forms, and contexts of argumentation and debate. Students will participate in formal and informal classroom debates and will examine the role of advocacy and reasoning in a free society. Transferable to both UC and CSU; see counselor for limitations

## Computer \& Office Studies, Application Software (COSA)

## COSA 11 units

Computer Information Competency
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly COMIS 1 and CAOTC 211. The course is designed for students to develop current computer information competency. It covers basic use of hardware, Internet knowledge and skills, word processing, spreadsheet, digital data presentations, and communications applications. This course satisfies the technology component of the Information Competency graduation requirement for Plan A.
Transferable to CSU Only

## COSA 23 units

## Critical Thinking Using Computers

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly CPAS 2 . This course will explore the various ways computer technology can be used to enhance critical thinking and information literacy skills. The student will learn to utilize multiple software programs critically to gather, diagnose, synthesize, and present information. Students will develop a fundamental understanding of critical thinking skills such as deductive and inductive reasoning, scientific reasoning, argument analysis and development in the context of computer technology.
Transferable to both UC and CSU; see counselor for limitations

## COSA 3 units

Technology and Society

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course critically examines the interrelationships among technology, the individual, and society. Students investigate the factors that influence the growth and development of technology and assess how individuals and society respond to the challenges and consequences of the technology revolution. Appropriate for both technical and nontechnical majors, students explore principles, methodologies, and value systems from a technology perspective. Students will use case studies to illustrate how technology has affected specific industries.
Transferable to both UC and CSU; see counselor for limitations

## COSA 53 units

## Microsoft Windows Operating System

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly CAOTC 31A and COSA 5AD. Students will learn basic to advanced features and concepts of the Microsoft Windows operating system. Topics will include the use of Microsoft applications, Internet technologies, email, maintenance and security. Conceptual materials covered in this course will be balanced with hands-on experience. This course satisfies the technology portion of the information competency requirement.
Transferable to CSU Only
COSA 103 units

## Microsoft Word for Windows

## 54 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Word processing using Microsoft Word. Students will learn how to edit, format, design, and use layout and customization tools to create documents such as letters, flyers, newsletters, and publications. Upon successful completion of this course, students will be provided with a voucher to take the Microsoft Office Specialist (MOS) industry certification exam. Formerly CAOTC 39A and COSA 10AD.
Transferable to CSU Only

## COSA 153 units

## Microsoft Excel for Windows

## 54 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CAOTC 41E and COSA 15AD. Students will learn spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables. Upon successful completion of this course, students will be provided with a voucher to take the Microsoft Office Specialist (MOS) industry certification exam. Transferable to CSU Only

## COSA 203 units

Microsoft PowerPoint for Windows 54 hours lecture
Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CAOTC 44D and COSA 20AD. This class provides a thorough exploration of presentation graphics software. Skills are developed in planning, creating, formatting, enhancing, and delivering presentations. Through hands-on practice, students learn to combine text and graphic images, animation, sound, and other special effects to develop computerized slide shows. This course satisfies the technology component of the Information Competency graduation requirement. Upon successful completion of this course, students will receive a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam. Transferable to CSU Only

## COSA 253 units

## Microsoft Access for Windows

## 54 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CAOTC 47A and COSA 25AD. Relational databases concepts using Microsoft Access including design fundamentals, creation of tables, queries, forms, and reports are covered. This course satisfies the technology component of the Information Competency graduation requirement. Upon successful completion of this course, students will be provided with a voucher to take the Microsoft Office Specialist (MOS) industry certification exam.
Transferable to CSU Only
COSA 30 (C-ID ITIS 120) 3 units
Introduction to Computers

## 54 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CAOTC 34. This course is a computer and information literacy course. This course will focus on: the relationship between technology, individuals, and society; the long-term physiological consequences of incorrect ergonomic design; and the use of critical thinking and logic to critically gather, diagnose, synthesize, and present information. Instruction also includes the use of computers, common software programs, peripherals, and social media. Students are instructed in the use of word processing, spreadsheet, presentation, and Internet applications. Upon successful completion of this course, students will be given a voucher to sit for the Internet and Computing Core (IC3) industry certification exam.
Transferable to CSU Only

## COSA 353 units

Microsoft Office

## 54 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Formerly CAOTC 35. This course studies the concepts and features of Microsoft Office software in today's business office with handson application projects. Topics covered include computer concepts, operating system, file management browser fundamentals, MS Word, MS Excel, MS Access and MS PowerPoint. This course satisfies the technology component of the Information Competency requirement for Plan A.
Transferable to CSU Only

## COSA 50 (C-ID ITIS 120) 4 units

Intro to IT Concepts and Applications

## 72 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CBIS 6A. This course focuses on information systems, information literacy, and computer literacy. This course emphasizes: the relationship between technology, individuals, and society; the long-term physiological consequences of incorrect ergonomic design; and the use of critical thinking and logic to critically gather, diagnose, synthesize, and present information. Word processing, spreadsheets, databases, presentation software, and basic Internet use will be covered. Spreadsheet use for business will be emphasized. Upon successful completion of this course, students will be given a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam.
Transferable to both UC and CSU; see counselor for limitations

## COSA 2103 units

Intro to Project Management for IT

## 54 hours lecture

Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
Formerly CBIS 436A. This class is an introduction to IT project management. Popular project management software will be introduced. In addition, the class will focus on the methods and techniques for managing technology projects as well as preparing students for the CompTIA's IT Project+ certification.

## COSA 2153 units

## Microsoft Outlook for Windows

## 54 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.

## Materials Fee: \$10.

Formerly CAOTC 215A and COSA 215AD. This course provides comprehensive instruction in desktop management software using Microsoft Outlook. Topics include how to compose, format, and send e-mail, manage contacts, plan and track tasks, schedule calendar items, and integrate Outlook with other applications. Upon successful completion of this course, students will be given a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam.

## COSA 2401 units

## Introduction to Cryptocurrency

## 18 hours lecture

Grading: letter grade or pass/no pass.
This course introduces the concepts and technologies behind cryptocurrency and blockchain. Topics include the basis of cryptocurrency, the relation to blockchain technology, the acquisition, management, and technology used in securing cryptocurrency in open and distributed financial systems. This course is for students who want to understand the role cryptocurrency plays in society.

## COSA 2411 units

Cryptocurrency Financial Software

## 18 hours lecture

Grading: letter grade or pass/no pass.
This course covers the software applications and platforms currently used in the field of Cryptocurrency. Topics will include the types of software commonly used to research, analyze, invest, and manage Cryptocurrency assets. This course is designed for anyone considering entering into Cryptocurrency financial services and investing.

## COSA 2513 units

Data Analytics with Power BI

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is designed to provide a comprehensive understanding of Power BI , a powerful data visualization and business analytics tool developed by Microsoft. This course equips students with the skills to transform raw data into meaningful insights, create interactive visualizations, and effectively communicate findings to stakeholders. Through hands-on exercises, real-world examples, and engaging discussions, students will learn how to leverage Power BI's capabilities to make data-driven decisions and enhance overall business performance.

## COSA 2523 units

Data Analytics with Tableau

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides a comprehensive understanding of Tableau, a leading data visualization tool. This course is suitable for beginners with little to no experience in data visualization or Tableau, as well as intermediate users looking to deepen their knowledge. Students will master the art of creating captivating visualizations, interactive dashboards, and informative reports, all while uncovering valuable insights from data.

## COSA 2533 units <br> Introduction to Google Analytics <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides an introduction to the field of data analytics using Google Analytics as a primary tool for data collection and analysis. It covers fundamental concepts and techniques of data analytics, data visualization, and data-driven decision-making. Students will gain handson experience in data collection, data cleaning, data analysis, and data visualization using Google Analytics and other relevant tools. The course also explores real-world applications of data analytics in various fields.

## COSA 6010 units

## Computer Information Competency

18 hours lecture, 18 hours laboratory
Grading: non graded.
The course is designed for students to develop current computer information competency. It covers basic use of hardware, Internet knowledge and skills, word processing, spreadsheet, digital data presentations, and communications applications.

## COSA 6020 units

Critical Thinking Using Computers

## 54 hours lecture

Grading: non graded.
This course will explore the various ways computer technology can be used to enhance critical thinking and information literacy skills. The student will learn to utilize multiple software programs critically to gather, diagnose, synthesize, and present information. Students will develop a fundamental understanding of critical thinking skills such as deductive and inductive reasoning, scientific reasoning, argument analysis, and development in the context of computer technology.
COSA 6030 units
Technology and Society

## 54 hours lecture

Grading: non graded.
This course critically examines the interrelationships among technology, the individual, and society. Students investigate the factors that influence the growth and development of technology and assess how individuals and society respond to the challenges and consequences of the technology revolution. Appropriate for both technical and nontechnical majors, students explore principles, methodologies, and value systems from a technology perspective. Students will use case studies to illustrate how technology has affected specific industries.

## COSA 6050 units

Microsoft Windows Operating System

## 54 hours lecture

Grading: non graded.
Students will learn basic to advanced features and concepts of the Microsoft Windows operating system. Topics will include the use of Microsoft applications, Internet technologies, email, maintenance and security. Conceptual materials covered in this course will be balanced with hands-on experience.
COSA 6100 units
Microsoft Word, Introductory

## 18 hours lecture

Grading: non graded.
This course provides hands-on instruction using basic features of Microsoft Word for the PC and its editing, formatting, and language tools to create, format, save, revise, and print various business and report documents.

COSA 6110 units
Microsoft Word, Intermediate
18 hours lecture
Grading: non graded.
This course provides hands-on instruction using intermediate features of Microsoft Word for the PC and its editing, formatting, and language tools to create, format, save, revise, and print various business and report documents.

## COSA 6120 units

Microsoft Word, Advanced

## 18 hours lecture

Grading: non graded.
This course provides hands-on instruction using advanced features of Microsoft Word for the PC and its editing, formatting, and language tools to create, format, save, revise, and print various business and report documents.

COSA 6130 units
Microsoft Word for Windows
54 hours lecture
Recommended Preparation: COSA 601.
Grading: non graded.
Materials Fee: \$10.
Word processing using Microsoft Word. Students will learn how to edit, format, design, and use layout and customization tools to create documents such as letters, flyers, newsletters, and publications. Upon successful completion of this course, students will be provided with a voucher to take the Microsoft Office Specialist (MOS) industry certification exam.

## COSA 6150 units

Microsoft Excel, Introductory

## 18 hours lecture

Grading: non graded.
This course covers beginning spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables.

## COSA 6160 units

Microsoft Excel, Intermediate
18 hours lecture
Grading: non graded.
This course covers intermediate spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables.

## COSA 6170 units

Microsoft Excel, Advanced

## 18 hours lecture

Grading: non graded.
This course covers advanced spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables.

## COSA 6180 units

Microsoft Excel for Windows

## 54 hours lecture

Recommended Preparation: COSA 601.
Grading: non graded.
Materials Fee: \$10.
Students will learn spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables. Upon successful completion of this course, students will be provided with a voucher to take the Microsoft Office Specialist (MOS) industry certification exam.

## COSA $620 \quad 0$ units

Microsoft PowerPoint, Introductory
18 hours lecture
Grading: non graded.
This course covers basic presentation concepts using Microsoft PowerPoint including combining text and graphic images to develop computerized slide shows, charts, and printed materials for presentations.

## COSA 6210 units

Microsoft PowerPoint, Intermediate
18 hours lecture
Grading: non graded.
This course covers intermediate presentation concepts using Microsoft PowerPoint including combining text and graphic images to develop computerized slide shows, charts, and printed materials for presentations.

## COSA 6220 units

Microsoft PowerPoint, Advanced

## 18 hours lecture

Grading: non graded.
This course covers advanced presentation concepts using Microsoft PowerPoint including combining text and graphic images to develop computerized slide shows, charts, and printed materials for presentations.
COSA 6230 units

## Microsoft PowerPoint for Windows

## 54 hours lecture

Recommended Preparation: COSA 601.
Grading: non graded.
Materials Fee: \$10.
This class provides a thorough exploration of presentation graphics software. Skills are developed in planning, creating, formatting, enhancing, and delivering presentations. Through hands-on practice, students learn to combine text and graphic images, animation, sound, and other special effects to develop computerized slide shows. Upon successful completion of this course, students will receive a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam.
COSA 6240 units
Microsoft Access for Windows

## 54 hours lecture

Recommended Preparation: COSA 601.
Grading: non graded.
Materials Fee: \$10.
Relational database concepts using Microsoft Access including design fundamentals, and the creation of tables, queries, forms, and reports are covered. Upon successful completion of this course, students will be provided with a voucher to take the Microsoft Office Specialist (MOS) industry certification exam.
COSA 6250 units
Microsoft Access, Introductory

## 18 hours lecture

Grading: non graded.
This course covers basic database concepts using Microsoft Access including creating and modifying tables, running queries, generating reports, and creating forms.

## COSA 6260 units

## Microsoft Access, Intermediate

## 18 hours lecture

Grading: non graded.
This course covers intermediate database concepts using Microsoft Access including creating and modifying tables, running queries, generating reports, and creating forms.

## COSA $627 \quad 0$ units

## Microsoft Access, Advanced

## 18 hours lecture

Grading: non graded.
This course covers advanced database concepts using Microsoft Access including creating and modifying tables, running queries, generating reports, and creating forms.

## COSA 6280 units

Microsoft Outlook, Introductory

## 18 hours lecture

Grading: non graded.
This course provides instruction in desktop management using Microsoft Outlook. Topics include how to send and receive e-mail, use email special features, and create contacts.
COSA 6290 units
Microsoft Outlook, Intermediate

## 18 hours lecture

Grading: non graded.
This course provides instruction in intermediate Outlook tasks. Students will learn how to plan and track tasks, schedule calendar items, and create rules to manage their Inbox.
COSA 6300 units
Microsoft Outlook, Advanced

## 18 hours lecture

Grading: non graded.
This class provides instruction in advanced functions of Microsoft Outlook. Through hands-on practice, student learn to share and manage multiple calendars, import and export contacts, archive and adjust security options, and customize Outlook components.

## COSA 6310 units

## Microsoft Outlook for Windows

## 54 hours lecture

Recommended Preparation: COSA 601.
Grading: non graded.
Materials Fee: \$10.
This course provides comprehensive instruction in desktop management software using Microsoft Outlook. Topics include how to compose, format, and send e-mail, manage contacts, plan and track tasks, schedule calendar items, and integrate Outlook with other applications. Upon successful completion of this course, students will be given a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam.

COSA 6320 units
Introduction to Computers
54 hours lecture
Recommended Preparation: COSA 601.
Grading: non graded.
Materials Fee: \$10.
This course is a computer and information literacy course. This course will focus on: the relationship between technology, individuals, and society; the long-term physiological consequences of incorrect ergonomic design; and the use of critical thinking and logic to critically gather, diagnose, synthesize, and present information. Instruction also includes the use of computers, common software programs, peripherals, and social media. Students are instructed in the use of word processing, spreadsheet, presentation, and Internet applications. Upon successful completion of this course, students will be given a voucher to sit for the Internet and Computing Core (IC3) industry certification exam.
COSA 6350 units
Microsoft Office
54 hours lecture
Recommended Preparation: COSA 601.
Grading: non graded.
This course studies the concepts and features of Microsoft Office software in today's business office with hands-on application projects. Topics covered include computer concepts, operating systems, file management browser fundamentals, MS Word, MS Excel, MS Access and MS PowerPoint.

## COSA $640 \quad 0$ units

Introduction to Cryptocurrency
18 hours lecture
Grading: non graded.
This course introduces the concepts and technologies behind cryptocurrency and blockchain. Topics include the basis of cryptocurrency, the relation to blockchain technology, the acquisition, management, and technology used in securing cryptocurrency in open and distributed financial systems. This course is for students who want to understand the role cryptocurrency plays in society.

## COSA 6410 units

Cryptocurrency Financial Software
18 hours lecture
Grading: non graded.
This course covers the software applications and platforms currently used in the field of Cryptocurrency. Topics will include the types of software commonly used to research, analyze, invest, and manage Cryptocurrency assets. This course is designed for anyone considering entering into Cryptocurrency financial services and investing.
COSA $650 \quad 0$ units
Intro to IT Concepts \& Applications
72 hours lecture
Recommended Preparation: COSA 601.
Grading: non graded.
This course is an introduction to information systems and the common use of office applications. Internet, Word processing, spreadsheets, databases, presentation software, and basic internet use will be covered. Spreadsheet use for business will be emphasized. Upon successful completion of this course, students will be given a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam. This course satisfies the technology portion of the Information Competency graduation requirement.

## COSA $651 \quad 0$ units

## Data Analytics with Power BI

## 54 hours lecture

Grading: non graded.
This course is designed to provide a comprehensive understanding of Power BI, a powerful data visualization and business analytics tool developed by Microsoft. This course equips students with the skills to transform raw data into meaningful insights, create interactive visualizations, and effectively communicate findings to stakeholders. Through hands-on exercises, real-world examples, and engaging discussions, students will learn how to leverage Power Bl's capabilities to make data-driven decisions and enhance overall business performance.
COSA 6520 units
Data Analytics with Tableau

## 54 hours lecture

Grading: non graded.
This course provides a comprehensive understanding of Tableau, a leading data visualization tool. This course is suitable for beginners with little to no experience in data visualization or Tableau, as well as intermediate users looking to deepen their knowledge. Students will master the art of creating captivating visualizations, interactive dashboards, and informative reports, all while uncovering valuable insights from data.
COSA 6530 units
Introduction to Google Analytics

## 54 hours lecture

## Grading: non graded.

This course provides an introduction to the field of data analytics using Google Analytics as a primary tool for data collection and analysis. It covers fundamental concepts and techniques of data analytics, data visualization, and data-driven decision-making. Students will gain handson experience in data collection, data cleaning, data analysis, and data visualization using Google Analytics and other relevant tools. The course also explores real-world applications of data analytics in various fields.

## Computer \& Office Studies, Keyboarding (COSK)

## COSK 2003 units

Keyboarding and Document Production
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly CAOTT 200. Students in this course develop computer typing skills for business and personal use with emphasis on proper technique, speed, and accuracy. Students create correspondence, business reports, academic reports, tables, resumes, and other employment documents. This course satisfies the technology component of the Information Competency graduation requirement.
COSK 2091 units
Speed/Accuracy Bldg. for Typists
18 hours lecture, 18 hours laboratory
Recommended Preparation: COSK 200 or COSK 233.
Grading: letter grade or pass/no pass.
Formerly CAOTT 209AB and COSK 209AD. This intermediate- to advanced-level course is designed to increase keying speed and accuracy to desired employment levels.

## COSK 2331 units

## Computer Keyboarding Skills

18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CAOTT 233 and COSK 233AD. This course is designed for the person who desires to develop touch control of the computer keyboard and numeric keypad for business or personal use. Emphasis is placed on proper typing and inputting techniques and building basic speed and accuracy.

## COSK $600 \quad 0$ units

Keyboarding and Document Production
54 hours lecture
Grading: non graded.
Students in this course develop computer typing skills for business and personal use with an emphasis on proper technique, speed, and accuracy. Students create correspondence, business reports, academic reports, tables, resumes, and other employment documents.

## COSK 6330 units

Computer Keyboarding Skills
18 hours lecture, 18 hours laboratory
Grading: non graded.
This course is designed to develop touch control of the computer keyboard for personal use. Emphasis is placed on proper typing and inputting techniques and building basic speed and accuracy.

## Computer \& Office Studies, Networking, \& OS (COSN)

COSN 5 (C-ID ITIS 110) 4 units
Computer Hardware Fundamentals

## 72 hours lecture

Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
Formerly CBIS 200. This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level ICT professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional will be introduced.
Preparation for the CompTIA A+ certification exams.
Transferable to CSU Only
COSN 10 (C-ID ITIS 150) 3 units
Networking Fundamentals

## 54 hours lecture

Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CBIS 41. In this class, the student will learn to install, configure, upgrade and troubleshoot a computer network. There will be discussions regarding local area networks, wide area networks, wireless networks, communications protocols, network topologies, transmission media, security, and assessment of career opportunities in networking. This class maps to the CompTIA Network+ certification. In addition, upon successful completion of this course, students will be given a voucher to sit for the Microsoft Technology Associate (MTA) industry certification exam.
Transferable to CSU Only

## COSN 2003 units

## Wireless and Mobile Devices

## 54 hours lecture

Corequisite: COSN 10.
Grading: letter grade or pass/no pass.
Formerly CBIS 212. In this class the student will learn how to install, use, and manage popular wireless technologies such as WiFi, WiMax, and Bluetooth. They will build on the knowledge from COSN 10 to understand how mobile devices connect to the larger network infrastructure through various wireless technologies. Students will have hands on experience installing, trouble shooting, managing, securing, backing up and upgrading Android, IOS, Windows and other mobile devices.

## COSN 2054 units

UNIX/LINUX Fundamentals

## 72 hours lecture

Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
Formerly CBIS 223. This course trains students to use the Linux operating system as an alternative to other operating systems for managing files, running applications, and developing application procedures. Course topics include an overview of basic operating system concepts, a history of UNIX and its influence on modern operating systems, basic internal operating system structure, details of UNIX/Linus file system structures, pipes, filters and redirection, scripts, processes, shells, and UNIX/Linux utilities. Completion of this course qualifies students for COSN 210, Linux System Administration.

## COSN 2063 units

Scripting Fundamentals

## 54 hours lecture

Recommended Preparation: COSN 205.
Grading: letter grade or pass/no pass.
This course offers an in-depth introduction to scripting languages including basic data types, control structures, regular expressions, input/output, and textual analysis. Students will use popular scripting languages in a Windows and Linux environment.

## COSN 2104 units

LINUX Server Administration

## 72 hours lecture

Recommended Preparation: COSN 205.
Grading: letter grade or pass/no pass.
Formerly CBIS 235A and COSN 210AD. This course is an in-depth study of the Linux operating system. The focus is on Linux installation and administration. The course will also examine the theoretical concepts common to all Linux systems that have increased its popularity. The course will also take the form of a practical hands-on approach to Linux to prepare students for the CompTIA Linux+ or LPI certifications. Students should have already completed a foundation course in Linux.

## COSN 2154 units

## LINUX Networking and Security

## 72 hours lecture

Recommended Preparation: COSN 205 or COSN 210.
Grading: letter grade or pass/no pass.
Formerly COSN 215AD. This is an advanced Linux operating system course. The focus is on Linux networking and security. The course covers networking technologies and protocols, network configuration and the use of command-line and graphical utilities. Network security issues such as firewalls, VPNs, and utilities such as nmap, ethereal, and the SAINT profiling tool will be presented.

## COSN 2253 units

## Microsoft Windows Client

## 54 hours lecture

Recommended Preparation: COSN 10.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CBIS 226. In this class, students will install, configure and administer Windows OS. They will install and upgrade client systems, manage file systems and devices and perform system maintenance. The class will prepare the student to take the corresponding MTA Certification Exam.

## COSN $230 \quad 4$ units

## Microsoft Windows Server

## 72 hours lecture

Recommended Preparation: COSN 225.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CBIS 227. In this class, students will install, configure and administer Windows Server Operating System. The class will prepare the student to take the corresponding MTA Certification Exam.

## COSN 2503 units

## Cloud Computing in Amazon Web Services

## 54 hours lecture

Recommended Preparation: COSA 50, COSN 10, or COSN 205.
Grading: letter grade or pass/no pass.
This course introduces cloud computing which shifts information systems from on-premises computing infrastructure to highly scalable internet architectures. The course provides a solid foundation of cloud computing technologies and provides students with the understanding required to effectively evaluate and assess the business and technical benefits of cloud computing and cloud applications. Students analyze a variety of cloud services (storage, servers and software applications) and cloud providers. Case studies will be used to examine various industry cloud practices and applications. The course also surveys cloud careers and discusses industry demand for cloud skills.

## COSN 2513 units

Database Essentials in Amazon Web Svcs

## 54 hours lecture

Recommended Preparation: COSN 250.
Grading: letter grade or pass/no pass.
This course addresses cloud database management which supports a number of different approaches for storing data. In the course, students define, operate and scale both SQL and noSQL data storage solutions. This course considers factors that should be balanced during the design of a storage solution. Principles are applied by performing exercises using Amazon RDS and SQL to create and fill tables, retrieve and manipulate data. Object-based APIs are used to serialize objects to Amazon DynamoDB for noSQL solutions. Topics include automated backups, transaction logs, restoration and retention.

## COSN 2523 units

## App Development in Amazon Web Services

## 54 hours lecture

Recommended Preparation: COSN 250.
Grading: letter grade or pass/no pass.
In this course, students explore how cloud computing systems are built using a common set of core technologies, algorithms, and design principles centered around distributed systems. Students will use the Amazon Web Services (AWS) Management Console to provision, loadbalance and scale their applications using the Elastic Compute Cloud (EC2) and the AWS Elastic Beanstalk. The course discusses, from a developer perspective, the most important reasons for using AWS and examines the underlying design principles of scalable cloud applications.

## COSN 2533 units

Security in Amazon Web Services

## 54 hours lecture

Recommended Preparation: COSN 250.
Grading: letter grade or pass/no pass.
This course focuses on protecting the confidentiality, integrity and availability of computing systems and data. Students learn how Amazon Web Service (AWS) uses redundant and layered controls, continuous validation and testing, and a substantial amount of automation to ensure the underlying infrastructure is continuously monitored and protected. Students examine the AWS Shared Responsibility Model and access the AWS Management Console to learn more about security tools and features provided by the AWS platform.

## COSN 2994 units

## Security and Networking Capstone

## 72 hours lecture

Prerequisite: COSS 71 or COSN 225 or COSN 205.
Grading: letter grade or pass/no pass.
This capstone course focuses on tying together the skills, knowledge and abilities students have developed throughout the Associate of Science in Computer Security and Networking degree program. Students will build, configure, manage and secure a mock IT infrastructure including routers, switches, desktop computers, mobile devices, directory services, web services, database services, VPN services, and virtualization. Students will use Microsoft, UNIX-based and mobile operating systems to complete their project.

## COSN 6050 units

Computer Hardware Fundamentals

## 72 hours lecture

Recommended Preparation: COSA 650.
Grading: non graded.
This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level ICT professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional will be introduced. Preparation for the CompTIA A+ certification exams.

## COSN $610 \quad 0$ units

## Networking Fundamentals

## 54 hours lecture

Grading: non graded.
Materials Fee: \$10.
In this class, the student will learn to install, configure, upgrade and troubleshoot a computer network. There will be discussions regarding local area networks, wide area networks, wireless networks, communications protocols, network topologies, transmission media, security, and assessment of career opportunities in networking. This class maps to the CompTIA Network+ certification. In addition, upon successful completion of this course, students will be given a voucher to sit for the Microsoft Technology Associate (MTA) industry certification exam.

## Computer \& Office Studies, Programming (COSP)

COSP 7 (C-ID COMP 112) 4 units

Programming Concepts and Methodologies
72 hours lecture
Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
Formerly CBIS 7. This course is an introduction to programming concepts and methodologies including syntax, structured design, debugging, variables identifiers, flowchart and simple UML design, programming error detection, extracting and manipulating data from arrays, array sorting with passing parameter and augmenting test data.
Transferable to both UC and CSU; see counselor for limitations

## COSP 84 units

Visual Basic Programming

## 72 hours lecture

Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
Formerly CBIS 8B. The class introduces students to the development of information systems using Visual Basic .NET language. The following programming concepts are covered: the software life-cycle, .Net IDE, data types, control structures, methods, strings and arrays, objectoriented programming, GUI design and development, file I/O, database and ASP. Students should have completed a 3-unit computer concepts and applications course such as COSA 50 as preparation for this course.
Transferable to both UC and CSU; see counselor for limitations

## COSP 104 units <br> Introduction to C\# Programming <br> 72 hours lecture

Recommended Preparation: COSP 7.
Grading: letter grade or pass/no pass.
Formerly COSP 216. This course is an introductory presentation of the C\# language, including data structures and examples. Emphasis is placed on programming business applications including design, development, and documentation. Students should have completed the COSP 7 course or equivalent as preparation for this course.
Transferable to CSU Only

COSP 36 (C-ID ITIS 140) 4 units
Systems Analysis and Design

## 72 hours lecture

Recommended Preparation: COSA 50 and COSP 38.
Grading: letter grade or pass/no pass.
Formerly CBIS 36. This course covers the broad concepts and methods of system analysis and design, while emphasizing the latest object-oriented techniques. Topics include development processing models, conceptual and physical design, system implementation and maintenance techniques, project management, collaborative communication skills, and the responsibilities of systems analysts. Students should have completed the COSA 50 and COSP 38 courses or equivalent as preparation for this course.
Transferable to CSU Only
COSP 38 (C-ID ITIS 180) 4 units
Database Concepts
72 hours lecture
Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
Materials Fee: \$10.
Formerly CBIS 38. This course covers concepts and technologies of database systems. Topics include data modeling, design, and the implementation of relational databases; Structured Query Language-SQL; concurrency control; distributed database systems; data warehousing; Web enabled database technologies; and the functions of database administration. Upon successful completion of this course, students will be given a voucher to sit for the Microsoft Technology Associate (MTA)
industry certification exam.
Transferable to CSU Only

## COSP 2011 units

## Mobile App Development

18 hours lecture
Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
This course is an introduction to building apps for Android devices, including Android phones and tablets, using MIT App Inventor or other App development tools. This course does not require previous programming skills. Students will learn how to design and develop an app and use visual program blocks to specify the app's behavior. Students will do several assignments intended to teach app development followed by a final project.

COSP 2303 units

## Android App Development in Java

## 54 hours lecture

Prerequisite: CS 11 or CS 21 or CS 31.
Grading: letter grade or pass/no pass.
This is a course that will teach the professional level of skills and practices needed to develop and publish a variety of types of applications or Apps on Android phones and tablets. Students should be able to design, develop, and test their own professional quality Apps by the end of the course.

COSP 2311 units
Intro to Data Analytics/Modeling
18 hours lecture
Grading: letter grade or pass/no pass.
Data analytics and visualization are expanding fields that offer tremendous opportunities for career growth. This course introduces topics by exploring the use of the latest analytic and modeling tools in order to derive meaningful information from data sets commonly used in social and business environments. Students will practice acquiring, organizing, and presenting data using current, industry-standard tools and formats.

COSP 2374 units
Database Programming with SQL
72 hours lecture
Recommended Preparation: COSP 38.
Grading: letter grade or pass/no pass.
This course offers students an introduction to database programming concepts and techniques. The class covers the concepts of both relational and object relational databases through the SQL (Structured Query Language). Students are taught to create and maintain database objects and to store, retrieve, and manipulate data. In addition, students learn to create SQL blocks of application code that can be shared by multiple forms, reports, and data management applications.
COSP 6310 units
Intro to Data Analytics/Modeling

## 18 hours lecture

Grading: non graded.
Data analytics and visualization are expanding fields that offer tremendous opportunities for career growth. This course introduces topics by exploring the use of the latest analytic and modeling tools in order to derive meaningful information from data sets commonly used in social and business environments. Students will practice acquiring, organizing, and presenting data using current, industry-standard tools and formats.

## Computer \& Office Studies, Security (COSS)

## COSS 713 units

## Network Security Fundamentals

54 hours lecture
Corequisite: COSN 10.
Grading: letter grade or pass/no pass.
Materials Fee: \$10
Formerly CBIS 271 and COSS 271. This course provides a comprehensive overview of network security including security goals, security systems, access controls, networks and security, integrity, cryptography
fundamentals, authentication. This course also prepares students to take
the CompTIA Security + Certification Exam.
Transferable to CSU Only
coss $270 \quad 1$ units

## Information Security Fundamentals

18 hours lecture
Grading: letter grade or pass/no pass.
Formerly CBIS 270. In this course, you will learn how to protect yourself from identity theft and personal computer attacks. This course is for anyone with basic computer skills. Learn how to protect yourself from hackers, phishers, and anyone else who is trying to "snoop" into your personal information.

COSS 272 (C-ID ITIS 165) 3 units

## Computer Forensics and Investigation

## 54 hours lecture

Recommended Preparation: COSN 5.
Grading: letter grade or pass/no pass.
This course offers an introduction into computer forensics, investigating computer crimes and data recovery. Topics covered in this course include a process for investigating cyber crime and procedures for collecting, analyzing, recovering and preserving forensic evidence.

## COSS 273 (C-ID ITIS 164) 4 units <br> Ethical Hacking and Countermeasures

## 72 hours lecture

Recommended Preparation: COSS 71.
Grading: letter grade or pass/no pass.
This course will prepare students to perform network hacking and implement appropriate countermeasures. Students will also explore the ethical questions surrounding network and system penetration. This course covers topics such as using network penetration tools, techniques for identifying system vulnerabilities and exploiting those vulnerabilities to compromise systems and data.

## COSS $280 \quad 3$ units

Cybersecurity Competition Fundamentals

## 54 hours lecture

Recommended Preparation: COSA 50.
Grading: letter grade or pass/no pass.
This course prepares students to mentor and participate in various cybersecurity competitions including but not limited to CyberPatriot. Topics include cybersecurity basics, operating system installation and hardening, Windows and Linux administration, and networking fundamentals.

COSS $680 \quad 0$ units
Cybersecurity Competition Fundamentals
54 hours lecture
Recommended Preparation: COSA 50.
Grading: non graded.
This course prepares students to mentor and participate in various cybersecurity competitions including but not limited to CyberPatriot. Topics include cybersecurity basics, operating system installation and hardening, Windows and Linux administration, and networking fundamentals.

## Computer \& Office Studies, Work Experience (COSE)

## COSE 271WE 1-4 units

Work Experience-Comp \& Office Studies
72 hours laboratory
Prerequisite: Prior approval by COS department faculty and compliance with work experience regulations as designed in the college catalog. Grading: letter grade or pass/no pass.
Students learn and gain on-the-job experience in a computer networking, information technology, or cyber security related field. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of non-paid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1 to 4 units credit. Students may re-enroll up to 4 times (semesters). Prior approval from COS Department faculty and compliance with Work Experience regulations as designated in the College Catalog is required.

# Computer \& Office Studies, Web Development (COSW) 

## COSW 104 units

## Beginning Website Development

## 72 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade or pass/no pass.
Formerly CBIS 207AD and CBIS 211 AD and COSW 10AD. This course introduces the fundamental skills needed to design, develop and publish websites using industry standard software. Students will create websites by coding in HTML and CSS and incorporate web design principles such as site planning, usability and accessibility standards. Topics covered include formatting text, creating hyperlinks, building navigation menus, inserting images and other media, creating tables, creating forms, using CSS for layout and design, and understanding the purpose of responsive web development. Students should have completed a basic computer concepts course such as COSA 1 as preparation for this course. Transferable to CSU Only
COSW 204 units
Front End Website Development

## 72 hours lecture

Recommended Preparation: COSW 10.
Grading: letter grade.
Formerly CBIS 207E. This course develops knowledge in modern frontend web development skills including intermediate level HTML/CSS, mobile websites, responsive web development, CSS frameworks, jQuery, accessibility, usability and emerging web development trends/tools. Students are encouraged to have a basic knowledge of web development from COSW 10 or equivalent in preparation for this course.
Transferable to CSU Only

## COSW 304 units

Web Development with PHP/MySQL

## 72 hours lecture

Recommended Preparation: COSP 38 and COSW 10.
Grading: letter grade or pass/no pass.
Formerly COSW 220. This course covers PHP \& MySQL, one of the most popular technology combinations for developing interactive Web sites. It is designed to provides students with a real-world experience in developing database driven website programming concepts for personal and small business needs Students write PHP code to interact with data stored in a database including record creation, update, deletion and retrieval. Emphasis will be placed on creating web forms, searching databases, and session management. It is recommended that students enter this course with beginning knowledge of Web development concepts including HTML and CSS.
Transferable to CSU Only

## COSW 2004 units

Introduction to JavaScript
72 hours lecture
Recommended Preparation: COSW 10.
Grading: letter grade or pass/no pass.
This course provides an introduction to client-side programming using JavaScript; including variables, data types, control structures, arrays, functions, event handlers, objects, and form validation. Students will learn through real-world projects and gain experience working with the DOM, AJAX, JSON, and explore popular JavaScript frameworks.

## COSW 2304 units

## Web Development Frameworks

## 72 hours lecture

Recommended Preparation: COSW 10 and COSW 200.
Grading: letter grade or pass/no pass.
Formerly CBIS 430. This course is an introduction to modern web development frameworks and is intended for students with prior web development knowledge. Students will learn a web development framework, programming concepts, syntax and data management. Installation and setup, unit testing, structure of the web development framework, debugging tools, module/component creation, application deployment, and code repositories will be covered. Students should have working knowledge of at least one programming language (preferably JavaScript) and have an intermediate level of understanding of HTML and CSS as preparation for this course.

## COSW 2403 units

## Intro to Content Management Systems

## 54 hours lecture

Recommended Preparation: COSW 10.
Grading: letter grade or pass/no pass.
Students will create and manage websites using popular web-based content management systems (CMS) such as WordPress, Drupal, and/or Joomla. This course introduces fundamental concepts of CMS administration including installation, setup, management of user accounts, and security. Students will design a site, create navigation, integrate with social media, publish diverse content, and optimize content for search engine optimization (SEO) purposes.

# Computer Academy CISCO Networking (CISCO) 

CISCO 2502 units

Communications Cabling Installation
18 hours lecture, 54 hours laboratory
Corequisite: ELECT 600.
Grading: letter grade or pass/no pass.
This course will present the basic skills and knowledge needed to qualify for employment as a communications cabling installer. The course content will include safe use of tools, copper and fiber optic cabling systems, TIA standards, BICSI best practices, and the National Electrical Code as it applies to low-voltage communications cabling.

## CISCO 2512 units

Introduction to Networks
18 hours lecture, 54 hours laboratory
Corequisite: ELECT 600.
Grading: letter grade.
This is the first course in a sequence of three that prepares students to pass the Cisco certification exam required to become a Cisco Certified Network Associate (CCNA). The course includes introductions to networking devices, IPv4 and IPv6 addressing schemes, routing and switching concepts, media design and selection, topologies and cabling, electricity and electronics concerns, and network management and trouble-shooting approaches. The instruction for this course is based on the Cisco Networking Academy CCNAv7 curriculum.

CISCO $252 \quad 2$ units

## Switching Routing Wireless Essentials

18 hours lecture, 54 hours laboratory
Prerequisite: CISCO 251.
Grading: letter grade.
This is the second course in a sequence of three that prepares students to pass the Cisco certification exam required to become a Cisco Certified Network Associate (CCNA). The course maintains a focus on configuring switches and routers for use in small and medium size networks, including Virtual Local Area Networks (VLANs), VLAN Trunking, InterVLAN Routing, Spanning Tree Protocol (STP), EtherChannel, Dynamic Host Configuration Protocol (DHCP), First Hop Redundancy, LAN and Switch Security, and Static Routing. The course also provides knowledge and skills relating needed to implement a wireless LAN (WLAN). The instruction for this course is based on the Cisco Networking Academy CCNAv7 curriculum.

## CISCO 2532 units

Enterprise Network Security Automation
18 hours lecture, 54 hours laboratory
Prerequisite: CISCO 252.
Grading: letter grade.
This is the third course in a sequence of three that prepares students to pass the Cisco certification exam required to become a Cisco Certified Network Associate (CCNA). The course maintains a focus on enterprise size networks for advanced functionality. The course describes the architecture, components, operations and security to scale for large complex networks, including Wide Area Network (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. The instruction for this course is based on the Cisco Networking Academy CCNAv7 curriculum.

## Computer Aid Design (CAD)

## CAD 13 units

Intro Computer Aided Design SolidWorks
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CAD 50/DRAFT 51A. This course covers the principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD) using SolidWorks. Topics include the development of visualization skills; orthographic projections; mechanical dimensioning and tolerancing practices; and the engineering design process for the use in the mechanical and engineering technology fields. Assignments develop sketching, 2-D and 3-D CAD skills. The use of SolidWorks CAD software is an integral part of the course.
Transferable to CSU Only

## CAD 23 units

Intro to Computer Aided Design AutoCAD
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CAD 202/DRAFT 202. This course covers the principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD) using AutoCAD. Topics include the development of engineering documentation for civil, architectural and mechanical engineering applications; visualization skills; orthographic projections; dimensioning and tolerancing practices; and the engineering design process. Assignments develop sketching, 2-D and 3-D CAD skills. The use of AutoCAD software is an integral part of the course.
Transferable to CSU Only

CAD 3 units
Intro to Computer Aided Design CATIA
36 hours lecture, $\mathbf{7 2}$ hours laboratory
Grading: letter grade or pass/no pass.
Formerly CAD 220/DRAFT 220. This course covers the principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD) using CATIA. Topics include the development of visualization skills; orthographic projections; mechanical dimensioning and tolerancing practices; and the engineering design process for the aerospace industry. Assignments develop sketching, 2-D and 3-D CAD skills. The use of CATIA CAD software is an integral part of the course.
Transferable to CSU Only

## CAD 4 units

Geometric Dimensioning and Tolerancing
36 hours lecture, $\mathbf{7 2}$ hours laboratory
Recommended Preparation: CAD 1.
Grading: letter grade or pass/no pass.
Formerly CAD 60/DRAFT 60. This course is designed for engineers, designers, technicians, drafters, quality, inspection, manufacturing, tooling, production, management, procurement, and purchasing professionals in the aerospace and manufacturing fields. The course covers a review Geometric Dimensioning and Tolerancing standards per ASME Y14.5 on engineering documentation. Topics include; conventional dimensioning, dimensioning and geometric tolerancing symbols, datums, material condition symbols, tolerances of form, profile, orientation, runout, position, modifiers and common inspection procedures. Transferable to CSU Only

## CAD 53 units <br> Intro to CAD/CAM MasterCAM

## 36 hours lecture, 72 hours laboratory

Recommended Preparation: CAD 1.
Grading: letter grade or pass/no pass.
Formerly CAD 52/DRAFT 52A. This course covers the successful transfer of manufacturable design models and drawings to Computer Aided Manufacturing (CAM) software using MasterCAM. The course emphasizes CAM programming for Computer Numerical Control (CNC) machine tools. Concepts studied will include geometry construction, tooling design, tool paths and motion, machine functions, programming, verification and conformance to detail drawings per ASME Y14.5 standards. Students will create programs from designed models and detail drawings using CAM software. CAD/CAM software is an integral part of this course.
Transferable to CSU Only

## CAD 63 units

## Computer Aided Design Advanced

## 36 hours lecture, $\mathbf{7 2}$ hours laboratory

Recommended Preparation: CAD 1, CAD 2, CAD 3, or ETEC 20.
Grading: letter grade or pass/no pass.
Formerly CAD 51/DRAFT 51B. This course covers CAD software used to create advanced 3D models, advanced 2D engineering detail and assembly drawings while applying dimensioning and tolerancing standards per ASME Y14.5. Engineering designs will include advanced solid modeling tools, techniques, surfaces, complex assemblies, modelbased definition and sheet metal parts. Complex orthographic detail and assembly drawings will be developed and produced by the individual student or in student teams. Projects will include development of 3D models, 3D printed parts, and documentation through reverse engineering and the engineering design process.
Transferable to CSU Only

## CAD 2032 units

## AutoCAD II, Advanced Concepts

18 hours lecture, 54 hours laboratory
Prerequisite: CAD 2.
Grading: letter grade or pass/no pass.
Formerly DRAFT 203AD. This course is 2 nd in a series of 3 classes leading to a certificate - CAD Professional (324 Hours). This intermediate level AutoCAD class is aimed at individuals with a drafting background employed in engineering, architecture, interior design and other related fields who wish to upgrade their skills in the area of Computer Aided Drafting (CAD). Topics cover advanced 2D concepts and intermediate level 3D modeling using AutoCAD Software: user interface, advanced draw, edit, and query commands, template drawings, dimension styles, model space/paper space electronic drawing sheets, external reference styles, file management and the Web, plotting styles, blocks and attributes and 3D modeling techniques.

## CAD 2042 units

3D Visualization/Animation
18 hours lecture, 54 hours laboratory
Prerequisite: CAD 203.
Grading: letter grade or pass/no pass.
Formerly DRAFT 204. This course is an advanced-level course primarily aimed at individuals with a drafting background employed in engineering, architecture, interior design and other related fields who wish to upgrade their skills in the area of Computer Aided Drafting (CAD), Visualization, Rendering and Animation. CAD training will utilize AutoCAD and one or more of the following - Architectural Desktop, Sketchup, REVIT Architecture and 3D Studio MAX Software. Digital non-linear editing is introduced. Advanced 3D modeling and rendering concepts are explored: user interface, coordinate system, surface and solids modeling commands, rendering and animation. Projects cover both mechanical and architectural applications.

## CAD 2212 units

Intermediate CATIA
18 hours lecture, 54 hours laboratory
Recommended Preparation: CAD 3.
Grading: letter grade or pass/no pass.
Formerly DRAFT 221. This course is the second course in a series of three preparing students for careers as computer aided drafting operators in various industries utilizing CATIA parametric design software. This intermediate level class introduces students to the more complex operations of CATIA software than the former class by concentrating on advanced design solids modeling concepts and applying them in the creation of industry standard detail parts drawings and advanced assembly/subassembly drawings in a Windows environment. The course may serve as a preparation for students intending to take industry certification tests CATIA PART DESIGN Expert and CATIA Assembly Design Expert created by Dessault Systems.

# Computer Science (CS) 

CS 11 (C-ID COMP 122) 3 units<br>Introduction to Computer Science- C++<br>54 hours lecture, 18 hours laboratory

Prerequisite: Elementary algebra or qualifying through the LBCC math placement process.
Recommended Preparation: COSP 7.
Grading: letter grade.
This is an introductory course in the C++ programming language, a problem-solving technique used in modern software technology. The features of $\mathrm{C}++$ that support the development of small and large systems are covered, thus providing a method for prototyping the commercial software development in business and industry.
Transferable to both UC and CSU; see counselor for limitations

## CS 124 units <br> Advanced Computer Science-C++ <br> 72 hours lecture <br> Prerequisite: CS 11. <br> Grading: letter grade.

This is the second course in C++ course offerings, which includes further explanation of $\mathrm{C}++$ areas such as data types, input/output, data structures, pointers and accessing files and object-oriented programming, object hierarchy, inheritance, data abstraction, templates, recursion, operator overloading, linked lists, stacks and queues, and streams.
Transferable to both UC and CSU; see counselor for limitations

## CS 21 (C-ID COMP 122) 3 units

Introduction to Computer Science-Java
54 hours lecture, 18 hours laboratory
Recommended Preparation: COSP 7.
Grading: letter grade.
This course introduces Computer Science and the Java programming language. It will cover the basics of programming and software design using a procedure-oriented approach.
Transferable to both UC and CSU; see counselor for limitations

## CS 22 (C-ID COMP 132) 3 units

Data Structures and Algorithms

## 54 hours lecture

Prerequisite: CS 11 or CS 21 or CS 31.
Grading: letter grade.
This course covers the application of software engineering techniques for the design and development of large programs, and will include the topics of data abstraction and structures with their associated algorithms.
Transferable to both UC and CSU; see counselor for limitations

## CS 31 (C-ID COMP 122) 3 units

Introduction to Computer Science-Python
54 hours lecture, 18 hours laboratory
Recommended Preparation: COSP 7.
Grading: letter grade.
This is an introductory course in Computer Science covering basic subjects in computer programming using the Python programming language. Topics covered include basic input/output, decision structures, loops, functions, operations on text strings, data collection structures (lists, sets, tuples, and dictionaries), and software design using a procedure-oriented approach.
Transferable to both UC and CSU; see counselor for limitations

CS 51 (C-ID COMP 142) 3 units
Introduction to Computer Architecture
54 hours lecture, 18 hours laboratory
Prerequisite: CS 11 or CS 21 or CS 31 or COSP 8 and MATH 50
Grading: letter grade.
This course covers the organization and behavior of real computer systems at the assembly-language level. The mapping of statements and constructs in a high-level language onto sequences of machine instructions is studied, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors.
This course is modeled after the State C-ID COMP 142 course standard. Transferable to both UC and CSU; see counselor for limitations

## CS 61 (C-ID COMP 152) 3 units

## Discrete Structures

## 54 hours lecture, 18 hours laboratory

Prerequisite: CS 11 or CS 21 or CS 31 or COSP 8 and intermediate algebra or qualifying through the LBCC math placement process.
Grading: letter grade or pass/no pass.
This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: Functions, Relations and Sets; Basic Logic; Proof Techniques; Basics of Counting; Graphs and Trees; and Discrete Probability. Transferable to CSU Only

## Construction Technology (CONST)

## CONST 153 units

## Blueprint Reading for Construction Trade

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly CONST 215 and CARP 440. This course is designed to provide knowledge of blueprint reading as it relates to the construction and building industry. This course will cover the theory of orthographic projections, reading floor plans, section and elevation drawings, symbols and notations, scaling and dimensioning practices, reading blueprints for structural formation, electrical, mechanical, and plumbing drawings. Transferable to CSU Only

## CONST 503 units

Concrete Fundamentals
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 15 and CONST 230.

## Grading: letter grade.

This course introduces students to concrete flatwork and foundations, hands-on surveying, forming and finishing concrete, poured-in-place reinforced concrete, concrete estimating, code requirements and blueprint reading for concrete.
Transferable to CSU Only

## CONST $70 \quad 3$ units

Cost Estimating
54 hours lecture
Recommended Preparation: CONST 15.
Grading: letter grade or pass/no pass.
Formerly CONST 270 and CARP 230. This course is designed for those individuals needing to produce accurate project estimates; topics will include interpreting project information from a detailed blueprint and processing it into a final detailed estimate.
Transferable to CSU Only

## CONST 2007 units

## Construction Apprenticeship Readiness

108 hours lecture, $\mathbf{7 2}$ hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 211. This class prepares students to enter the Construction Trades in a variety of apprenticeship programs. Students who complete the Multi-Craft Core Curriculum (MC-3) earn the OSHA 10 certificate and also receive CPR and First Aid certification. The subjects covered include: physical agility, blueprint reading, industry awareness and opportunities in the crafts; introduction to the crafts and their tools (hand and power); tool safety; and the heritage of the American worker. Students will be taken on field trips to Apprenticeship Training Centers and will tour local job sites.

## CONST $205 \quad 0.5$ units <br> Forklift Fundamentals <br> 9 hours lecture, 9 hours laboratory <br> Grading: pass/no pass.

Formerly FORK 801. Forklift Safety and Operation training will provide basic safety and operation of the forklift including lifting principles, load rating, stability, and operation techniques. Students will be required to have a valid California Driver's license to participate and be certified.

## CONST $230 \quad 3$ units

## Carpentry Fundamentals

## 36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
Formerly CARP 311 . This course covers the fundamentals of the building trades. Topics of instruction include safety, building codes, construction mathematics, rough framing, concrete form work and placement, blueprint reading, and technical information on alternative "Green Technology" materials and methods of construction.

## CONST 2353 units

Residential Roof Framing
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 230.
Grading: letter grade or pass/no pass.
Formerly CARP 219. This course covers residential roof framing. Topics of instruction include roof structures, calculations and layout of various rafters, codes requirements, roof construction, and estimating.

## CONST $240 \quad 3$ units

## Finish Carpentry

36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 230.
Grading: letter grade or pass/no pass.
Formerly CARP 227. This course covers residential interior finishes. Topics of instruction include: drywall installation, taping and texturing; hanging doors and installing door hardware; installing trim, including baseboard, window and door casing, chair rail and wainscot and crown molding, flooring, interior design, estimating, and layout.

## CONST 2453 units

## Residential Stairs

## 36 hours lecture, 54 hours laboratory

Recommended Preparation: CONST 230.
Grading: letter grade or pass/no pass.
Formerly CARP 222. This course covers residential stairs framing. Topics of instruction include stair design, calculation, layout, and construction.

## CONST 2502 units

## Home Remodeling Fundamentals

18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415A. This course focuses on home improvement projects and introduces the student to basic home remodeling. Topics will include safety, building codes, obtaining building permits, trade related math, hand and power tools, techniques for installing or repairing plumbing fixtures, electrical repairs and upgrades, and energy saving concepts.

## CONST $255 \quad 2$ units

## Home Remodeling-Basic Carpentry

18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415B. This course focuses on home improvement projects and introduces and identifies the basic hand and power tools used for home remodeling projects. Topics include wood-framed floor systems, wall and ceiling components. The class will review the applicable building codes that deal with the removal of interior wall partitions. Practical instruction is given in the construction laboratory.

## CONST 2602 units

Home Remodeling-Interior Construction
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly CARP 415C. This course in home remodeling covers interior sub-crafts. Topics of instruction include insulation, drywall, finish trim carpentry, installing cabinets, tile, estimating, and relevant codes. Practical instruction is given in the construction laboratory.

## CONST 2652 units

## Home Remodeling-Exterior Construction

## 18 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
Formerly CARP 415D. This course in Home remodeling covers exterior sub-crafts. Topics of instruction include exterior flashing, roofing, rain gutters, exterior siding, decks, patio and walks. Practical instruction is given in the construction laboratory.

## CONST 2753 units

## Contracting Laws and Management

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly CARP 245. This course is designed for those with construction experience who wish to become contractors. Topics of instruction include the following: home improvement certification, contractor license law, labor laws, payroll deductions planning, management principles, lien laws, and business organization.

## CONST 6000 units <br> Construction Apprenticeship Readiness <br> 108 hours lecture, 72 hours laboratory <br> Grading: non graded.

This class prepares students to enter the Construction Trades in a variety of apprenticeship programs. Students who complete the Multi-Craft Core Curriculum (MC-3) earn the OSHA 10 certificate and also receive CPR and First Aid certification. The subjects covered include: physical agility, blueprint reading, industry awareness and opportunities in the crafts: introduction to the crafts and tools (hand and power); tool safety; and the heritage of the American worker.

## CONST 6010 units

Introduction To Construction
9 hours lecture, 9 hours laboratory
Grading: non graded.
The introduction to construction will introduce students to the common construction tools, equipment, materials, safety, and practices in the construction industry. Lab will include hands-on projects to put these skills to use by building a small-scale project.

## CONST 6020 units

Exploring Construction
9 hours lecture, 9 hours laboratory
Grading: non graded.
This course is an exploration of construction tools and crafts. This course will allow the student to explore the basic safety requirements and tool utilization in the industry.

## CONST 6050 units

## Forklift Fundamentals

9 hours lecture, 9 hours laboratory
Grading: non graded.
Forklift Safety and Operation training will provide basic safety and operation of the forklift including lifting principles, load rating, stability, and operation techniques. Students will be required to have a valid California Driver's license to participate and be certified.

## CONST 6060 units

## Workplace Competency Skills

## 18 hours lecture

Grading: non graded.
This competency-based course will provide students an awareness of the skills needed to be successful in the construction industry. Topics include effective workplace communication, problem and conflict resolution, thriving in a diverse workforce, and being an effective team player.

## CONST 6150 units

Blueprint Reading for Construction Trade

## 54 hours lecture

## Grading: non graded.

This course is designed to provide knowledge of blueprint reading as it relates to the construction and building industry. This course will cover the theory of orthographic projections, reading floor plans, section and elevation drawings, symbols and notations, scaling and dimensioning practices, reading blueprints for structural formation, electrical, mechanical, and plumbing drawings.

## CONST 6160 units

## Home Remodeling-Drywall

## 9 hours lecture, 18 hours laboratory

Grading: non graded.
Formerly CONST 615B. This course in home remodeling covers technical instruction and practical experience for installing and repairing drywall in commercial and residential locations. Topics of instruction include, safety, tools, taping, spackling, compound and hanging techniques for drywall. Students will also learn how to differentiate between LEED approved and non-approved materials.

## CONST $617 \quad 0$ units

Home Remodeling-Tiling
9 hours lecture, 18 hours laboratory
Grading: non graded.
Formerly CONST 615A. This course in home remodeling covers technical instruction and practical experience for tiling, marble and granite installation. Topics of instruction include, safety, waterproofing, tiling floors, counter tops, and walls in ceramic, porcelain, marble, and granite and mortar floating. Practical instruction is given in a lab setting.

## CONST $618 \quad 0$ units <br> Home Remodeling-Painting <br> 9 hours lecture, 18 hours laboratory <br> Grading: non graded.

Formerly CONST 615C. This course in home remodeling covers basic painting techniques. Topics of instruction include, safety, job site and surface preparation (e.g. cleaning, caulking, sealing); Proper tools; spray-painting equipment; ladder and scaffolding safety; applications to enhance the job through stripping, sponging, and distressing.

## CONST $620 \quad 0$ units

Plumbing Fundamentals
36 hours lecture, 54 hours laboratory
Recommended Preparation: CONST 615 - Blueprint Reading.
Grading: non graded.
This course will provide students with entry level instruction involving the theory and skills of residential plumbing systems. Knowledge of basic principles, functions, design, and the physical ability to install and test rough-in plumbing in a single-family dwelling.

## CONST $670 \quad 0$ units

## Cost Estimating

## 54 hours lecture

Recommended Preparation: CONST 615
Grading: non graded.
This course is designed for those individuals needing to produce accurate project estimates; topics will include interpreting project information from a detailed blueprint and processing it into a final detailed estimate.

CONST 6750 units

## Contracting Laws and Management

54 hours lecture
Grading: non graded.
This course is designed for those with construction experience who wish to become contractors. Topics of instruction include the following: home improvement certification, contractor license law, labor laws, payroll deductions planning, management principles, lien laws, and business organization.

## Counseling/Guidance (COUNS)

COUNS $1 \quad 1$ units<br>Orientation for College Success<br>18 hours lecture<br>Grading: letter grade or pass/no pass.

This course is recommended for all students and is designed to orient them to the college environment and educational opportunities in a holistic manner. The course contains an introduction to the principles of student development theory, student conduct, academic procedures, policies, goal setting, educational planning, and college and student support services. Students will learn the various academic opportunities of higher education in California, pursue academic major explorations, and develop a tentative educational plan to achieve personal and academic goals.
Transferable to both UC and CSU; see counselor for limitations

## COUNS 23 units

## Making a Difference with Mentoring

## 54 hours lecture

Grading: letter grade or pass/no pass.
This is an experiential course where students explore the altruistic principles and techniques of transformative mentoring. Emphasis is placed on objective problem solving and the development of effective attending skills. Students evaluate mentoring, first year experience, and student development theories with the goal of promoting the academic and psychosocial factors that contribute to college and life success. Campus and community resources will be discussed and explored.
Transferable to CSU Only

## COUNS $7 \quad 3$ units

College and Professional Success
54 hours lecture
Grading: letter grade.
Students will compare and analyze student development theories for the purpose of defining internal and external obstacles to career and academic success. Throughout the course, students will practice, apply and evaluate integrative exercises related to academic achievement, self-exploration, career development and professional growth and development.
Transferable to CSU Only

## COUNS 481 units

## Career Exploration

18 hours lecture
Grading: letter grade or pass/no pass.
This course is designed for students who are undecided about their career and/or educational goals. It provides an introduction to a career decision-making model, including personal assessment, self-understanding, career and labor market research, integration of information and goal setting. The course emphasizes one's selfdescription as it impacts career choices.
Transferable to CSU Only

## COUNS 492 units

## College Study Techniques

## 36 hours lecture

Grading: letter grade or pass/no pass.
This course is designed to teach students the important strategies for academic success and how to be confident college students. Course content will cover specific techniques and methods on effective time management, note taking, critical thinking skills, life skills, textbook reading and test taking skills. Students will identify their own individual learning styles through self-assessment and presented learning theories. Topics will be presented as a practical and applicable approach to specific strategies for gaining academic competency and achieving selfconfidence for academic success.
Transferable to CSU Only

## COUNS 49A 1 units

## College Study Techniques

## 18 hours lecture

Grading: letter grade or pass/no pass.
This is an introductory course designed to teach students important strategies for academic success. Course content will cover specific techniques such as effective time management plan, note taking skills, textbook reading and test taking skills. Students will identify their own learning styles and important factors to college success through selfassessment and interpretation.
Transferable to CSU Only

## COUNS 503 units

## Career Planning and College Success

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course presents a reflective model of the career planning process that integrates theory and practice applicable in a variety of situations over an individual's life span. Applying psychological, sociological, and physiological concepts, students will explore, identify, and establish personal, career, and educational goals. Students will be empowered to take charge of their academic and career decisions through the integration of career development and educational planning process. Topics include: intensive career investigation; assessment of interests, personality, skills, values, and other personal qualities that coincide with educational planning and career identification; application of college readiness; decision-making; time management; goal setting; learning and life management strategies; application of career and lifespan development theory; and resume development, job search and other career building techniques.
Transferable to both UC and CSU; see counselor for limitations

## COUNS $650 \quad 0$ units

## Career Planning and College Success

## 54 hours lecture

Grading: non graded.
This course presents a reflective model of the career planning process that integrates theory and practice applicable in a variety of situations over an individual's life span. Applying psychological, sociological, and physiological concepts, students will explore, identify, and establish personal, career, and educational goals. Students will be empowered to take charge of their academic and career decisions through the integration of career development and educational planning process. Topics include: intensive career investigation; assessment of interests, personality, skills, values, and other personal qualities that coincide with educational planning and career identification; application of college readiness; decision-making; time management; goal setting; learning and life management strategies; application of career and lifespan development theory; and resume development, job search and other career building techniques.

## COUNS 8001 units

## Employment Skills and Self Concept

## 18 hours lecture

Grading: pass/no pass.
This is an introductory course designed to assist students in understanding personal qualities in relationship to life and career skills required to succeed in the 21 st Century world of work. The goal is for students to recognize the required essential skills for finding employment in today's world and keeping it. Course topics include personality assessment of strengths and weaknesses, recognizing strengths and self-worth, developing job search skills, and developing a career or employment search portfolio.
COUNS 8550.5 units

## Strategies for Academic Success

## 9 hours lecture

Grading: pass/no pass.
This course is designed for students who have been scholastically dismissed from Long Beach City College and will focus on developing strategies and skills to improve status. Topics to be covered will include the policy definition of Academic and Progress Probation as well as dismissal and the readmission process, approaches to dealing with obstacles to success and possible solutions, review of student support services, academic resources and services, goal setting, strategies for academic success, and educational planning leading to student success.

## COUNS 898A 0.5 units

EXP. Educational Planning

## 9 hours lecture

## Grading: pass/no pass.

This course is designed to provide students with an in depth understanding of the components and importance of educational planning. Students will receive an overview of certificates, graduation and transfer requirements. Upon successful completion of this course, students will develop an individual student educational plan (SEP) reflecting their educational goal. This course is strongly recommended for first-time students with declared majors.

## Creative Arts (CART)

## CART 413 units

The Arts and Modern Man
54 hours lecture
Grading: letter grade or pass/no pass.
This course serves as a humanities requirement and is an introduction to and exploration of the creative arts including art, film, music and the theatre arts for the general student. Each student is required to view and attend an exhibit and live performances related to the major areas of concentration in this course (art, music \& theatre).
Transferable to both UC and CSU; see counselor for limitations

## Culinary Arts (CULAR)

CULAR 10 (C-ID HOSP 100) 3 units

## Intro to Hospitality

54 hours lecture
Grading: letter grade.
This course is an overview of the hospitality industry's structure; Focus on customer service, cultural/economic trends and career opportunities in restaurants, lodging, resorts, and related food service operations. Transferable to CSU Only

## CULAR 20 (C-ID HOSP 110) 2 units

## App. Food Serv. Sanit in Hotel/Rstr. Mgmt.

36 hours lecture
Grading: letter grade.
Formerly CULAR 20AD. This course introduces students to food safety and sanitation issues facing professionals in the food and beverage industry. The course serves as a foundation for the entire Culinary/Baking Program by helping students ascertain a thorough understanding of food safety and sanitation. The course is based on regulatory code and covers major foodborne illnesses, standards, process controls, and food safety management systems, such as HACCP. To successfully complete the course, students are required to demonstrate knowledge by successfully passing a Nationally Accredited Food Protection Manager Certification Exam.
Transferable to CSU Only
CULAR 30 (C-ID HOSP 120) 3 units
Cost Control in Hospitality
54 hours lecture
Grading: letter grade.
This course is an overview of applying cost control techniques in managing food, beverages and labor expense to maximize profit. Topics include: Menu costing and pricing, expense and income statement analysis, purchasing and storage control, loss prevention and waste management.
Transferable to CSU Only

CULAR 90 (C-ID HOSP 130) 4 units
Intro to Culinary Skills \& Principles
36 hours lecture, 126 hours laboratory
Corequisite: CULAR 20.
Grading: letter grade.
Materials Fee: \$85
Formerly CULAR 202. The fundamental concepts, skills, and techniques involved in basic cookery are covered in this course: ingredients, cooking theories, preparation of stocks, mother sauces, and emulsions, knife skills, vegetables and starches, and meat and poultry prepared using basic cooking techniques (sautéing, roasting, poaching, braising, and frying). Students must pass a practical exam on a variety of cooking techniques. Note: Proof of TB clearance is required on the first day of class.
Transferable to CSU Only
CULAR 2113 units
Intermed. Culinary Skills \& Principles
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and CULAR 90 or CULAR 202.
Grading: letter grade.
Materials Fee: \$85
This course provides students with skills and knowledge of the organization, equipment and responsibilities of the "cold kitchen". Cold hors d'oeuvres, sandwiches, salads, and basic charcuterie items are taught. Reception foods and buffet arrangements are introduced. Students must pass a written and practical exam. Note: Proof of TB clearance is required on the first day of class.

CULAR 2152 units
Buffets and Catering
36 hours lecture, 27 hours laboratory
Prerequisite: CULAR 20 and CULAR 90 or CULAR 202.
Grading: letter grade.
This course is designed to instruct students on various types and levels of food presentation and cooking. From large buffets to small intimate dinner events, students learn to develop menu items, select cooking methods, formulate presentation styles and control costs. This includes event planning, catering costing, and food preparation methodology. Note: Proof of TB clearance is required on the first day of class.

## CULAR 2163 units

World Cuisines: American Regional
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and CULAR 90 or CULAR 202.
Grading: letter grade.
Materials Fee: \$65
This course explores the use of indigenous ingredients in the preparation of traditional and contemporary American specialties from Hawaii to Florida, with stops in the Pacific Northwest, Texas, and New England along the way. Note: Proof of TB clearance is required on the first day of class.

## CULAR 2172 units

## Vegetarian \& Specialty Cuisine

18 hours lecture, 54 hours laboratory
Prerequisite: CULAR 20 and CULAR 90 or CULAR 202.
Grading: letter grade.
Materials Fee: \$55
This course provides the knowledge to understand the principles of vegetarian, vegan, raw food, and specialty cuisines. Topics will include how to combine non-meat proteins, prepare raw foods, and make substitutions for low fat, low sugar, gluten-free, and other allergy-based dietary restrictions. Note: Proof of TB clearance is required on the first day of class.

## CULAR 2183 units

World Cuisines: Asian

## 36 hours lecture, 72 hours laboratory

Prerequisite: CULAR 20 and CULAR 90 or CULAR 202.
Grading: letter grade.
Materials Fee: \$65
Students prepare, taste, serve, and evaluate traditional, regional dishes of the cuisines of India, the four regions of China, Japan, Vietnam, Thailand, and Indonesia. Importance will be placed on ingredients, flavor profiles, preparations, and techniques representative of these cuisines. Note: Proof of TB clearance is required on the first day of class.

## CULAR 2193 units

## World Cuisines: Mediterranean

## 36 hours lecture, 72 hours laboratory

Prerequisite: CULAR 20 and CULAR 90 or CULAR 202.
Grading: letter grade.
Materials Fee: \$65
This course emphasizes the influences and ingredients that create the unique character of Mediterranean cuisine. Students prepare, taste, serve, and evaluate traditional, regional dishes of countries in the Mediterranean region. Ingredients, flavor profiles, and techniques representative of these cuisines will be stressed. Note: Proof of TB clearance is required on the first day of class.

## CULAR 222A 4 units

Advanced Restaurant Operations

## 72 hours lecture

Prerequisite: CULAR 20, CULAR 211, and CULAR 90 or CULAR 202.
Corequisite: CULAR 222B.
Grading: letter grade.
This capstone course covers the fundamental principles of front- and back-of-house operations in a restaurant setting including: equipment and station set-up, cost control, inventory, menu development, Point of Sale (POS) system, dining room service, hospitality management, and marketing. Note: Proof of TB clearance is required on the first day of class.

## CULAR 222B 4 units

Advanced Restaurant Practicum

## 216 hours laboratory

Prerequisite: CULAR 20, CULAR 211, and CULAR 90 or CULAR 202.
Corequisite: CULAR 222A.
Grading: letter grade.
This capstone course gives students real-time hands-on professional restaurant experience via LBCC's full-service student-run Bistro. Rotating between the kitchen and dining room, students learn how to set-up stations, create, prepare, and serve made-to-order dishes, dining room set-up and décor, manage beverage services and customer service/ relations. Note: Proof of TB clearance is required on the first day of class.

## CULAR 2252 units

## Product and Menu Development

## 36 hours lecture

Grading: letter grade.
This course provides the basic knowledge of food composition, ingredients, and their functions. Students will learn how to create food products and develop menus by blending flavors with various cooking and baking techniques or by ingredient substitution.
CULAR 2502 units
Culinary Skills for Baking Students
18 hours lecture, 54 hours laboratory
Corequisite: CULAR 20.
Grading: letter grade.
Materials Fee: \$45
This course introduces the Baking and Pastry student to basic culinary skills and principles in order to build foundational skills, outside of his or her specialty. This includes knife cuts, basic sauce making, sautéing, poaching, braising and steaming. Note: Proof of TB clearance is required on the first day of class.

## Dance (DANCE)

## DANCE 13 units

Dance Forms Through the Ages

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores the world of dance including its role in culture, its development through history and the theatrical dance forms in contemporary America.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 2 units

## Introduction to Dance

27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
This course introduces the basic dance techniques of ballet, modern, and jazz dance. It is recommended for students with no dance experience.
Transferable to CSU Only

## DANCE 3 units

Musical Theatre Dance
27 hours lecture, 27 hours laboratory
Corequisite: One of the following-DANCE 2 or 3 or 5 or 6 or 8 or 12A or 13 or 14 or 15 or 16 or 17 or 18 A or 18 B or 20 or 21 or 24 or 26 or 27 or 28 or 29 or 46.
Recommended Preparation: DANCE 12A or DANCE 12B.
Grading: letter grade or pass/no pass.
Formerly DANCE 3AD. This course introduces musical theatre dance styles from the 1940s to the present. It includes the study of ballet, jazz and tap techniques to prepare students for performance in musical
theatre emphasizing creating character through movement.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 52 units

Tap Dance 1
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Formerly DANCE 5AB. Students will study basic tap dance techniques. This course provides the opportunity to develop coordination, rhythm and performance skills. Some history of tap will be included.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 62 units

## Tap Dance 2

27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 5.
Grading: letter grade or pass/no pass.
Formerly DANCE 6AB. This is a continuing study of tap dance skills, emphasizing the intermediate level of dance. The course includes the study of terminology, tap history and tap styles.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 8 units

Stretch and Relaxation
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Formerly DANCE 8AD. This course includes the study and practice of stretching and breathing principles for increased flexibility, reduction of stress and improved mental and physical health.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 12A 2 units

Pilates 1

## 27 hours lecture, 27 hours laboratory

Grading: letter grade or pass/no pass.
Formerly DANCE 12AD. This course will include basic elements from Pilates focusing on mat work, ball, magic circle, theraband, foam roller and Reformer exercises. The course will include basic anatomy, Pilates terminology, alignment, breath, strength and flexibility exercises. This course is designed to enhance dance technique and performance and prevent injuries
Transferable to both UC and CSU; see counselor for limitations

## DANCE 12B 2 units

Pilates 2
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 12A.
Grading: letter grade or pass/no pass.
This course will include Intermediate to Advanced elements from Pilates with a Dance Specialization focusing on challenging mat work, ball, magic circle, theraband, foam roller and Reformer exercises. The course will include basic anatomy, Pilates terminology, spinal alignment, breathing patterns, strength and flexibility exercises. Emphasis will be put on spinal and pelvic alignment, breathing to relieve stress and allow adequate oxygen flow to the muscles, while developing a strong core and improving coordination and balance.
Transferable to CSU Only

## DANCE 132 units

Turns
27 hours lecture, 27 hours laboratory
Prerequisite: DANCE 14 or DANCE 20 or DANCE 26.
Grading: letter grade or pass/no pass.
Formerly DANCE 13AD. This course includes the practice and study of beginning to advanced turns for modern, ballet and jazz dance.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 142 units

## Modern Dance

27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Formerly DANCE 14AB. This course emphasizes dance technique, musicality, improvisation and composition within the modern dance idiom. Full body warm-ups, technical exercises, and dance combinations will be explored as a way to build skill, kinesthetic awareness, physica strength, and artistry.
Transferable to both UC and CSU; see counselor for limitations

DANCE $15 \quad 2$ units
Modern Dance 2
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 14.
Grading: letter grade or pass/no pass.
Formerly DANCE 15AB. This course continues to focus on building
technical skill in modern dance including more challenging combinations and patterns, syncopation, and variation in tempo. Musicality, improvisation, and composition skills will be further developed with more challenging exercises and assignments.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 162 units

Modern Dance 3
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 15.
Grading: letter grade or pass/no pass.
Formerly DANCE 16AB. This course focuses on building intermediate technical skills in modern dance including more challenging combinations and patterns, increased syncopation, and variation in tempo emphasizing medium to fast weight changes Musicality, improvisation, and composition skills will be further developed with more challenging exercises and assignments.
Transferable to CSU Only
DANCE 172 units
Modern Dance 4
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 16.
Grading: letter grade or pass/no pass.
Formerly DANCE 17AB. This course is an advanced study of modern dance techniques for the concert stage, encompassing more complicated combinations taught at a quicker pace,with an emphasis on movement expression, creating composition studies, and a comparison on modern styles and choreographers.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 18A 2 units

Folk and Ethnic Dance-African
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Formerly DANCE 18AD. This course introduces dance from African cultures and examines its role in society through the practice of dance traditions and rituals. Basic dance steps and styles are taught, emphasizing coordination, rhythm and body awareness.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 18B 2 units

Folk and Ethnic Dance-Belly Dance
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
This course will focus on training students to understand and perform belly dance. Students will also learn about the different music, history, and culture of this dance style. Students will demonstrate mastery of belly dance through choreographed and non-choreographed class performances.
Transferable to CSU Only

## DANCE 193 units

## Hip Hop Dance History

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a comprehensive survey of Hip-hop dance history. The content of this course will cover the contributions and perspectives of men, women and members of various ethnic or cultural groups in street dance styles known as Hip-Hop from the 20th and 21 st centuries.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 202 units

Jazz Dance 1
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Formerly DANCE 20AB. This course serves as an introduction to the movement skills used in jazz dance. It includes the use of dynamics in rhythm, sustained and percussive tension, and dramatic focus unique to jazz.
Transferable to both UC and CSU; see counselor for limitations
DANCE 212 units
Jazz Dance 2
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 20.
Grading: letter grade or pass/no pass.
Formerly DANCE 21 AB. This course is a study of the movement skills that require an intermediate knowledge of jazz dance techniques. Emphasis is on executing movement with a sense of performance and using long movement patterns with a focus on dynamics in rhythm, sustained and percussive tension, and dramatic focus that are unique to jazz.
Transferable to both UC and CSU; see counselor for limitations
DANCE 242 units
Hip Hop
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
This course will introduce students to the fundamentals of the hip hop/ funk dance style. The students will learn the fundamentals of today's dances that are commonly used in music videos. Classes will include warm-up exercises, isolations, floor stretches and strengthening specific to the hip hop/funk style of dance. This will also include locomotor movements practiced across the floor and short dance combinations. Transferable to CSU Only

## DANCE 262 units

Ballet 1
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Formerly DANCE 10AB. This course includes the study and execution of fundamental ballet techniques, including appreciation of ballet as an art form through the study of its history, current trends and terminology. Transferable to both UC and CSU; see counselor for limitations

## DANCE 272 units

## Ballet 2

27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 26.
Grading: letter grade or pass/no pass.
This course includes the study and execution of beginning ballet techniques, including appreciation of ballet as an art form through the study of its history, current trends and terminology. This course focuses on more challenging combinations and patterns, syncopation, and variation in tempo.
Transferable to CSU Only

## DANCE 282 units

Ballet 3
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 27.
Grading: letter grade or pass/no pass.
This course includes the study and execution of intermediate ballet techniques, including appreciation of ballet as an art form through the study of its history, current trends and terminology. This course focuses on more challenging combinations and patterns with an emphasis on musicality, placement, stability, and speed. Student will gain strength, improved coordination and alignment and demonstrate technical accuracy.
Transferable to CSU Only

## DANCE 292 units

Ballet 4
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 28.
Grading: letter grade or pass/no pass.
Formerly DANCE 11 AB . This course includes the study and execution of advanced ballet techniques, including appreciation of ballet as an art form through the study of its history, current trends and terminology. This course focuses on more challenging combinations and patterns with an emphasis on musicality, placement, stability, and speed including an introduction to contemporary ballet vocabulary. Student will gain strength, improved coordination and alignment, and demonstrate technical accuracy.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 312 units

Choreography I

## 27 hours lecture, 27 hours laboratory

Prerequisite: DANCE 14 or DANCE 20 or DANCE 26.
Grading: letter grade or pass/no pass.
Formerly DANCE 31 AB . This course is a study of creating movement for the dancer focusing on discovering inventive movement, creating a personal style of expression, and development of aesthetic judgment. Transferable to both UC and CSU; see counselor for limitations

## DANCE 322 units

## Choreography 2

27 hours lecture, 27 hours laboratory
Recommended Preparation: One semester of DANCE 31.
Grading: letter grade or pass/no pass.
Formerly DANCE 32AB. This course is a study of choreography for a group of dancers focusing on the use of design in space to create dances of significant form. It includes work in a collaborative environment teaching choreography to workshop participants.
Transferable to both UC and CSU; see counselor for limitations
DANCE 332 units
Dance Choreography Workshop
27 hours lecture, 27 hours laboratory
Prerequisite: DANCE 14, DANCE 20 or DANCE 26.
Grading: letter grade or pass/no pass.
Formerly DANCE 33AD. This course is a collaborative workshop environment in which class participants work with student choreographers in the creation of dances of significant form and content. Transferable to both UC and CSU; see counselor for limitations

## DANCE 412.5 units

## Dance Performance

144 hours laboratory
Corequisite: One of the following - DANCE $2,3,5,6,8,12 \mathrm{~A}, 12 \mathrm{~B}, 13,14,15$,
16, 17, 18A, 18B, 20, 21, 24, 26, 27, 28, 29, 31, 32, 33, 46.
Grading: letter grade or pass/no pass.
Formerly DANCE 41AD. This course prepares students for the
professional stage by developing the skills of professional dancers and nurturing choreographers' artistic development. It emphasizes the application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at the initial class meeting.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 41/1 0.5 units

Dance Performance
36 hours laboratory
Corequisite: DANCE $2,3,5,6,8,12 \mathrm{~A}, 12 \mathrm{~B}, 13,14,15,16,17,18 \mathrm{~A}, 18 \mathrm{~B}, 20$, $21,24,26,27,28,29,31,32,33,46$.
Grading: letter grade or pass/no pass.
This course prepares students for the professional stage by developing the skills of professional dancers and nurturing choreographers" artistic development. It emphasizes the application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at the initial class meeting.
Transferable to both UC and CSU; see counselor for limitations
DANCE 41/2 1 units
Dance Performance

## 72 hours laboratory

Corequisite: DANCE $2,3,5,6,8,12 \mathrm{~A}, 12 \mathrm{~B}, 13,14,15,16,17,18 \mathrm{~A}, 18 \mathrm{~B}, 20$, $21,24,26,27,28,29,31,32,33,46$.
Grading: letter grade or pass/no pass.
This course prepares students for the professional stage by developing the skills of professional dancers and nurturing choreographers' artistic development. It emphasizes the application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at the initial class meeting.
Transferable to both UC and CSU; see counselor for limitations

## DANCE 41/3 2 units

Dance Performance

## 108 hours laboratory

Corequisite: DANCE $2,3,5,6,8,12 A, 12 B, 13,14,15,16,17,18 A, 18 B, 20$, $21,24,26,27,28,29,31,32,33,46$.
Grading: letter grade or pass/no pass.
This course prepares students for the professional stage by developing the skills of professional dancers and nurturing choreographers' artistic development. It emphasizes the application of choreographic concepts and skills through rehearsal and performance of dance projects for public performance. The appropriate class section in this sequence is assigned following skills assessment at the initial class meeting.
Transferable to both UC and CSU; see counselor for limitations

DANCE $45 \quad 2.5$ units

## Musical Theatre Dance Performance

144 hours laboratory
Corequisite: One of the Following - DANCE 2, 3, 5, 6, 8, 11, 12AD, 13, 14, 15, 16, 17, 18A, 18B, 20, 21, 24, 26, 28, 29, 46.
Recommended Preparation: DANCE 11 or DANCE 12.
Grading: letter grade or pass/no pass.
This course prepares students for the performance of a musical emphasizing developing character through dance culminating in a public presentation.
Transferable to CSU Only

## DANCE 462 units

Ballroom/Social Dance
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
This course introduces students to the fundamentals of partner dance skills in Swing, Salsa, Waltz, Foxtrot, and Tango and other social dances.
Students will practice movement techniques, patterns, and styling
applicable to each style of dance.
Transferable to CSU Only

## Diagnostic Medical Imaging (DMI)

## DMI 103 units

Introduction of Radiologic Technology
54 hours lecture
Prerequisite: AH 60 and AH 61 and ANAT 41.
Grading: letter grade.
This course is a study of the history and basic principles of medical radiography, the mechanics of radiographic exposure, the processing of the latent image, basic electrical and radiation safety measures, and medicolegal issues that relate to the practice of radiologic technology. Transferable to CSU Only

DMI 111 units
Radiographic Techniques
18 hours lecture
Prerequisite: DMI 20.
Grading: letter grade.
This course is a study of the criteria required to select x-ray
machine settings to produce diagnostic quality radiographs and the compensations in radiographic technique that are required for pathologic conditions.

Transferable to CSU Only

## DMI 123 units

Contrast Fluoroscope/Radiographic Proced.
54 hours lecture
Corequisite: DMI 11.
Grading: letter grade.
This course is a study of basic Fluoroscopy: Radiographic Contrast Media administration, pharmacology, safety, and treatments. Contrast Media examinations, Special Procedures, Digital Angiography, Vascular and NonVascular intervention are also discussed within the scope of this course. Transferable to CSU Only

## DMI 143 units

## Trends and Self-Assessment in Rad Tech

## 54 hours lecture

Prerequisite: DMI 15 or current Certified Radiologic Technologist (CRT).
Grading: letter grade.
Comprehensive review of the diagnostic medical imaging core
curriculum. Serves as a preparation for state certification and national
registry exams.
Transferable to CSU Only
DMI 153 units
Computer Applications in Radiology

## 54 hours lecture

Prerequisite: DMI 24.
Grading: letter grade.
This course is a study of the history of computer systems, hardware and software, and their uses in radiology. Specific areas covered are: CT,
Digital Imaging, MRI, and Picture Archiving Systems.
Transferable to CSU Only

## DMI 203 units

Introduction to Radiologic Physics
54 hours lecture
Prerequisite: DMI 10.
Grading: letter grade.
This course provides a study of the basic principles of physics involved in the production, behavior, modification, and control of radiation.
Transferable to CSU Only

## DMI 212 units

Applied Radiological Physics
18 hours lecture, 54 hours laboratory
Prerequisite: DMI 20.
Grading: letter grade.
This course is a study of the application of the interaction of radiation and matter, technique manipulation, quality assurance, and quality control. Students are introduced to advanced Medical Imaging including: digital imaging; ultrasound; nuclear medicine; radiation oncology; PET; SPECT; and bone densitometry.
Transferable to CSU Only

## DMI 243 units

Radiation: Biology and Protection
54 hours lecture
Prerequisite: DMI 21.
Grading: letter grade.
This course presents a history of ionizing radiation exposure to humans. Cellular and biologic effects of ionizing radiation are explored, with specific emphasis as to ways of limiting exposure to patients and personnel. State and Federal regulations are discussed as they pertain to Diagnostic Medical Imaging.
Transferable to CSU Only

## DMI 303 units

Positioning for General Diagnostic Rad
36 hours lecture, 54 hours laboratory
Prerequisite: DMI 20.
Recommended Preparation: DMI 11.
Grading: letter grade.
This course is the study of positioning for general and specialized radiologic exams of the skeletal system and adjacent organ systems. The student will develop skill in positioning the patient, film, and x-ray tube, and select appropriate techniques to produce diagnostic quality radiographic images.
Transferable to CSU Only

## DMI 313 units

## Positioning for Cranial Radiography

36 hours lecture, 54 hours laboratory
Prerequisite: DMI 30.
Grading: letter grade.
This course is the study of positioning for general and specialized radiologic exams of the cranium and its contents. The student will develop skill in positioning the patient, film and $x$-ray tube, and select appropriate techniques to produce diagnostic quality radiographic images.
Transferable to CSU Only

## DMI 40A 2.5 units

Clinical Radiology
144 hours laboratory
Prerequisite: DMI 10 and DMI 20.
Grading: letter grade.
This course is the clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and image quality control. The course includes an assignment to a radiology department in an accredited hospital for clinical experience. Transferable to CSU Only

## DMI 40B 7.5 units

## Clinical Radiology

18 hours lecture, 351 hours laboratory
Prerequisite: DMI 40A.
Grading: letter grade.
This course is the clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job-oriented problems and image quality control. The course includes an assignment to a radiology department in an accredited hospital for clinical experience. Transferable to CSU Only

## DMI 40C 6 units

Clinical Radiology
18 hours lecture, 270 hours laboratory
Prerequisite: DMI 40B.
Grading: letter grade.
This course is the clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job-oriented problems and image quality control. The course includes an assignment to a radiology department in an accredited hospital for clinical experience. Transferable to CSU Only

## DMI 40D 11 units

Clinical Radiology
18 hours lecture, 558 hours laboratory
Prerequisite: DMI 40C.
Grading: letter grade.
This course is the clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job oriented problems and image quality control. The course includes an assignment to a radiology department in an accredited hospital for clinical experience. Transferable to CSU Only

DMI 40E 11 units
Clinical Radiology
18 hours lecture, 558 hours laboratory
Prerequisite: DMI 40D.
Grading: letter grade.
This course is the clinical application of theoretical knowledge to the practice of radiologic technology, correlation of clinical experiences, training and career goals, interpersonal relations, job-oriented problems and image quality control. The course includes an assignment to a radiology department in an accredited hospital for clinical experience. Transferable to CSU Only

## DMI 603 units

## Radiologic Pathology

54 hours lecture
Prerequisite: ANAT 41 and DMI 11.
Grading: letter grade.
This course is an introduction to the study of disease as it relates to radiologic technology. It includes the causes, signs, symptoms and radiolographic demonstration of common human diseases. The course acquaints the student with various pathologic conditions and their impact on the radiographic process.
Transferable to CSU Only

## DMI 612 units

## Fluoroscopy

36 hours lecture, 18 hours laboratory
Prerequisite: DMI 40D or Equivalent.
Corequisite: DMI 14.
Grading: letter grade.
This course includes the principles of radiation protection, fluoroscopy and viewing equipment, recording systems, quality control, patient positioning and regulatory provisions associated with fluoroscopy. This course prepares students to obtain a Department of Health Services Fluoroscopy permit.
Transferable to CSU Only

## DMI 2220.5 units

Venipuncture for Medical Imaging
9 hours lecture, 9 hours laboratory
Prerequisite: DMI 12 and AH 61.
Grading: letter grade or pass/no pass.
This course is designed for instruction and supervised practice of the concepts and techniques of venipuncture. This course will partially fulfill the requirements of the California Health and Safety Code Section 106985 pertaining to Radiologic Technologists.

## DMI 4013 units

## Physical Principles of MRI

54 hours lecture
Prerequisite: Possession of a valid Certified Radiologic Technologist (CRT) and/or American Registry of Radiologic Technologist (ARRT) license.
Recommended Preparation: DMI 14 and DMI 40E.
Grading: letter grade.
This course provides the student with a comprehensive overview of Magnetic Resonance Imaging (MRI). Included are image acquisition; MRI equipment, terminology, and instrumentation; tissue characteristics; basic patient and personNel safety; patient assessment and preparation; imaging parameters, and quality assurance. The course is designed to allow practicing technologists the opportunity to acquire the necessary skills and knowledge to qualify for national licensure as MRI technologists.

## DMI 4023 units

## Magnetic Resonance Imaging Procedure

## 54 hours lecture

Prerequisite: Possession of a valid Certified Radiologic Technologist (CRT) and/or American Registry of Radiologic Technologist (ARRT) license.
Grading: letter grade.
This course includes imaging techniques related to the Central Nervous System, neck thorax, musculoskeletal system and abdomen and pelvic regions. Specific clinical application, coils available and their use, consideration in the scan sequences, specific choices of protocols, and positioning criteria will be included. Planes that best demonstrate anatomy and the signal characteristics of normal and abnormal structures are discussed.

## DMI 4033 units

## Cross-Sectional Anatomy

## 54 hours lecture

Prerequisite: Possession of a valid Certified Radiologic Technologist (CRT) and/or American Registry of Radiologic Technologist (ARRT) license.
Recommended Preparation: ANAT 41.
Grading: letter grade.
This is a study of human anatomy as seen in axial, sagittal, and coronal planes as would be shown on CT or MRI examinations. Bony, muscular, vascular, soft tissues, and organs of the following anatomical regions are studied: central nervous system, head, neck, musculoskeletal, cardiovascular, thorax, abdomen, and pelvis.

## DMI 4043 units

MRI/CT Pathology

## 54 hours lecture

Prerequisite: DMI 60 or DMI 403.
Grading: letter grade.
This course familiarizes the student with the common pathologies demonstrated on MRI/CT examinations and their appearance with various imaging protocols. The course content will include all commonly imaged body systems and structures.

## DMI 405A 2.5 units

MRI Clinical Practicum

## 144 hours laboratory

Prerequisite: Possession of a valid Certified Radiologic Technologist (CRT) and/or American Registry of Radiologic Technologist (ARRT) license.
Grading: letter grade.
Formerly DMI 405AB. This course allows the students the opportunity to practice the skills necessary to obtain high quality MR images, to objectively alter protocols based on patient pathology or physical condition, and to identify image quality problems and make appropriate corrections.

## DMI 405B 2.5 units

## MRI Clinical Practicum

144 hours laboratory
Prerequisite: DMI 405A.
Grading: letter grade.
This course allows the students the opportunity to continue to practice the skills necessary to obtain high quality MR images, to objectively alter protocols based on patient pathology or physical condition, and to accumulate the required examinations designated by the American Registry of Radiologic Technologists.

## DMI 4063 units

## Computerized Tomography Physics

## 54 hours lecture

Prerequisite: Possession of a valid Certified Radiologic Technologist
(CRT) and/or American Registry of Radiologic Technologist (ARRT) license.
Grading: letter grade.
This course provides the student with a comprehensive understanding of the physical principles and instrumentation involved in computed tomography (CT). Included are: physics topics, CT systems and operation data acquisition and display, and radiation protection practices. The course is designed to allow practicing technologists the opportunity to acquire the necessary skills and knowledge to qualify for national licensure as CT technologists.

## DMI 4073 units

Computerized Tomography Procedures
54 hours lecture
Prerequisite: Possession of a valid Certified Radiologic Technologist (CRT) and/or American Registry of Radiologic Technologist (ARRT) license.
Grading: letter grade.
This course provides the student with detailed instruction on imaging techniques for computer tomography (CT). Procedures included are central nervous and musculoskeletal systems, neck, thorax, abdomen and pelvis. Specific clinical application, indications for the procedure, patient education, assessment and preparation, positioning, contrast media usage, and image processing will be included. CT images will be reviewed for quality, anatomy and pathology.

## DMI $462 \quad 3.5$ units

Mammography
54 hours lecture, 27 hours laboratory
Prerequisite: DMI 40D or equivalent.
Grading: letter grade.
This course prepares students to obtain the Department of Health Services Mammography license. It includes principles of components of dedicated mammography equipment, radiation protection legislation, quality assurance regulations and mammographic positioning.

## Digital Media Arts (DMA)

DMA 1 (C-ID ARTS 250) 3 units
Introduction to Computer Graphics
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly ART 41. This course introduces beginning students to digital image creation through fundamental terms, tools, and techniques.
Through multiple applied projects, students will develop skills related to the production of: digital illustration, photo retouching, fine art imagery, and graphic design. The course explores historical background and emerging media trends in digital art as a tool for creative expression. Transferable to CSU Only

## DMA 23 units

Introduction to Digital Media Arts
36 hours lecture, 72 hours laboratory
Recommended Preparation: DMA 1.
Grading: letter grade or pass/no pass.
Formerly DMA 201. This course introduces students to digital multimedia using technology as a creative tool. Through multiple applied projects, students will explore: web imagery, animation, motion graphics, data visualization, UX/UI, interaction, gaming, visual effects, video production and transmedia storytelling. The course explores how digital media transforms our experience of communication and impacts our cultural, business and personal lives.
Transferable to both UC and CSU; see counselor for limitations

## DMA 3 units

Digital Illustration
36 hours lecture, 72 hours laboratory
Prerequisite: DMA 1 or DMA 2.
Recommended Preparation: ART 17 or ART 31.
Grading: letter grade or pass/no pass.
Formerly ART 45. This course further explores digital image creation and stylization using vector and raster-based software applications. Students learn to create illustrated images for graphics, animation, games, and fine art applications. Applied projects will cover: storyboarding, concept art, portraiture, character design, environments, and material studies for digital image artifacts.
Transferable to both UC and CSU; see counselor for limitations

## DMA 4 units

Introduction to Typography
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly ART 56. This graphic design course explores the fundamentals of typographic form with a close examination of the architecture of letterforms, alphabet construction and wordmarks. Students learn the appropriate use of specific families of type for work in the field of graphic and communication design. The intersection of type as visual language and expressive at form explored from historic, theoretic and aesthetic views.
Transferable to CSU Only

## DMA 53 units

Graphic Design: Branding
36 hours lecture, 72 hours laboratory
Prerequisite: DMA 1.
Recommended Preparation: ART 31 or DMA 4.
Grading: letter grade or pass/no pass.
Formerly ART 44. This graphic design course serves as an overview of visual communications, branding and the commercial arts using digital production techniques. Students will develop applied skills in design software and hardware combined with analog construction, while learning to combine and coordinate type, images and symbols into logos, packaging, posters and ads.
Transferable to CSU Only

## DMA 63 units

Graphic Design: Publication \& Production
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 31 or DMA 1 or DMA 4.
Grading: letter grade or pass/no pass.
Formerly ART 55. This course examines graphic design through craft and production, including typography, illustration, photography and layout. Students will develop a combination of traditional hand-skills supplemented by design software and production equipment. The history of graphic design will be explored as well as the relationship to marketing, merchandising, and publication.
Transferable to CSU Only

## DMA 103 units

Introduction to Game Design

## 36 hours lecture, 72 hours laboratory

Recommended Preparation: DMA 1 or ART 17.
Grading: letter grade.
This course surveys the history, technology, narrative, ethics, and design of games. Students will work in teams to develop novel game-design story boards, game design documents and graphics. The course will explore the interplay of narrative, graphics, rule systems, in the creation of field, card, board, roleplaying, and digital games.
Transferable to CSU Only

## DMA 153 units

Interaction and Web Design

## 36 hours lecture, 72 hours laboratory

Prerequisite: DMA 1 or DMA 2.
Recommended Preparation: ART 31 or DMA 4 or DMA 5.
Grading: letter grade or pass/no pass.
Formerly ART 43. This graphic design course explores visual communications associated with non-linear media such as websites, mobile apps and game engines. Students will learn to apply graphic design theory and UX/UI principles to social media graphics, data visualizations, animated icons and navigation display. The history of graphic user interface will be explored through arcades, gaming, home computing, and the internet.
Transferable to CSU Only

## DMA 203 units

Digital Animation: 2D
36 hours lecture, 72 hours laboratory
Prerequisite: DMA 1 or DMA 2.
Recommended Preparation: ART 31 or DMA 3.
Grading: letter grade or pass/no pass.
Formerly ART 47. This course further develops the skills and software used to create 2D digital animation and multimedia. Students will learn the history and theory of various traditional and new-media animation methods as well as applied techniques to create both small and largescale, stand-alone animation projects.
Transferable to both UC and CSU; see counselor for limitations

## DMA 253 units

Motion Graphics
36 hours lecture, 72 hours laboratory
Prerequisite: DMA 1 or DMA 2.
Recommended Preparation: DMA 4 or DMA 5.
Grading: letter grade or pass/no pass.
Formerly ART 48. This graphic design course explores developing animated digital graphics combined with sound for web, video, film and games. Projects in motion graphics encompass, dynamic typography, animated logos, title and credit sequences, social media, AR/VR Filters, and special effects. Students will learn to render digital video nonlinear editing and compositing of clips to create professional quality productions.
Transferable to CSU Only

## DMA 27 units

## 2D Game and Interaction Design

## 36 hours lecture, 72 hours laboratory

Recommended Preparation: DMA 2 or DMA 15 or DMA 20.
Grading: letter grade.
This course combines the skills learned in previous design, animation, and interaction classes, to emphasize the unique characteristics of twodimensional computer games and interactive applications. Students will learn the fundamentals of software based game design, acquiring new skills about game design and interaction, while applying skills learned in earlier coursework. Students will create games or interactive experiences targeted toward entertainment, education, or commercial spaces. Transferable to CSU Only

## DMA 303 units

Digital Animation: 3D

## 36 hours lecture, 72 hours laboratory

Prerequisite: DMA 2.
Recommended Preparation: DMA 3 or DMA 20.
Grading: letter grade or pass/no pass.
Formerly ART 46. This course further develops skills in digital animation. Students digitally construct three-dimensional objects and learn to deal with virtual space. Specific relationships will be made between electronic modeling and the visual arts, in particular, sculpture, animation, illustration, gaming and other areas of digital graphics and multimedia. Transferable to both UC and CSU; see counselor for limitations

## DMA 403 units <br> Multimedia Design <br> 36 hours lecture, 72 hours laboratory

Prerequisite: DMA 1 and DMA 2.
Recommended Preparation: DMA 15 or DMA 20 or DMA 25 or DMA 30. Grading: letter grade or pass/no pass.
Formerly ART 42. This course combines the skills learned in previous design, animation, and interaction classes, to emphasizes the unique characteristics of three and four-dimensional computer graphics. Multimedia allows students to explore the advanced visual characteristics of virtual dimensions in both time and space through: graphic interfaces, game engines, projection mapping, and transmedia story-telling.
Transferable to both UC and CSU; see counselor for limitations

## DMA 903 units

Special Studies: Design \& Multimedia 36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly ART 49. This course is for graphic design and multimedia students who have completed a series of foundational classes and are prepared to do advanced work in a specific area. Students work independently on projects formulated with faculty assistance to develop personal skills for their chosen specialty in graphic design, web and interaction, animation, game design and/or the multimedia arts. Transferable to CSU Only

## Design (DSGN)

## DSGN 102 units

Survey and Mapping
36 hours lecture, 18 hours laboratory
Grading: letter grade.
This course introduces the theory and practice of plane surveying, including the use of instruments for measuring distances, angles, and elevations. Students learn proper field procedures for basic surveying which include taking field notes, taping and EDM, leveling, bearings and azimuths, topography, and mapping.
Transferable to CSU Only

## DSGN $11 \quad 1.5$ units

Design Management Trends
18 hours lecture, 36 hours laboratory
Grading: letter grade.
This course discusses trends in construction and design management such as emerging technologies, practice methodologies and problemsolving.
Transferable to CSU Only

## DSGN 203 units

## Space Planning

## 36 hours lecture, 54 hours laboratory

Grading: letter grade.
This course overviews residential and commercial programming design principles and explores concepts such as circulation design and space proximities. Students will gain a basic understanding of programmatic communication tools, drawing techniques, and associated codes for the creation of architectural spaces.
Transferable to CSU Only

## DSGN 303 units

## Visualizations for Interiors

## 36 hours lecture, 54 hours laboratory

Recommended Preparation: ARCHT 20 or ARCHT 61.
Grading: letter grade.
This course introduces drawing strategies and visual communication methods for the development of interior and exterior spaces. Twodimensional and three-dimensional drawing methodologies are explored as both traditional hand sketching and digital graphic development. Transferable to CSU Only

## DSGN 313 units

Visualizations for Industrial Design
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This course is a comprehensive introduction to the fundamentals of traditional perspective drawing and rendering theory and techniques, using traditional drawing techniques still used today in the industrial and product design industry.
Transferable to CSU Only

## DSGN 403 units

Materials of Interiors

## 54 hours lecture

Grading: letter grade.
This lecture course introduces analysis and research of critical issues affecting the selection and application of interior finish materials.
Sources and materials used by interior designers in the development of a design project are presented. Materials available in the market for furniture, finishes, and equipment and their costs, maintenance, and environmental impact are analyzed and discussed.
Transferable to CSU Only

## DSGN 503 units

Design Materials and Tools
54 hours lecture, 54 hours laboratory
Grading: letter grade.
Introduction to the study of fabrication and 3D design. Students will investigate a wide range of materials, tools, and techniques specific to design as they apply to the package, product, and environmental design. Transferable to CSU Only

## DSGN 513 units

Lighting Design
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This course introduces architectural lighting techniques such as luminaire sources and types, regulations, and technical terminology. Students determine how to apply lighting strategies to practical situations for residential and commercial interiors and train students to draw lighting plans, write specifications and create study models. Transferable to CSU Only

## DSGN 523 units

## Building Code and Systems

## 54 hours lecture

Grading: letter grade.
Students are introduced to basic elements of construction and building systems, including power distribution systems, mechanical systems, energy management, ceiling systems, flooring systems and the impact of local building codes on the interior design process. Emphasis is placed on the interaction between interior and architectural design ideas and the construction methods.
Transferable to CSU Only
DSGN 533 units
Industrial Prototyping
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This course introduces students to product development, focusing on model-making techniques, color and material studies, and visual models for industrial design. Students will develop their ideas and creativity using a series of physical and digital models to express their design concepts. Transferable to CSU Only

## DSGN 543 units

Design Methodologies
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This introductory course aims to expose you to the mindset, skillset, and toolset associated with industrial design. It does so through guided applications to framing and solving problems in design, business and engineering. Specifically, you will learn approaches to noticing and observing, framing and reframing, imagining and designing, and experimenting and testing, as well as for critique and reflection.
Transferable to CSU Only

## DSGN $60 \quad 1.5$ units

## Solidworks 1

18 hours lecture, 36 hours laboratory
Grading: letter grade.
This introductory course is the foundation of your advancement in SolidWorks. After this course, students will be able to successfully build and use Parts, Assemblies, and Drawing Layouts.
Transferable to CSU Only

## DSGN $61 \quad 1.5$ units

Solidworks 2
18 hours lecture, 36 hours laboratory
Prerequisite: DSGN 60 or DSGN 660.
Grading: letter grade.
This course will teach practical methods to design plastic and metal parts with moderate to complex shapes in Solidworks. Real-life industry examples will be used and discussed to demonstrate how to apply software commands.
Transferable to CSU Only

## DSGN 713 units

Industrial Design Studio I
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This introductory Industrial Design Studio will introduce you to the fundamental concepts, ideas, and methods involved with the human activity called Design, as well as the skills and tools needed to communicate them verbally, two-dimensionally and three-dimensionally. Students will explore, analyze and give shape to the objects within the human ecology and challenge themselves and existing paradigms by searching unlikely places for insight and inspiration.
Transferable to CSU Only
DSGN 723 units
Industrial Design Studio II
36 hours lecture, 54 hours laboratory
Prerequisite: DSGN 71.
Grading: letter grade.
This intermediate Industrial Design studio class will introduce students to the pipeline of creating a product from the ground up. Throughout the semester students will work on idea generation, prototyping, packaging, marketing, and evaluating their designs. Knowledge from the previous and current courses within the industrial design curriculum will be leveraged, from human factors to modeling and prototyping. Transferable to CSU Only

## DSGN 733 units

Industrial Design Studio III
36 hours lecture, 54 hours laboratory
Prerequisite: DSGN 71.
Grading: letter grade.
This project-specific studio will address real-world needs, parameters, and research as it applies to market trends and industry-focused development. Companies and entrepreneurs will be invited to submit industry or need-specific project briefs to the studio, which will become the project for the semester. The students will experience first-hand the challenges of designing, building, and testing within a real-life,
interdisciplinary framework.
Transferable to CSU Only
DSGN 6010 units
Photoshop for Designers

## 18 hours lecture, 36 hours laboratory

Grading: non graded.
In this course, students learn the basic use of Adobe Photoshop as a graphic design tool, focusing on the skills needed to create a quality portfolio to become a confident design professional.

## DSGN 6020 units

Illustrator for Designers
18 hours lecture, $\mathbf{3 6}$ hours laboratory
Grading: non graded.
In this course, students learn the basic use of Adobe Illustrator as a graphic design tool, focusing on the skills needed to create quality vectorbased drawings necessary in the design profession.

## DSGN 6030 units

## InDesign for Designers

18 hours lecture, 36 hours laboratory
Grading: non graded.
In this course, students learn the basic use of Adobe InDesign as a graphic design tool, focusing on the skills needed to create a quality portfolios and graphic books for the design profession.

## DSGN $660 \quad 0$ units

## Solidworks 1

18 hours lecture, 36 hours laboratory
Grading: non graded.
This introductory course introduces students to the foundation of SolidWorks. After this course, students can successfully build and use Parts, Assemblies, and Drawing Layouts.

## DSGN 6610 units

## Solidworks 2

18 hours lecture, $\mathbf{3 6}$ hours laboratory
Prerequisite: DSGN 60 or DSGN 660.
Grading: non graded.
This course will teach practical methods to design plastic and metal parts with moderate to complex shapes in Solidworks. Real-life industry examples will be used and discussed to demonstrate how to apply software commands.

## Economics (ECON)

ECON 1 (C-ID ECON 202) 3 units
Macro Economic Analysis

## 54 hours lecture

Prerequisite: Intermediate Algebra or one year of high school intermediate algebra with a second semester grade of B or better or qualification through the math placement process.
Grading: letter grade or pass/no pass.
Formerly ECON 1A. Macroeconomics is concerned with the economy as a whole and large market segments. The instructional emphasis is on macroeconomic policy. This course examines the functioning of a mixed enterprise system. Topics will include the economic role of government, determination of national income, the banking system, and Federal Reserve policy. The attention is focused on such problems as the level of unemployment, the rate of inflation, balance of payments, the nation's total output of goods and services, economic growth, fiscal and monetary policies.
Transferable to both UC and CSU; see counselor for limitations

## ECON 1H (C-ID ECON 202) 3 units

Honors Macro Economic Analysis

## 54 hours lecture

Prerequisite: Intermediate Algebra or one year of high school intermediate algebra with a second semester grade of $B$ or better or qualification through the math placement process, and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
Formerly ECON 1AH. Macroeconomics is concerned with the economy as a whole and large market segments. The instructional emphasis is on macroeconomic policy. This course examines the functioning of a mixed enterprise system. Topics will include the economic role of government, determination of national income, the banking system, and Federal Reserve policy. The attention is focused on such problems as the level of unemployment, the rate of inflation, balance of payments, the nation's total output of goods and services, economic growth, fiscal and monetary policies.
Transferable to both UC and CSU; see counselor for limitations
ECON 2 (C-ID ECON 201) 3 units
Micro Economic Analysis

## 54 hours lecture

Prerequisite: Intermediate Algebra or one year of high school intermediate algebra with a second semester grade of B or better or qualification through the math placement process.
Grading: letter grade or pass/no pass.
Formerly ECON 1B. This course examines the behaviors of individual households and firms in a mixed enterprise capitalist system. The class will include topics of price theory, distribution, resource allocation, foreign trade and comparative economic systems. Microeconomics is concerned with specific economic units or parts that make up an economic system and the relationship between these parts. The emphasis is placed on understanding the behavior of individual firms and households, and the ways in which they interact.
Transferable to both UC and CSU; see counselor for limitations

ECON 2H (C-ID ECON 201) 3 units

## Honors Micro Economic Analysis

## 54 hours lecture

Prerequisite: Intermediate Algebra or one year of high school intermediate algebra with a second semester grade of B or better or qualification through the math placement process, and qualification for the Honors Program.
Grading: letter grade.
Formerly ECON 1BH. This course examines the behaviors of individual households and firms in a mixed enterprise capitalist system. The class will include topics of price theory, distribution, resource allocation, foreign trade and comparative economic systems. Microeconomics is concerned with specific economic units or parts that make up an economic system and the relationship between these parts. The emphasis is placed on understanding the behavior of individual firms and households, and the ways in which they interact.
Transferable to both UC and CSU; see counselor for limitations
ECON 3 units
General Concepts in Economics

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a survey of economic principles, both micro and macro. This course is designed to provide non-economics and non-business majors a foundation in economics.
Transferable to both UC and CSU; see counselor for limitations

## ECON 43 units

## Contemporary Economic Issues

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course offers an economic analysis of contemporary questions including environmental, institutional, and multicultural issues. The class will determine the role of economies, as a social science, assisting in understanding causes, effects, and possible policies for current problems. The instructional emphasis is on the relationship of basic tools of economic analysis and their application to current economic problems. Transferable to both UC and CSU; see counselor for limitations

## ECON 53 units

## The Global Economy

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the location and organization of international economic activities from an economic, cultural, political, and environmental perspective. Topics covered by a faculty team drawn from economics and geography include the spatial distribution of resources and production, global flows of information, capital and labor, and regional inequalities such as income distribution, poverty, discrimination and standard of living. This class is recommended for students in business, social science and liberal arts with an interest in global and international issues, including regional and social inequalities, marketing and international trade, and tourism. This course is not open to students registered in or with credit in GEOG 5.
Transferable to both UC and CSU; see counselor for limitations

## Education (EDUC)

EDUC 63 units

Ethnic Studies for Education/Educators
54 hours lecture
Grading: letter grade.
This course will provide students with a foundational background in Ethnic Studies with regard to theories about the construction Race and Ethnicity as well as in the epistemologies derived from scholars within African American, Asian American, Native American, and Latinx/Chicanx Studies fields. Additionally, this course helps students understand the historical inequalities reproduced within education and schools, the knowledge produced by these communities and the strategies used for resistance and liberation. Likewise, students who complete the course will have better understanding of the role of intersectionality, identity, and collective struggle play in educational institutions. Units and lessons taught in this class will prepare students to utilize the concepts and methods of Ethnic Studies in teaching and pedagogical practice in K -12 education to better serve and advocate historically marginalized communities of color. This course is not open to students registered in or with credit in ETHST 6.
Transferable to both UC and CSU; see counselor for limitations
EDUC $10 \quad 1$ units
Introduction to Teaching and Learning
18 hours lecture
Corequisite: EDUC 250 or EDUC 650.
Recommended Preparation: Eligibility for READ 82 or reading proficiency met and eligibility for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.

## Grading: letter grade.

This course will provide students with an introduction to teaching as a profession. It addresses the qualities of an effective teacher, components and purposes of an effective professional portfolio, and critical issues in diverse contemporary classrooms. Ten hours of field experience and observation in an approved classroom setting is required. Students must provide Clear LiveScan fingerprinting and Clear TB test results certification (issued within the past four years) to secure fieldwork placement in the school district.
Transferable to CSU Only
EDUC 20 (C-ID EDUC 200) 3 units
Intro to Elementary Classroom Teaching

## 54 hours lecture

Corequisite: EDUC 250 or EDUC 650.
Recommended Preparation: Eligibility for READ 82 or reading proficiency met and eligibility for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.

## Grading: letter grade.

This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 ( $\mathrm{K}-12$ ). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary education issues, California's common core standards, and teacher performance standards. In addition to class time, the course requires a minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California's diverse student population and includes cooperation with at least one carefully and campus-approved certificated classroom teacher. Transferable to both UC and CSU; see counselor for limitations

## EDUC 401 units

Introduction to Educational Technology

## 18 hours lecture

Recommended Preparation: COSA 1.
Grading: letter grade.
Based on the Technology Standards for a CA K-12 Preliminary Teaching Credential, this course focuses on the technology proficiencies required prior to credential candidates being issued a preliminary Multiple or Single Subject Credential. Students will develop proficiency in educational technologies to facilitate the teaching process in a classroom setting and will apply digital literacy skills to create pedagogically sound teaching and learning products.
Transferable to CSU Only

## EDUC $130 \quad 2$ units

Intro to Secondary Classroom Teaching

## 36 hours lecture

Corequisite: EDUC 250 or EDUC 650.
Grading: letter grade.
This course introduces students to the concepts and issues related to teaching in middle and high school classrooms. Topics include teaching as a career, historical and philosophical foundations of the American education system, a comprehensive view of contemporary education issues, California's Common Core standards, Next Generation Science Standards and teacher performance standards. In addition to class time, the course requires a minimum of 15 hours of structured fieldwork in public school secondary classrooms that represent California's diverse student population, and includes cooperation with at least one carefully and campus-approved certificated classroom teacher.
EDUC $250 \quad 0.5$ units
Teacher Preparation Orientation

## 9 hours lecture

Grading: pass/no pass.
This course serves as a Teacher Preparation Program orientation and preparation for the Tomorrow's Teachers Teacher Preparation Program. Students who enroll in education fieldwork courses must complete this class. Topics covered will include teaching career pathways, professional educator standards, ethics and professionalism in classroom and school site visits, and skills preparation in implementation of school site visit protocols as well preparation for program clearances.

## EDUC 271WE 1-4 units

Career Work Experience in Teacher Ed

## 72 hours laboratory

Grading: letter grade.
Students learn and gain on-the-job experience in the field of Teacher Education. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of nonpaid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1-4 units credit.

## EDUC 6500 units

## Teacher Preparation Orientation

## 9 hours lecture

Grading: non graded.
This course serves as a Teacher Preparation Program orientation and preparation for the Tomorrow's Teachers Teacher Preparation Program. Students who enroll in education fieldwork courses must complete this class. Topics covered will include teaching career pathways, professional educator standards, ethics and professionalism in classroom and school site visits, and skills preparation in implementation of school site visit protocols as well preparation for program clearances.

# Educational Development (EDEV) 

## EDEV 6020 units <br> Social Skills Development <br> 36 hours lecture <br> Grading: non graded.

This course covers the essential social skills that students with intellectual, developmental and learning disabilities need to develop to achieve success in academic, professional and personal settings. Emphasis will be placed on the skills needed to promote appropriate social interactions, problem solving and communication.

## EDEV 6030 units

Receptive/Expressive Language Dev.

## 36 hours lecture

Grading: non graded.
This course covers receptive and expressive language skills needed for students with intellectual, developmental and learning disabilities to develop social competence. Through lecture, interactive role-play, and group assignments, students will learn the skills needed for selfadvocacy, reading social cues, teamwork and will practice job interview skills.
EDEV 6040 units
Adult Learning Assessment

## 9 hours lecture

Grading: non graded.
This course provides instruction on adult learning and learning strategies. It includes individual assessments to identify learning strengths and weaknesses for the purpose of identifying learning disabilities following the California Community College Learning Disability Eligibility model. It emphasizes the development of a plan for improved learning in all college courses.

EDEV $610 \quad 0$ units
Transition to Higher Learning

## 36 hours lecture

Grading: non graded.
This course is designed to prepare students with intellectual, developmental, and learning disabilities for college life and expectations. The main content topics include: transitioning to college, program studies/opportunities, academic and administrative requirements, resources, laws pertaining to students with disabilities, DSPS program, and tools for success for students with disabilities.

## EDEV 6110 units

Communication and Self-Advocacy
36 hours lecture
Grading: non graded.
This course is designed to assist students with intellectual, developmental, and learning disabilities to develop effective communications skills needed for self-advocacy and decisionmaking. The main content topics include: disabilities, disability/ disability limitations discloser, appropriately requesting for reasonable accommodations, appropriate social etiquette, effective techniques for conflict resolution, and adaptive skills.

## EDEV 649A 0 units

## College Study Techniques

## 18 hours lecture

Grading: non graded.
This course assists students with the development of essential strategies for academic success. Course content will cover specific techniques such as effective time management plan, note taking skills, textbook reading and test taking skills. Students will identify their own learning styles and important factors needed for college success through selfassessment and interpretation.

## Electricity (ELECT)

## ELECT $41 \quad 1.5$ units <br> Computer Applications for Tech Reports <br> 18 hours lecture, 36 hours laboratory <br> Corequisite: ELECT 600. <br> Grading: letter grade.

The course will consist of an introduction to the various software programs used in the electrical technology program. Students will develop all the components of a complete engineering technical report. The course will utilize computer applications to research and complete technical reports and documentation. Included are Computer Aided Design software, Word, Excel, Visio, Constructor, and web-based communication and information research.
Transferable to CSU Only

## ELECT 2023 units

## Electrical Mathematics

54 hours lecture
Corequisite: ELECT 600.
Grading: letter grade.
This course is designed for students enrolled in the Electrical Technology
Program or Industry professionals coming back to complete continuing education units. This course covers the learning and application of mathematics and pre-algebra needed in the electrical industry. Faculty will utilize guided learning activities to help students to take meaningful measurements and apply mathematics and electrical formulas to solve problems. Students will learn how to apply topics such as arithmetic, fractions, decimals, percentages, graphing, measurement, and pre-algebra to better understand how to solve electrical formulas.

## ELECT 2044 units

First Semester Fundamentals of DC Electricity

## 54 hours lecture, 54 hours laboratory

Prerequisite: ELECT 600 and ELECT 202 or ELECT 602 or MATH 110 or higher.
Grading: letter grade.
This course is an introduction to direct current electrical theory, its practices, applications, nomenclature and components for students beginning electrical studies for occupational goals, continuing university education or for increasing skill levels. Included in this course are formulas used in electrical theory, information regarding proper use and selection of hand tools, materials, and wiring as practiced in the electrical maintenance and construction industry. In addition, extensive hand-on lab exercises are provided to reinforce these concepts.

## ELECT 2094 units

## Second Sem Fund of Motors/Generators

54 hours lecture, 54 hours laboratory
Prerequisite: ELECT 202 and ELECT 204
Grading: letter grade.
This course covers the operational theory and practices associated with motors and generators. This includes theory associated with motors, generators, motor controls, circuit diagrams, and wiring practices in the electrical maintenance and construction industry. In addition, extensive hand-on lab exercises are provided to reinforce these concepts.

## ELECT 2124 units

Third Semester Fund of AC Electricity
54 hours lecture, 54 hours laboratory
Prerequisite: ELECT 225 and ELECT 209.
Grading: letter grade.
This course is an introduction to alternating current theory, practices and applications with studies of nomenclature and components. It is an advanced course that requires previous direct current electrical coursework and math including right angle trigonometry. In addition, extensive hand-on lab exercises are provided to reinforce these concepts.

## ELECT 2144 units

Fourth Semester AC Principles \& Pract
54 hours lecture, 54 hours laboratory
Prerequisite: ELECT 212.
Grading: letter grade.
This is an advanced course that requires knowledge of AC circuitry, systems, and components. This course covers the complete electrical design of a commercial/industrial facility inclusive of general electrical, AC motors, lighting, transformers and electrical load calculations. All design work is completed to applicable codes. In addition, extensive hand-on lab exercises are provided to reinforce these concepts.

## ELECT 2254 units

Algebra and Trigonometry for Technicians
72 hours lecture
Prerequisite: ELECT 202 or ELECT 602 or MATH 110 or higher
Corequisite: ELECT 600.
Grading: letter grade.
Formerly MATH 225. This course will present basic algebra and trigonometry and their application to the solution of practical problems in technical (mechanical, electrical, construction) fields. This course is not open for credit to students registered in or with credit in MATH 225, 220, 230, 110 and 150

## ELECT 2272 units

Variable Speed Drive Fundamentals
18 hours lecture, 54 hours laboratory
Prerequisite: ELECT 204 or ETEC 40.
Grading: letter grade.
This course covers the theory, circuit designs and application of direct current and alternating current variable speed drives. Topics include basic fabrication techniques, semiconductor usage, and control of both DC and AC Drives. Students will work through testing and troubleshooting exercises as well as determine the proper speed drives for specific applications.

ELECT 230A 2 units
Robotics Technology - Design
18 hours lecture, 54 hours laboratory
Grading: letter grade.
This course utilizes the engineering model of design, system integration and applications development as applied to the area of industrial and marine robotics technology, including power and control systems, troubleshooting, hydraulic and pneumatic systems, programming fundamentals, and issues relating to the operation of electrical equipment in harsh environments. Students may start the series in any segment to develop skills specific to each topic.

## ELECT 230B 2 units

Robotics Technology - Integration
18 hours lecture, 54 hours laboratory
Grading: letter grade.
This course utilizes the engineering model of design, system integration and applications development as applied to the area of industrial and marine robotics technology, including power and control systems, troubleshooting, hydraulic and pneumatic systems, programming fundamentals, and issues relating to the operation of electrical equipment in harsh environments. Students may start the series in any segment to develop skills specific to each topic.

## ELECT 2312 units

Electro-Hydraulics and Pneumatic Systems
18 hours lecture, 54 hours laboratory
Prerequisite: ELECT 204 or ETEC 40.
Grading: letter grade.
This course covers the operation and troubleshooting of electro-hydraulic and electro-pneumatic (fluid power) systems. Control of fluid power systems with automation devices including Programmable Logic Controllers (PLCs) is included. This is a hands-on course with work on operating hydraulic and pneumatic actuators and controls.

## ELECT $240 \quad 3$ units

Introduction to National Electrical Code
54 hours lecture
Prerequisite: ELECT 204.
Grading: letter grade.
This course is an introduction to National Electrical Code. The interpretation of electrical wiring diagrams, material use, installation methods and calculation of electrical loads to size feeders and conductors is included.

ELECT $242 \quad 1.5$ units
Electrical Code-Grounding
27 hours lecture
Prerequisite: ELECT 240.
Grading: letter grade.
This course covers National Electrical Code requirements for grounding. Grounding system components, principles of operation, design and fault current calculations are included.

## ELECT 2453 units

## Electrical Code-Commercial

54 hours lecture
Prerequisite: ELECT 240.
Grading: letter grade.
This course covers National Electrical Code requirements for commercial, office and light industrial wiring. The electrical layout and design of commercial buildings, feeder circuit calculations, branch circuit calculations and circuit over current protection are included.

## ELECT 2462 units

## NFPA 70E for Manufacturing

## 36 hours lecture

Prerequisite: ELECT 240.
Grading: letter grade.
The NFPA 70E is an industry consensus standard for electrical safety in the workplace. This standard provides practical methods for protecting personnel from electrical workplace hazards. Students will learn how to identify factors relating to electrical safety and how to properly correct these problems. Safe workplace practices and the selection of proper personal protective equipment will be covered.

## ELECT 2471 units

Electrical Code-Solar

## 18 hours lecture

Prerequisite: ELECT 240.
Grading: letter grade.
This course covers aspects of the National Electrical Code and Article 690 as they pertain to solar electrical installations and associated equipment. Safety, installation, grounding, bonding and vehicle chargers are among the items covered.

## ELECT $250 \quad 3$ units

Electrical Code-Industrial

## 54 hours lecture

Prerequisite: ELECT 240.
Grading: letter grade.
This course covers National Electrical Code requirements for industrial applications. Materials and wiring methods for heavy industrial applications, life, safety and hazardous systems are included.

## ELECT 2532 units

OSHA Standards for Construction Safety

## 36 hours lecture

Corequisite: ELECT 600.
Grading: pass/no pass.
This course covers Occupational Safety and Health Administration (OSHA) policies, procedures, and standards, with emphasis on safety and health principles in the construction trades. Topics include Industrial Hygiene, Managing Safety and Health through the hierarchy of controls as applied to the OSHA construction standards. Special attention is given to those areas that are extremely hazardous and often result in serious injury to construction workers. Upon successful course completion with meeting OSHA attendance requirements, the student will receive an OSHA Department of Labor (DOL) 30 Hour Construction Outreach Training Completion Card.

## ELECT 2561 units

## High Voltage Safety Awareness

## 18 hours lecture

Prerequisite: ELECT 240 and ELECT 253.
Grading: letter grade.
The focus of this course is on voltages over 600 volts, which in the workplace presents unique and potentially deadly hazards to employees. The course covers the recommended best safety practices, personal protective equipment, and safe approach distances for working with voltages between 600 volts and 16k volts. Industry standards from OSHA (Occupational Safety and Health Administration) and NFPA 70E (National Fire Protection Association) are covered.

## ELECT 2623 units

Solar 1-Grid-Tied Solar Photovoltaics
45 hours lecture, 27 hours laboratory
Prerequisite: ELECT 200B or ELECT 209.
Grading: letter grade.
This level 1 lecture/laboratory electrical course will introduce students to the components that make up a photovoltaic (PV) system and the function of each. Students will also learn how to install, troubleshoot, and maintain a residential solar electric system.

## ELECT $263 \quad 3$ units

Solar 2-Advanced Solar Photovoltaics
45 hours lecture, 27 hours laboratory
Prerequisite: ELECT 262.
Grading: letter grade.
In this level 2 lecture/laboratory course students build upon skills learned in ELECT 262 to design and implement a cost-effective stand-alone photovoltaic (PV) system with battery backup. Students will also learn how to analyze data from system monitoring hardware and software, and use that data to adjust a PV system for optimal performance.

## ELECT 2652 units

## Conductors

18 hours lecture, 54 hours laboratory
Prerequisite: ELECT 212.
Grading: letter grade.
This course provides an understanding of how to identify and interpret AC single-line and three-line diagrams, connection and interconnection drawings, electrical symbols, and ANSI device numbers associated with electrical equipment. Students will learn to verify correct type and ratings of Low and Medium voltage power cables to include shielding requirements. Students will learn methods and procedures for testing cables and interpreting test data. InterNational Electrical Testing Association (NETA) standards are adhered to in this course.

## ELECT 2662 units

## Circuit Breakers

## 18 hours lecture, 54 hours laboratory

Prerequisite: ELECT 212.
Grading: letter grade.
This course is an overview of the construction, application, function, operation, testing, and analyzation of test results of molded-case, insulated-case, and power-type circuit breakers and switches. It is a course that requires previous Alternating Current electrical coursework and math. InterNational Electrical Testing Association (NETA) standards are adhered to in this course.

## ELECT 2672 units

## Switchgear and Switchboards

## 18 hours lecture, 54 hours laboratory

Prerequisite: ELECT 212.
Grading: letter grade.
This course discusses the operation and servicing of Switchgear, Switchboards, and Motor Control Centers, their function as a system, their operational control logic, motor starting methods, all to ANSI/NETA maintenance and testing specifications. This course requires previous coursework in Alternating Current Electricity. InterNational Electrical Testing Association (NETA) standards are adhered to in this course.

## ELECT $268 \quad 2$ units

## Transformers

18 hours lecture, 54 hours laboratory
Prerequisite: ELECT 212.
Grading: letter grade.
This course describes the basic applications of power distribution transformers, consisting of two or more coupled windings, in single and three-phase systems and defines transformer winding configurations for step-up or step-down operation and the various ancillary components incorporated to monitor and cool windings. Students will learn the various electrical tests used to analyze transformer windings, and identify the transformer's ability to operate within the energized electrical system. InterNational Electrical Testing Association (NETA) standards are adhered to in this course.

## ELECT 2713 units

## Electrical Cost Estimating 1

## 54 hours lecture

Prerequisite: ELECT 277.
Grading: letter grade.
This course will present an introduction to electrical cost estimating, including take-off and listing procedures. It is designed for students preparing to enter electrical estimating occupations or electrical contracting work.

## ELECT 2751 units

Electrical Pipe Bending
9 hours lecture, 27 hours laboratory
Prerequisite: ELECT 225.
Grading: letter grade.
This course is a study of how to properly calculate, layout and bend Electrical Metallic Tubing (EMT) and Rigid Metal Conduit (RMC). Methods taught include hand bending and the use of mechanical and machine benders per Industry standards and National Electrical Code (NEC) standards.

## ELECT 2773 units

## Blueprint Reading for Electricians

## 54 hours lecture

Prerequisite: ELECT 212.
Grading: letter grade.
This course is designed for students to comprehend, and correctly interpret blueprints used in the electrical and related construction trades.

## ELECT $280 \quad 3$ units

## Traffic Signal Systems 1

45 hours lecture, 27 hours laboratory
Recommended Preparation: ELECT 204.
Grading: letter grade.
This first course in traffic signal systems includes instruction on the building and wiring of a working intersection. CalTrans and NEC Standards and requirements, copper wiring, controller, pole and signal head installation, and controller theory are covered in this hands-on course

## ELECT 2833 units

Traffic Systems Communications
45 hours lecture, 27 hours laboratory
Recommended Preparation: ELECT 204.
Grading: letter grade.
This course provides instruction in Traffic Signal Communications Systems. The course content will cover communications theory, microwave, VHF/UHF radios, vision monitoring and detection, antenna systems. This hands-on course will further include the testing and troubleshooting of communications systems.

## ELECT 2843 units

Traffic Signal Controllers \& Digital Systems
45 hours lecture, 27 hours laboratory
Prerequisite: ELECT 204.
Grading: letter grade.
This is a course in digital logic and microprocessor controls as applied to Traffic Signal Systems. This hands-on course will include troubleshooting of digital traffic controllers. Course topics will include, but are not limited to, interface logic, electronics, and theory of system operation.

## ELECT 2852 units <br> Traffic Signal Inspection and Safety <br> 36 hours lecture

Prerequisite: ELECT 280 and ELECT 284.
Grading: letter grade.
This course covers the processes necessary for the proper inspection of traffic signal systems. Topics will include areas of inspection and proper inspection methods. Additional topics in safety as it relates to traffic signals will be covered.

## ELECT $400 \quad 2$ units

## Electrical Certification Exam Prep

36 hours lecture
Grading: pass/no pass.
This course prepares students to take the California Electrician Certification Exam. It includes testing methods, rapid code lookup, code calculations and applications. This course cannot be used for credit toward the certificate or degree in Electrical Technology.

## ELECT 435A 2 units

Motor Control Wiring and Troubleshooting
18 hours lecture, 54 hours laboratory
Prerequisite: ELECT 209.
Grading: letter grade.
This course covers the theoretical and practical principles involving the control of direct and alternating current electric motors. Industry standard wiring practices and troubleshooting methods are covered. An introduction to Programmable Logic Controllers (PLCs) is included. Mandatory safety awareness assessment will be conducted early in the course.
ELECT 435B 2 units
Programmable Logic Controllers (PLC) 1
18 hours lecture, 54 hours laboratory
Prerequisite: ELECT 435A.
Grading: letter grade.
This course consists of advanced theoretical and practical principles involving the control of direct and alternating current electric motors and automation systems. Topics covered include Programmable Logic Controllers (PLCs), ladder logic, wiring, timing and programming. GE Fanuc PLCs and GE Proficy software are utilized.

## ELECT 435C 3 units

HMI and Advanced PLC Programming
45 hours lecture, 27 hours laboratory
Prerequisite: ELECT 435B.
Grading: letter grade.
This course is an introduction to Human Machine Interface (HMI) concepts and programming along with advanced Programmable Logic Controller (PLC) programming. This is a hands-on class with programming of displays and PLCs which will build upon programming skills learned in ELECT 435B. Introductory process control, factory automation and SCADA (Supervisory Control and Data Acquisition) concepts are covered.

## ELECT $600 \quad 0$ units

## Electrical Program \& Safety Preparation

## 9 hours lecture

Grading: non graded.
This is a preparation and orientation course for the Electrical Technology
Program. Students planning on enrolling in either the ELECT or CISCO
series of classes must complete this class. Topics covered will include curriculum guide navigation, electrician trainee status, program completion certificates, program math requirements and substitutions, Associate Degree requirements, student safety and personal protective equipment, expectations of students in the program and examples of expected work product.

## ELECT 6010 units

Computer Applications for Tech Reports
18 hours lecture, 36 hours laboratory
Corequisite: ELECT 600.
Grading: non graded.
The course will consist of an introduction to the various software programs used in the electrical technology program. Students will develop all the components of a complete engineering technical report. The course will utilize computer applications to research and complete technical reports and documentation. Included are Computer Aided Design Software, Word, Excel, Visio, Constructor, and web-based communication and information research.

## ELECT 6020 units

Electrical Mathematics

## 54 hours lecture

Corequisite: ELECT 600.
Grading: non graded.
This course is designed for students enrolled in the Electrical Technology Program or Industry professionals coming back to complete continuing education units. This course covers the learning and application of mathematics and pre-algebra needed in the electrical industry. Faculty will utilize guided learning activities to help students to take meaningful measurements and apply mathematics and electrical formulas to solve problems. Students will learn how to apply topics such as arithmetic, fractions, decimals, percentages, graphing, measurement, and pre-algebra to better understand how to solve electrical formulas.
ELECT 619B 0 units
FCC Amateur Radio Technician Lic. Prep.

## 36 hours lecture

Recommended Preparation: ELECT 630A.
Grading: non graded.
This course prepares students to take the FCC Technician License exam for Amateur Radio Operators. Students will learn all the elements contained in the licensing exam as well as participate in example exams. This class will cover the latest test banks as directed by the FCC. Students will learn through lecture topics, computer aided material and hands-on examples.

## ELECT 620A 0 units

## Electric Cable Termination IPC-620C

18 hours lecture, 54 hours laboratory
Grading: non graded.
This course is the first of two courses where students learn proper cable termination methods and practices while working under the industry standard IPC/WHMA-A-620. The IPC/WHMA-A-620 standard provides the electronics industry with the most current criteria for the performance and acceptance of cable and wire harness assemblies. Students are prepared for entry level jobs in the aerospace and industrial harness and wiring industries.

## ELECT 620B 0 units

Electric Cable Inspection IPC-620C
18 hours lecture, 18 hours laboratory
Grading: non graded.
This course is the second of two courses where students learn cable harness and wire inspection methods per IPC/WHMA-A-620. Students will use their cable assemblies from ELECT 620A and are taught proper cable inspection methods and practices. The IPC/WHMA-A-620 provides the electronics industry with the most current criteria for the performance and acceptance of cable and wire harness assemblies. Students are prepared for entry level jobs in the aerospace and industrial harness and wiring industries.

## ELECT 630A 0 units

## Intro to Electronics

9 hours lecture, 18 hours laboratory
Grading: non graded.
This course provides hands-on experience covering basic electronics and electronic assembly. Electronic components are covered as well as soldering techniques and kit assembly. Students are introduced to schematic reading, basic circuit analysis as well. This class provides a pathway to additional classwork in electronics, RF communication and robotics.

## ELECT 630B 0 units

## Introductory Robotics Camp

9 hours lecture, 18 hours laboratory
Recommended Preparation: ELECT 630A.
Grading: non graded.
This course provides hands-on experience that will introduce students to the fundamentals of Industrial Robotics as well as Underwater Robotics. This is a hands-on class and students will learn how to program Omron Industrial Robots and how to pilot underwater robots.

## ELECT 632A 0 units

## Electrical Power Generation

18 hours lecture, 54 hours laboratory
Recommended Preparation: ELECT 602.
Grading: non graded.
This course provides hands-on experience covering the connection and operation of a power generation system, including electrical connections, control systems and documentation. This covers the electrical half of a diesel or CNG electric power generation system.

## ELECT 632B 0 units

## Power Generation Troubleshooting

18 hours lecture, 54 hours laboratory
Recommended Preparation: ELECT 632A.
Grading: non graded.
This course provides hands-on experience troubleshooting motor generator based power generator systems covering possible faults and operational problems and proper methods of troubleshooting and repair. Test procedures, service schedules and general maintenance are covered.

# Emergency Medical Technology (EMT) 

EMT 2514 units

Emergency Medical Technician
72 hours lecture
Recommended Preparation: BIO 60.
Grading: letter grade.
This course will enable the student to develop basic skills in the assessment, rescue, immediate treatment and transport of the urgently ill or injured client. Course content emphasizes identifying and correcting life-threatening conditions, identifying rescue activities and developing a systematic approach to the care of the client and the performance of rescue activities. Relevant information on traumatic injuries, medical emergencies, environmental hazards, rescue techniques and equipment will be integrated.

## EMT 251L 2 units

## Emergency Medical Technician Laboratory

108 hours laboratory
Corequisite: EMT 251.
Recommended Preparation: BIO 60.
Grading: pass/no pass.
This course is designed to develop basic skills in the assessment, rescue, immediate treatment and transport of the urgently ill or injured client. Emphasis will be placed on identifying and correcting life-threatening conditions, identifying rescue problems and developing a systematic approach to the care of the client and the performance of rescue activities. Integrated into this course will be relevant information on traumatic injuries, medical emergencies, environment hazards, rescue techniques and equipment. There may be mandatory assignments that include evenings and weekends.

## EMT 2521 units

Emergency Medical Tech I Refresher
18 hours lecture, 9 hours laboratory
Prerequisite: Current EMT - 1 Certification.
Grading: letter grade.
Formerly EMT 252AD. The EMT-1 must have certification that is current or not expired more than six months. This course will be a review and update of life support measures, CPR and use of emergency medical equipment and supplies for the certified EMT-I.

## Engineering (ENGR)

## ENGR 3A 3 units

Essential Engr Graphics \& 3D CAD Drafting
36 hours lecture, $\mathbf{7 2}$ hours laboratory
Prerequisite: MATH 120 or one year high school geometry.
Grading: letter grade.
This course will review the methods of graphic expression common to the various fields of engineering. It will follow engineering drafting standards and procedures through working drawings. The use of computers to prepare and study engineering drawings and solving engineering space problems by orthographic methods will be emphasized.
Transferable to both UC and CSU; see counselor for limitations

## ENGR 3B 3 units

## Advanced Engr Graphics \& 3D CAD Drafting

36 hours lecture, 72 hours laboratory
Prerequisite: ENGR 3A and MATH 40.
Grading: letter grade.
This course will review the principles of graphic expression through working drawings. It will expand on the principles of descriptive geometry as studied in ENGR 3A. The use of computer drafting software as well as charts, diagrams and graphic solutions are discussed.
Transferable to both UC and CSU; see counselor for limitations

## ENGR 113.5 units

Digital Logic Design
54 hours lecture, 36 hours laboratory
Prerequisite: MATH 130.
Grading: letter grade or pass/no pass.
A modern introduction to logic design and the basic building blocks used in digital systems, in particular digital computers. Discussion of combinational logic: logic gates, minimization techniques, arithmetic circuits, and modern logic devices such as field programmable logic gates. Sequential circuits: flip-flops, synthesis of sequential circuits, and case studies, including counters, registers, and random access memories. State machines are discussed and illustrated through case studies of more complex systems using programmable logic devices. This course is intended for students transferring to an engineering program such as electrical, computer, or biomedical.
Transferable to CSU Only

## ENGR 173 units

## Electrical Engineering Circuits

## 54 hours lecture

Corequisite: MATH 70 and PHYS 3B.
Grading: letter grade.
This course provides an introduction to elecrical circuits from an engineering perspective. This includes mesh and node equations, controlled sources, Thevenin and Norton equivalencies, natural response of RLC circuits, phasor analysis and other topics.
Transferable to both UC and CSU; see counselor for limitations

## ENGR 17L 1 units

Electrical Engineering Circuits Lab
54 hours laboratory
Corequisite: ENGR 17.
Grading: letter grade.
This course provides a laboratory study of electrical circuits and instrumentation to accompany the lecture course.
Transferable to both UC and CSU; see counselor for limitations

## ENGR 353 units

Statics
54 hours lecture
Prerequisite: MATH 60.
Corequisite: PHYS 3A.
Grading: letter grade.
This is a first course in mechanics that will enable engineering students to analyze any problem in a simple and logical manner and to apply to its solution a few, well-understood, basic principles. This course introduces students to statics of particles, rigid bodies, equilibrium of two- and threedimensional force systems employing free-body diagrams. Topics that will be examined are centroids, center of gravity, analysis of structures, friction, and forces in beams and cables.
Transferable to both UC and CSU; see counselor for limitations

## ENGR 443 units

Materials Science and Engineering

## 54 hours lecture

Prerequisite: CHEM 1A and PHYS 3A.
Grading: letter grade.
This course presents an introduction to atomic bonding, crystalline structure and microstructure, and how these structures determine the physical, mechanical, electrical and thermal properties of materials.
The course covers metals, ceramics, polymers, composites and semiconductors. Topics include material imperfections, diffusion, mechanical properties, phase diagrams, material selection, processing, heat treatment and strengthening mechanisms. Corrosion phenomena, electrical properties and thermal properties are also covered.
Transferable to CSU Only

## ENGR 501 units

Introduction to Engineering

## 18 hours lecture

Grading: pass/no pass.
This course is an introduction to engineering concepts from various branches of engineering.
Transferable to both UC and CSU; see counselor for limitations

## ENGR 543.5 units

## Computer Methods

## 54 hours lecture, $\mathbf{3 6}$ hours laboratory

Prerequisite: MATH 60 (may be taken concurrently)
Grading: letter grade or pass/no pass.
This course will introduce students to the nature of computers, algorithms, problem solving procedures and programming. This course is designed to explore computer methods used to solve various applications from engineering, computer science, physical sciences and math areas. $\mathrm{C}++$ is the primary programming language. The course also introduces MATHEMATICA and MATLAB software with applications from Engineering, Science and Mathematics.
Transferable to both UC and CSU; see counselor for limitations

## Engineering Technology (ETEC)

## ETEC 102 units

Introduction to Engineering Technology
36 hours lecture
Grading: letter grade or pass/no pass.
Formerly TEC 10. This course explores the varied branches of engineering technology profession, the functions of an engineer technologist, and the differences between a traditional academic engineering pathway and an academic engineering technology pathway. Students will explore industries in which an engineering technologist would be employed and explore effective strategies for students to reach their full academic potential. The course will cover an introduction to the methods and tools of engineering technology, problem solving, design, current issues in society, ethics, a respect for diversity and inclusion as related to the engineering technology profession. Students will be introduced to communication skills pertinent to engineering technology professions. Transferable to both UC and CSU; see counselor for limitations

## ETEC 203 units

Introduction to Engineering and Design
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly TEC 20. In this course, students will gain a basic understanding of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on the design process, geometric relationships, multi-view drawings and assembly drawings per American Society of Mechanical Engineers Y14.5 (ASME Y14.5) standards, drawings for production and various manufacturing processes, modeling, 3D printing and packaging.
Transferable to both UC and CSU; see counselor for limitations

## ETEC 303 units

Principles of Engineering Technology
36 hours lecture, $\mathbf{7 2}$ hours laboratory
Recommended Preparation: MATH 110 or MATH 110B.
Grading: letter grade or pass/no pass.
Formerly TEC 30. This course introduces the student to principles of engineering technology by the use of activity-based learning, projectbased learning, and problem-based learning. The student will learn about the design process, communication and documentation, engineering systems, statics and strength of materials, properties of materials and materials testing, reliability, and kinematics.
Transferable to both UC and CSU; see counselor for limitations

## ETEC 403 units

Electronics for Engineering Technology
36 hours lecture, $\mathbf{7 2}$ hours laboratory
Recommended Preparation: MATH 110 or 110B.
Grading: letter grade or pass/no pass.
Formerly TEC 40. In this course, students are introduced to the applications in electronics in engineering technology. The topics include safety, Ohm's Law, engineering notation, direct current circuits, capacitance, inductance, impedance, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flip-flops, shift registers, and micro-processors. Techniques in computer simulation and electrical measurements will be stressed. *This is a non-math based course that transfers to an Engineering Technology program.
Transferable to CSU Only

## ETEC 603 units

Material Science for Engineering Tech

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a study of the chemical, physical and mechanical properties of industrial materials including metals, ceramics, polymers, and composites. The course emphasizes the processes and tests used with different industrial materials during the manufacturing cycles. It also discusses function and structure as they relate to specific design considerations. This course is designed for students who are currently working in a manufacturing plant or pursuing a career in the engineering technology field.
Transferable to CSU Only

## English (ENGL)

ENGL 1 (C-ID ENGL 100)
4 units
Reading and Composition
72 hours lecture
Grading: letter grade.
In this course, students read and analyze college-level texts in order to write researched, thesis-based essays.
Transferable to both UC and CSU; see counselor for limitations
ENGL 1H (C-ID ENGL 100) 4 units
Honors Reading and Composition

## 72 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
In this course, students read and analyze college-level texts in order to write researched, thesis-based essays. Eligibility for the Honors Program is required for enrollment.
Transferable to both UC and CSU; see counselor for limitations
ENGL 1 S (C-ID ENGL 100) 5 units
Reading and Composition with Support
90 hours lecture
Grading: letter grade.
In this course, students read and analyze college-level texts in order to write researched, thesis-based essays. The course provides supplemental skills support through scaffolded, collaborative, individualized activities, and one-to-one feedback from a writing instructor necessary to complete ENGL1 criteria.
Transferable to both UC and CSU; see counselor for limitations
ENGL 2 (C-ID ENGL 120) 4 units
Introduction to Literature/Composition

## 72 hours lecture

Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This introduction to analysis of and writing about literature focuses on the three major genres of fiction, drama, and poetry. Writing assignments are designed to develop students' critical thinking and reading skills through the analysis and interpretation of the reading material.
Transferable to both UC and CSU; see counselor for limitations
ENGL 3 (C-ID ENGL 105) 4 units
Argumentative and Critical Writing
72 hours lecture
Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course offers an introduction to the elements and uses of critical thinking and writing. Analytical, persuasive, evaluative, and argumentative writing will be emphasized, as well as the evaluation and use of both electronic and conventional sources.
Transferable to both UC and CSU; see counselor for limitations
ENGL 3H (C-ID ENGL 105) 4 units

## Honors Argumentative \& Critical Writing

## 72 hours lecture

Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course offers an introduction to the elements and uses of critical thinking and writing. Analytical, persuasive, evaluative, and argumentative writing will be emphasized, as well as the evaluation and use of both electronic and conventional sources.
Transferable to both UC and CSU; see counselor for limitations

ENGL 4 (C-ID ENGL 110) 4 units

## Critical Analysis of Literature

## 72 hours lecture

Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade.
This course develops critical thinking skills through the written analysis of literary elements in fiction, poetry, and drama. Writing assignments emphasize argumentative strategies and the effective use of primary and secondary sources.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 4H 4 units

## Honors Critical Analysis of Literature

## 72 hours lecture

Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S and qualification for the Honors Program.
Grading: letter grade.
This course develops critical thinking skills through the written analysis of literary elements in fiction, poetry, and drama. Writing assignments emphasize argumentative strategies and the effective use of primary and secondary sources.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 63 units

## Production of Literary Publications

## 36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
Formerly ENGL 6AD. Students will study the principles and practice involved in editing and producing complete literary publications ranging in size and complexity from small pamphlets to books.
Transferable to CSU Only

## ENGL 73 units

Editing a Literary Review

## 54 hours lecture

Grading: letter grade or pass/no pass.
Students interested in editorial work will examine contemporary literary
journals, reviews, and creative publications and analyze the basic
philosophy of editing a journal. Also, they will have hands-on experience analyzing, considering, and choosing manuscripts appropriate to the standards of a literary journal.
Transferable to CSU Only
ENGL 153 units
Intro to Latino/Latina/Latinx Literature
54 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade.
This course introduces representative works of literature written by Latino/Latina/Latinx authors and develops students' close reading and analytical writing skills while promoting an appreciation for the qualities of this literature from historical, philosophical, social, political, and aesthetic perspectives.
Transferable to CSU Only

## ENGL 163 units

Introduction to LGBTQIA+ Literature

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade.
This course introduces students to the analysis of and writing about representative fiction, drama, autobiography, poetry, and essays written by LGBTQIA+ (lesbian, gay, bisexual, trans, queer, intersex, and asexual) authors and about LGBTQIA+ lives. This course promotes an appreciation for the qualities of this literature from historical, philosophical, social, political, and aesthetic perspectives.
Transferable to CSU Only
ENGL 173 units
Intro to African American Literature

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade.
This course introduces students to the analysis of and writing about representative fiction, drama, autobiography, poetry, essays, and oral literature written by African American authors from 1700s to the present. This course promotes an appreciation for the qualities of this literature from historical, philosophical, social, political, and aesthetic perspectives. Transferable to CSU Only

## ENGL 244 units

## College Grammar

## 72 hours lecture

Grading: letter grade or pass/no pass.
College Grammar is a transfer-level course designed to lead students through an examination of the English language, focusing on both theory and practice in grammar, usage, and mechanics. It is recommended for students who wish to strengthen their knowledge of grammar and to improve their skill in writing and speaking in English as well as for people who need a strong knowledge of grammar, usage and mechanics for professional purposes.
Transferable to CSU Only
ENGL 26 (C-ID ENGL 200)
3 units

## Creative Writing 1

## 54 hours lecture

Recommended Preparation: ENGL 1, ENGL 1S, or an equivalent course. Grading: letter grade or pass/no pass.
This course offers an introduction to practical and supervised experience in the fundamentals of writing fiction and poetry, through the study and analysis of the works of established professional and peer writers.
Students will practice writing in various genres and will be introduced to the workshop method.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 323 units

## Masterpieces/Asian Literature (in English)

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course is an introduction to Asian literature (in translation), with an emphasis on major literary works of India, China and Japan. The course is designed for students with a general interest in diverse literatures and their historical, cultural, and philosophical contexts.
Transferable to both UC and CSU; see counselor for limitations

ENGL 334 units

## Mythology

72 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This class focuses on the study of myths of various nations and archetypal mythic patterns. The reading and analysis of literature is based on these myths and patterns.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 33H 4 units

## Honors Mythology

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This class focuses on the study of myths of various nations and archetypal mythic patterns. The reading and analysis of literature is based on these myths and patterns.
Transferable to both UC and CSU; see counselor for limitations
ENGL 344 units
Literature for Children and Young Adults
72 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.

## Grading: letter grade.

This course introduces representative works of literature written for children and young adults and develops students' close reading and analytical writing skills while promoting an appreciation for the qualities of literature from historical, philosophical, social, political, and aesthetic perspectives.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 353 units

## Interpreting the Short Story

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course is a study of the interpretation of the short story and application of the meanings found in short stories to real-life situations through class discussion and writing assignments.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 363 units

The Novel

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course is a study of the novel as a literary form. Students will read representative works in the English, American, European Continental, and other traditions within their respective cultural contexts. The course will examine how literary movements and schools, critical concepts such as canonicity, and various formal elements shape conceptions of the novel. Transferable to both UC and CSU; see counselor for limitations

## ENGL $37 \quad 3$ units

## Science Fiction, Fantasy and Horror

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course surveys major works of speculative fiction with an emphasis on major themes and genres.
Transferable to both UC and CSU; see counselor for limitations
ENGL 383 units
The Bible as Lit: The Old Testament
54 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course surveys the narratives, poetry, and literary structure of the Old Testament, the Hebrew Bible. The course is designed for students interested in broadening their understanding of the literary characteristics, the culture, and the historical contexts of the Old Testament.
Transferable to both UC and CSU; see counselor for limitations
ENGL 393 units
The Bible as Lit: Apocrypha/New Testament
54 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course surveys the narratives, poetry, parables, letters, and literary structure of the New Testament and Apocrypha. The course is designed for students interested in studying the literary characteristics as well as the cultural and historical contexts of the books of the New Testament and the Apocrypha.
Transferable to both UC and CSU; see counselor for limitations
ENGL 41 (C-ID ENGL 130) 4 units

## American Literature I

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course is a survey of American literature from Native American oral literature to published texts from the time of the Civil War. Readings will include authors of diverse cultural backgrounds: African American, European American, Hispanic American, and Native American.
Transferable to both UC and CSU; see counselor for limitations
ENGL 42 (C-ID ENGL 135) 4 units

## American Literature II

72 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course is a survey of American literature from the Civil War to the present. Readings will include authors of diverse cultural backgrounds: African American, Asian American, European American, Mexican American, and Native American. We will consider how social and political issues influence the authors' works, and we will discuss literary movements so we can see how American literature has evolved. Transferable to both UC and CSU; see counselor for limitations

ENGL 43A 4 units
Introduction to Shakespeare
72 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course presents Shakespeare as a major literary figure in the context of the Elizabethan and Jacobean periods and the history of British literature. It involves reading, discussion, and analysis of seven plays and selected sonnets.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 43B 4 units

Introduction to Shakespeare
72 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
The course presents Shakespeare as a major literary figure in the context of the Elizabethan and Jacobean periods and the history of British literature. This course involves reading, discussion, and analysis of seven later plays and selections from the longer poems.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 44 (C-ID ENGL 140)

4 units

## World Literature I

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course offers a comparative survey of the historical development of world literature in translation from ancient times to the mid or late seventeenth century, including works from Europe, the Middle East, Asia, and other areas and reflecting philosophical, political, and artistic changes in western and eastern cultures.
Transferable to both UC and CSU; see counselor for limitations
ENGL 44H (C-ID ENGL 140)
4 units
Honors World Literature I

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course offers an honors comparative survey of the historical development of world literature in translation from ancient times to the mid or late seventeenth century, including works from Europe, the Middle East, Asia, and other areas and reflecting philosophical, political, and artistic changes in western and eastern cultures.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 45 (C-ID ENGL 145) 4 units <br> World Literature II <br> 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course focuses on world literature with an emphasis on works in translation, covering works from the Renaissance to contemporary times and emphasizing an appreciation of aesthetic, philosophical, and cultural concepts.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 45H (C-ID ENGL 145) <br> 4 units

## Honors World Literature II

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S
through the LBCC placement process and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course focuses on world literature with an emphasis on works in translation, covering works from the Renaissance to contemporary times and emphasizing an appreciation of aesthetic, philosophical, and cultural concepts.
Transferable to both UC and CSU; see counselor for limitations
ENGL 46 (C-ID ENGL 160) 4 units
Survey of British Literature I

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This survey of English literature from the early medieval period to the last quarter of the eighteenth century includes study of the historical, philosophical, political, social, and aesthetic concepts inherent in the works and their milieus.
Transferable to both UC and CSU; see counselor for limitations
ENGL 47 (C-ID ENGL 165) 4 units
Survey of British Literature II

## 72 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S
through the LBCC placement process.
Grading: letter grade or pass/no pass.
This survey of British literature covers British writers from the Age of Romanticism in the 18th century, through the Victorian Era, and into the 21 st century and includes study of the historical, philosophical, political, social, and aesthetic concepts inherent in the works and their milieus. Transferable to both UC and CSU; see counselor for limitations

ENGL 483 units
Modern \& Contemporary Literature

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This class is a study of imaginative literature written from the late 19th through the early 21 st centuries. Writers chosen will represent world literature and will generally be those who have exerted a strong influence on contemporary attitudes, ideas, aesthetics, and values. The course will explore the revolutionary ways of writing and seeing that are peculiar to recent major artists.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 48H 3 units

## Honors Modern \& Contemporary Literature

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This class is a study of imaginative literature written from the late 19th through the early 21 st centuries. Writers chosen will represent world literature and will generally be those who have exerted a strong influence on contemporary attitudes, ideas, aesthetics, and values. The course will explore the revolutionary ways of writing and seeing that are peculiar to recent major artists.
Transferable to both UC and CSU; see counselor for limitations
ENGL 493 units
Film and Literature
54 hours lecture
Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course will offer an examination of the ways in which literary works are related to film through the interdisciplinary study of structure and theme. The course will focus on analysis of cross-cultural/gender issues and artistic approaches, with focus on film adaptations of significant works from American, Western, and non-Western cultures, primarily novels and plays. Discussion will include ways in which literary works successfully or unsuccessfully translate into films.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 49H 3 units

Honors Film and Literature

## 54 hours lecture

Prerequisite: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process and qualification for the Honors Program.
Grading: letter grade or pass/no pass.
English 49 H will offer an examination of the ways in which literary works are related to film through the interdisciplinary study of structure and theme. The course will focus on analysis of cross-cultural/gender issues and artistic approaches, with focus on film adaptations of significant works from American, Western, and non-Western cultures, primarily novels and plays. Discussion will include ways in which literary works successfully or unsuccessfully translate into films.
Transferable to both UC and CSU; see counselor for limitations
ENGL 50A 3 units
Introduction to Poetry Writing
54 hours lecture
Prerequisite: ENGL 26.
Grading: letter grade or pass/no pass.
Formerly ENGL 27A. This course offers an introduction to practical experience in writing, appreciating and analyzing poetry.
Transferable to both UC and CSU; see counselor for limitations

ENGL 50B 3 units
Intermediate Poetry Writing

## 54 hours lecture

Prerequisite: ENGL 50A.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere in which to write original poetry. This course focuses on theory, technique and practical discipline of writing poetry; and examines basic forms of poetry. Students discuss the techniques of poetry and present manuscripts of their own work for critical discussion. In addition, students learn to write critiques, demonstrating an intermediate knowledge of poetic technique and terminology.
Transferable to CSU Only
ENGL 50C 3 units
Advanced Poetry Writing
54 hours lecture
Prerequisite: ENGL 50B.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere in which to write and revise original poetry. Students enrolled in this course should be presently working on a portfolio of poetry. This course is designed to assist students in developing and revising poetry manuscripts to meet contemporary publication standards.
Transferable to CSU Only
ENGL 50D 3 units
Writing and Publishing Poetry
54 hours lecture
Prerequisite: ENGL 50C.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere focusing on preparation of a book length manuscript for publication. This course is designed to assist students in preparing and marketing professional manuscripts of a select number of poems for publication. Students will focus on current standards for query letters and other submission procedures. Manuscripts submitted for workshop will meet contemporary publication standards.
Transferable to CSU Only
ENGL 51A 3 units
Introduction to Fiction Writing

## 54 hours lecture

Prerequisite: ENGL 26.
Grading: letter grade or pass/no pass.
Formerly ENGL 27B. This course offers an intensive workshop
atmosphere in which to write short fiction. The course focuses on theory, technique and practical discipline of writing fiction, and examines models from various genres. Students discuss the techniques of storytelling and present manuscripts of their own work for critical discussion. Transferable to both UC and CSU; see counselor for limitations

## ENGL 51B 3 units

Intermediate Fiction Writing

## 54 hours lecture

Prerequisite: ENGL 51A.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere in which to write original short fiction and focuses on theory, technique and practical discipline of writing fiction. It also examines basic models of short stories. Students discuss the techniques of storytelling and present manuscripts of their own work for critical discussion. In addition, students learn to write critiques demonstrating an intermediate
knowledge of literary technique and terminology.
Transferable to CSU Only
ENGL 51C 3 units
Advanced Fiction Writing
54 hours lecture
Prerequisite: ENGL 51B.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere focusing on analysis of the elements of fictional structure through student examination of works in progress. Students enrolled in this course should be presently working on a portfolio of short stories. This course is designed to assist students in developing and revising manuscripts to meet contemporary publication standards.
Transferable to CSU Only

## ENGL 51D 3 units

Writing and Publishing Fiction

## 54 hours lecture

Prerequisite: ENGL 51C.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere focusing on preparation of a book length manuscript for publication. This course is designed to assist students in preparing and marketing professional manuscripts of a select number of short stories for publication. Students will focus on current standards for query letters and other submission procedures. Manuscripts submitted for workshop will meet contemporary publication standards.
Transferable to CSU Only

## ENGL 52A 3 units

Introduction to Novel Writing

## 54 hours lecture

Prerequisite: ENGL 26.
Grading: letter grade or pass/no pass.
Formerly ENGL 27E. This course offers an intensive workshop atmosphere in which to write an original work of book-length fiction. The course focuses on theory, technique and practical discipline of writing fiction, and examines models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others). Students discuss the techniques of storytelling and present manuscripts of one's own work for critical discussion.
Transferable to both UC and CSU; see counselor for limitations

## ENGL 52B 3 units

## Intermediate Novel Writing

## 54 hours lecture

Prerequisite: ENGL 52A.
Grading: letter grade or pass/no pass.
This course offers a workshop atmosphere focusing on planning and developing an original novel length manuscript. This course focuses on theory, technique, practical discipline of writing fiction and examines models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others). Students discuss the techniques of storytelling and present manuscripts of their own work for critical discussion. In addition, students learn to write critiques demonstrating a working knowledge of literary technique and terminology.
Transferable to CSU Only

## ENGL 52C 3 units

Advanced Novel Writing

## 54 hours lecture

Prerequisite: ENGL 52B.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere focusing on analysis of the elements of dramatic fictional structure through student examination of works in progress. Students enrolled in this course should be presently working on a novel based manuscript. This course is designed to assist students in developing and revising manuscripts to meet contemporary publication standards.
Transferable to CSU Only
ENGL 52D 3 units
Writing and Publishing The Novel

## 54 hours lecture

Prerequisite: ENGL 52C.
Grading: letter grade or pass/no pass.
This course offers an intensive workshop atmosphere focusing on preparation of a novel length manuscript for publication. This course is designed to assist students in preparing and marketing professional manuscripts for publication. Students will focus on current standards for query letters and other submission procedures. Manuscripts submitted for workshop will meet contemporary publication standards.
Transferable to CSU Only
ENGL 53A 3 units
Introduction to Creative Nonfiction

## 54 hours lecture

Prerequisite: ENGL 26.
Grading: letter grade.
In this course, students read and write creative nonfiction prose. The course focuses on theory, technique and practical discipline of writing creative nonfiction, and examines models from various categories of prose (the personal essay, memoir, the lyric essay, the experimental essay, nature and travel writing, profiles, and others). Students discuss the craft and techniques of creative nonfiction storytelling and present original prose of one's own work for critical discussion.
Transferable to both UC and CSU; see counselor for limitations

ENGL 99 1-3 units
Directed (Independent) Study

## 54 hours lecture

Grading: pass/no pass.
This course provides the student an opportunity to explore research problems in English not covered in the regular departmental offerings.
Regular conferences with the instructor are coordinated with assigned
work and/or research projects.
Transferable to CSU Only
ENGL 1054 units

## Fundamentals of Writing

## 72 hours lecture

Grading: letter grade or pass/no pass.
This course focuses on expository and argumentative writing, standard written English, and critical reading. The course prepares students for entrance into ENGL1. During the semester, students are required to complete 3 hours of supplemental learning activities in a Success Center.

## ENGL 6000 units

## Great Works of Literature

## 54 hours lecture

## Grading: non graded.

This course is an introduction to literature with an emphasis on both the reading of major works of literature and on training in written expression especially for the older adult population.

## ENGL 6270 units

## Writing for Publication or Pleasure

## 54 hours lecture

Grading: non graded.
This course gives especially older adult students experience with the creative and critical processes in creative writing.

## ENGL 6960 units

Reading and Composition Skills Support

## 36 hours lecture

Corequisite: ENGL 1.
Grading: non graded.
This course offers concurrent instructional support for ENGL 1 students whose assessment indicates they need additional practice in critical reading, writing, thinking, and success strategies. The course provides scaffolded (collaborative and individualized) activities and one-on-one feedback from a writing instructor to supplement the skills necessary to complete ENGL 1 concurrently during a single semester.

## ENGL 801A 4 units

## College English Skills I

## 72 hours lecture

Prerequisite: Qualification through the LBCC assessment process for English.
Grading: pass/no pass.
This course focuses on expository writing, standard written English, and critical reading, especially at the paragraph level. During the semester, students are required to complete 3 hours of supplemental learning activities in a Success Center.

## ENGL 801B 4 units

## College English Skills II

## 72 hours lecture

Prerequisite: ENGL 801A or qualification through the LBCC assessment process for English, which must be completed before registration. Grading: pass/no pass.
This course focuses on expository writing, standard written English, and critical reading, especially moving from the paragraph to essay level. During the semester, students are required to complete 3 hours of supplemental learning activities in a Success Center.

## ENGL 8962 units

Reading and Composition Skills Support
36 hours lecture
Corequisite: ENGL 1.
Grading: pass/no pass.
This course offers concurrent instructional support for ENGL 1 students whose assessment indicates they need additional practice in critical reading, writing, thinking, and success strategies. The course provides scaffolded (collaborative and individualized) activities and one-on-one feedback from a writing instructor to supplement the skills necessary to complete ENGL 1 concurrently during a single semester.

## English as a Second Language (ESL)

## ESL 1 S (C-ID ENGL 100) 5 units <br> College Writing for Non-Native Speakers <br> 90 hours lecture <br> Grading: letter grade.

In this course, non-native speakers of English read and analyze collegelevel texts in order to write researched, thesis-based essays. The course provides supplemental support through scaffolded, collaborative, individualized activities, and one-to-one feedback from a writing instructor necessary to complete ENGL 1 criteria.
Transferable to both UC and CSU; see counselor for limitations
ESL 33X 5 units
College English with Computers for ESL

## 90 hours lecture

Prerequisite: ESL 56X or qualification through the LBCC assessment process for ESL.
Recommended Preparation: READ 883AX.
Grading: letter grade.
This course is an intensive study of reading and writing English focusing on the academic language skills needed for the AA and AS degrees. Skills taught include expository essay writing, summarizing, paraphrasing, reading comprehension, and critical analysis. Students use personal computers to complete the writing assignments. This course prepares students for ESL 34X.
Transferable to both UC and CSU; see counselor for limitations

## ESL 34X 5 units <br> College English with Computers for ESL <br> 90 hours lecture

Prerequisite: ESL 33X or qualification through the LBCC assessment process for ESL.
Recommended Preparation: Read 883AX.
Grading: letter grade.
This course is an intensive study of reading and writing English focusing on the academic language skills needed for the AA and AS degrees and entrance into English 1. Students use personal computers to complete the writing assignments. Skills taught include expository and argumentative essay writing, summarizing of academic readings and articles about current events, critical analysis of readings in literature, library and Internet research, and use and documentation of sources. Transferable to both UC and CSU; see counselor for limitations

## ESL 54X 5 units <br> Effective Writing with Computers for ESL <br> 90 hours lecture

Prerequisite: ESL 147 or qualification through the LBCC assessment process for ESL.
Grading: letter grade or pass/no pass.
To prepare for college level writing, ESL 54X provides ESL students with intensive sentence structure practice while they learn to write coherent paragraphs incorporating the use of transitional devices. Students will be introduced to and practice paraphrasing. Writing assignments will be prepared using personal computers.

## ESL 56X 5 units

## College Writing with Computers for ESL

90 hours lecture
Prerequisite: ESL 147 or ESL 54X or qualification through the LBCC assessment process for ESL.
Grading: letter grade or pass/no pass.
This course focuses on intensive summarizing of articles and writing of conceptual paragraphs that incorporate the elements of cohesion, unity, and support to prepare students for college level writing. Rhetorical modes covered include narration, description, explanation, and persuasion. All writing assignments are done on personal computers.

## ESL 1465 units

## Comprehensive Grammar I

90 hours lecture
Prerequisite: ESL 645 or 845 or qualification through the LBCC assessment process for English or ESL.
Grading: letter grade or pass/no pass.
Formerly ESL 146AB. This course is the first of two courses which together constitute a comprehensive review of the basic grammar of English in its entirety, together with the presentation of more complex grammatical features and troublesome exceptions, for students who have mastered or nearly mastered the fundamentals of English. The course provides in-depth study of the grammatical features and basic sentence patterns of English which students must command in order to succeed in academic, college-level courses. Also included in the course are the writing of multi-clause sentences and work with a variety of English idioms formed with irregular verbs.

## ESL 1475 units

Comprehensive Grammar II

## 90 hours lecture

Prerequisite: ESL 146.
Grading: letter grade or pass/no pass.
Formerly ESL 147AB. This course is the second of two courses which together constitute a comprehensive review of the basic grammar of English in its entirety, together with the presentation of more complex grammatical features and troublesome exceptions, for students who have mastered or nearly mastered the fundamentals of English. The course provides in-depth study of the grammatical features and basic sentence patterns of English which students must command in order to succeed in academic, college-level courses. Also included in the course are the writing of multi-clause sentences and work with a variety of English idioms formed with irregular verbs.
ESL 2705 units
Listen/Speak for Work for ESL Level 1
90 hours lecture
Prerequisite: ESL 844 or ESL 644.
Grading: letter grade or pass/no pass.
The first course in a three-course sequence in listening and speaking skills for the workplace for ESL. Cultural, sociolinguistic and nonverbal communication strategies and norms for a U.S. workplace setting are identified, analyzed and practiced.

## ESL 2715 units

Read/Write for Work for ESL Level 1

## 90 hours lecture

Prerequisite: ESL 844 or ESL 644.
Recommended Preparation: Students are strongly advised to enroll in ESL 270 and ESL 271 in the same semester.
Grading: letter grade or pass/no pass.
The first course in a three-course sequence of reading and writing skills for the workplace for ESL. Sociolinguistic and organizational norms for writing in a U.S. workplace setting are identified, analyzed and practiced.

## ESL 2725 units

Listen/Speak for Work for ESL Level 2

## 90 hours lecture

Prerequisite: ESL 670 or ESL 270.
Recommended Preparation: Students are strongly advised to enroll in ESL 272 and ESL 273 in the same semester.
Grading: letter grade or pass/no pass.
The second course in a three-course sequence in listening and speaking skills for the workplace for ESL. Cultural, sociolinguistic and nonverbal communication strategies and norms for a U.S. workplace setting are identified, analyzed and practiced.

## ESL 2735 units

Read/Write for Work for ESL Level 2

## 90 hours lecture

Prerequisite: ESL 671 or ESL 271.
Recommended Preparation: Students are strongly advised to enroll in ESL 272 and ESL 273 in the same semester.
Grading: letter grade or pass/no pass.
The second course in a three-course sequence of reading and writing skills for the workplace for ESL. Sociolinguistic and organizational norms for writing in a U.S. workplace setting are identified, analyzed and practiced.

## ESL 2745 units

## Listen/Speak for Work for ESL Level 3

## 90 hours lecture

Prerequisite: ESL 672 or ESL 272.
Recommended Preparation: Students are strongly advised to enroll in ESL 274 and 275 in the same semester.
Grading: letter grade or pass/no pass.
The third course in a three-course sequence in listening and speaking skills for the workplace for ESL. Cultural, sociolinguistic and nonverbal communication strategies and norms for a U.S. workplace setting are identified, analyzed and practiced.

## ESL 2755 units

Read/Write for Work for ESL Level 3

## 90 hours lecture

Prerequisite: ESL 673 or ESL 273.
Recommended Preparation: Students are strongly advised to enroll in ESL 274 and ESL 275 in the same semester.
Grading: letter grade or pass/no pass.
Formerly ESL 275X. The third course in a three-course sequence of reading and writing skills for the workplace for ESL. Sociolinguistic and organizational norms for writing in a U.S. workplace setting are identified, analyzed and practiced.

## ESL 602A 0 units

## Reading Skills for ESL Students 1

## 27 hours lecture

Grading: non graded.
This first course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read, and build vocabulary. ESL 602A teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students learn the rules for morphology, spelling and reading to assist them in vocabulary building, pronunciation and comprehension. Course content coincides with ESL 800.

## ESL 602B 0 units

Reading Skills for ESL Students 2

## 27 hours lecture

Recommended Preparation: ESL 602A.
Grading: non graded.
This second course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 602B teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 602A and in addition learn to analyze a passage for specific content and define words in context. Course content coincides with ESL 801.

## ESL 602C 0 units

## Reading Skills for ESL Students 3

## 27 hours lecture

Recommended Preparation: ESL 602B.
Grading: non graded.
This third course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 602C teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 602B and in addition learn to analyze a passage for specific content and define words in context. Course content coincides with ESL 802.

ESL 602D 0 units
Reading Skills for ESL Students 4
27 hours lecture
Recommended Preparation: ESL 602C.
Grading: non graded.
This fourth course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 602D teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 602C and in addition learn to make inferences and support opinions about reading selections. Course content coincides with ESL 803.

## ESL 602E 0 units

Reading Skills for ESL Students 5
27 hours lecture
Recommended Preparation: ESL 602D.
Grading: non graded.
This fifth course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 602E teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 602D and in addition learn to compare characters in readings and differentiate word meaning by context. Course content coincides with ESL 804.

ESL 602F 0 units

## Reading Skills for ESL Students 6

27 hours lecture
Recommended Preparation: ESL 602E.
Grading: non graded.
This sixth course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 602F teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 602E and in addition learn to identify central conflicts of stories and make inferences based on facts and details. Course content coincides with ESL 805.

## ESL 610A 0 units

Fundamentals of English Grammar 1

## 54 hours lecture

Recommended Preparation: ESL 645.
Grading: non graded.
This course is designed to support ESL students in the intermediate academic reading and/or writing classes. It is the first of a two-course sequence designed to introduce grammatical terminology and guide intermediate ESL students to mastery of the seven major parts of speech. ESL 610A emphasizes the use of verb tenses and agreement between subject and verb, article and noun, as well as verb and adverb. It emphasizes the correct construction of phrases, including noun, verb, and prepositional phrases, and simple sentences.

## ESL 610B 0 units

## Fundamentals of English Grammar 2

## 54 hours lecture

Recommended Preparation: ESL 610A.
Grading: non graded.
This course is designed for advanced ESL students in the advanced academic reading and/or writing classes. It is the second of a two-course sequence designed for advanced ESL students. It enables students to master correct English word order at the phrase, simple sentence, compound sentence and complex sentence level. Students continue to master the usage and word order of the seven major parts of speech, the relationship between phrases and clauses, and the relationship between independent and dependent clauses, focusing on adverbial phrases, noun clauses, adjective clauses, and adverbial/subordinate clauses.

## ESL 6120 units

Reading for Information and Pleasure
27 hours lecture
Recommended Preparation: ESL 645 or 845.
Grading: non graded.
This course is designed to improve students' ability to extract essential information from academic passages of a variety of written English material while building vocabulary, improving dictionary skills, and developing comprehension and critical reading skills.

## ESL 6130 units

Conversation

## 27 hours lecture

Recommended Preparation: ESL 645 or 845.
Grading: non graded.
This course develops conversational competence and confidence in whole-class, small-group, and partner interactions. Emphasis is on the comprehension and evaluation of oral communications as students practice expressing opinions, feelings, ideas, and abstract concepts.

## ESL 6140 units <br> Composition for ESL Students <br> 27 hours lecture

Recommended Preparation: ESL 645 or 845.
Grading: non graded.
This course (Composition) offers intermediate level ESL students systematic instruction and practice in the construction of short connected series of sentences which state an opinion, describe a process, give information or instructions, or report an experience. This course provides instruction and practice in organizing ideas and in identifying and writing topic and support sentences

## ESL 6150 units

Accent Reduction
108 hours lecture
Recommended Preparation: ESL 645 or 845.
Grading: non graded.
This intensive semester-long pronunciation course for intermediate to advanced non-native speakers focuses on the mastery of the English vowel/consonant sound system, stress patterns, melody, rhythm, and intonation of intelligible speech. Extended contextual practice enables students to modify nonstandard pronunciation patterns and achieve improved oral communication.

## ESL 6180 units

## Vocabulary Development

## 54 hours lecture

Recommended Preparation: ESL 645 or ESL 845.
Grading: non graded.
In this course, nonnative students prepare for academic success
in institutions of higher learning by studying the general academic vocabulary encountered across college disciplines. Instruction focuses on incorporating vocabulary mastery strategies that stimulate students to become active lifelong learners of the North American English lexicon.

## ESL 628 units

Literacy for English Language Learners 1
27 hours lecture
Grading: non graded.
The first course in a two-course sequence to develop literacy skills of English language learners.

## ESL 6290 units

## Literacy for English Language Learners 2

## 27 hours lecture

Recommended Preparation: Placement into this class is via ESL
department assessment.
Grading: non graded.
The second course in a two-course sequence to develop literacy skills of English language learners.

## ESL $630 \quad 0$ units

Reading for Citizenship 1

## 54 hours lecture

Recommended Preparation: Placement is determined via assessment by ESL department faculty.
Grading: non graded.
The first course in a two-course sequence for beginning level English language learners. Students will develop the language competency through content-based instruction in order to take the U.S. citizenship examination.

## ESL 6310 units <br> Reading for Citizenship 2 <br> 54 hours lecture

Recommended Preparation: Placement is determined via assessment by ESL department faculty.
Grading: non graded.
The second course in a two-course sequence for beginning level English language learners. Students will develop the language competency through content-based instruction in order to take the U.S. citizenship examination.

## ESL 632AX 0 units

## Reading for Citizenship AX

## 72 hours lecture

Recommended Preparation: Placement is determined via assessment by
ESL department faculty.
Grading: non graded.
A compressed reading for citizenship course for high-beginner English language learners. Students will develop language competency through content-based instruction in order to prepare for the U.S. citizenship examination.

## ESL 6400 units <br> English for Everyday 0 <br> 108 hours lecture

Grading: non graded.
This course is the first of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 6410 units

## English for Everyday 1

108 hours lecture
Prerequisite: ESL 640 or ESL 840 or qualification through the LBCC assessment process for ESL.
Grading: non graded.
This course is the second of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 6420 units

English for Everyday 2

## 108 hours lecture

Prerequisite: ESL 6461 or ESL 841 or qualification through the LBCC assessment process for ESL.
Grading: non graded.
This course is the third in a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written Standard North American English for natives.

## ESL 6430 units <br> English for Everyday 3 <br> 108 hours lecture

Prerequisite: ESL 642 or ESL 842 or qualification through the LBCC assessment process for ESL.
Grading: non graded.
This course is the fourth of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 6440 units <br> English for Everyday 4 <br> 108 hours lecture

Prerequisite: ESL 643 or ESL 843 or qualification through the LBCC assessment process for ESL.
Grading: non graded.
This course is the fifth of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 6450 units <br> English for Everyday 5 <br> 108 hours lecture

Prerequisite: ESL 644 or ESL 844 or qualification through the LBCC assessment process for ESL.
Grading: non graded.
This course is the sixth of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 6640 units

Integrated College Language Skills 1

## 90 hours lecture

Recommended Preparation: ESL 645 or ESL 845 or placement through the college placement process.
Grading: non graded.
This course is the first of three integrated skills ESL courses in an intensive study of reading and writing English with listening and speaking, focused on the academic language skills needed for success in the transfer-level courses ESL1S or English 1. Skills taught include intensive review verb tenses, parts of speech, parts of sentences, and multi-clause sentences. Also covered are essential reading concepts, focusing on reading comprehension strategies, vocabulary enrichment, and interpretation of extra-textual information, exposure to longer text selections provides opportunities for applying academic reading skills. This course also provides instruction in the strategies necessary for academic college reading and listening with an emphasis on notetaking, the application of comprehension, vocabulary and critical reading and listening skills in academic and literary texts.

## ESL 6650 units

Integrated College Language Skills 2

## 90 hours lecture

Recommended Preparation: ESL 146 or ESL 147 or ESL 864 or ESL 664 or placement through the college placement process.
Grading: non graded.
This course is the second of three integrated skills ESL courses in an intensive study of reading and writing English with listening and speaking, focused on the academic language skills needed for success in the transfer-level courses ESL1S or English 1. Skills taught include intensive summarizing of articles and writing of conceptual paragraphs that incorporate the elements of cohesion, unity, and support to prepare students for college level writing. Rhetorical modes covered include narration, description, explanation, and persuasion. Also covered are essential reading concepts, focusing on reading comprehension strategies, vocabulary enrichment, and interpretation of extra-textual information. Exposure to longer text selections provides opportunities for applying academic reading skills. This course also provides instruction in the strategies necessary for academic college reading and listening with an emphasis on notetaking, the application of comprehension, vocabulary and critical reading and listening skills in academic and literary texts.

## ESL 6660 units <br> Integrated College Language Skills 3 <br> 90 hours lecture

Recommended Preparation: ESL 54X or ESL 56X or ESL 865 or ESL 665 or placement through the college placement process.
Grading: non graded.
This course is the third and final integrated ESL skills courses in an intensive study of reading and writing English with listening and speaking, focused on the academic language skills needed for success in the transfer-level courses ESL1S or English 1. Skills taught include expository writing and speaking, focusing on a range of rhetorical patterns, summarizing, and an introduction to argumentative essay writing, and research and documentation of sources. This course also provides instruction in the strategies necessary for academic college reading and listening with an emphasis on notetaking, the application of comprehension, vocabulary and critical reading and listening skills in academic and literary texts.

## ESL $670 \quad 0$ units <br> Listen/Speak for Work for ESL Level 1 90 hours lecture

Prerequisite: ESL 844 or ESL 644.
Recommended Preparation: Students are strongly advised to enroll in ESL 670 and ESL 671 in the same semester.
Grading: non graded.
The first course in a three-course sequence in listening and speaking skills for the workplace for ESL. Cultural, sociolinguistic and nonverbal communication strategies and norms for a U.S. workplace setting are identified, analyzed and practiced.

## ESL 6710 units

Read/Write for Work for ESL Level 1

## 90 hours lecture

Prerequisite: ESL 844 or ESL 644.
Recommended Preparation: Students are strongly advised to enroll in ESL 670 and ESL 671 in the same semester.
Grading: non graded.
Formerly ESL 671X. The first course in a three-course sequence of reading and writing skills for the workplace for ESL. Sociolinguistic and organizational norms for writing in a U.S. workplace setting are identified, analyzed and practiced.

## ESL 6720 units

Listen/Speak for Work for ESL Level 2
90 hours lecture
Prerequisite: ESL 670 or ESL 270.
Recommended Preparation: Students are strongly advised to enroll in ESL 672 and ESL 673 in the same semester.
Grading: non graded.
The second course in a three-course sequence in listening and speaking skills for the workplace for ESL. Cultural, sociolinguistic and nonverbal communication strategies and norms for a U.S. workplace setting are identified, analyzed and practiced.

## ESL 6730 units

Read/Write for Work for ESL Level 2

## 90 hours lecture

Prerequisite: ESL 671 or ESL 271.
Recommended Preparation: Students are strongly advised to enroll in ESL 672 and ESL 673 in the same semester.
Grading: non graded.
Formerly ESL 673X. The second course in a three-course sequence of reading and writing skills for the workplace for ESL. Sociolinguistic and organizational norms for writing in a U.S. workplace setting are identified, analyzed and practiced.

## ESL 6740 units

## Listen/Speak for Work for ESL Level 3

90 hours lecture
Prerequisite: ESL 672 or ESL 272.
Recommended Preparation: Students are strongly advised to enroll in ESL 674 and ESL 675 in the same semester.
Grading: non graded.
The third course in a three-course sequence in listening and speaking skills for the workplace for ESL. Cultural, sociolinguistic and nonverbal communication strategies and norms for a U.S. workplace setting are identified, analyzed and practiced.

## ESL 6750 units

Read/Write for Work for ESL Level 3

## 90 hours lecture

Prerequisite: ESL 673 or ESL 273.
Recommended Preparation: Students are strongly advised to enroll in ESL 674 and ESL 675 in the same semester.
Grading: non graded.
Formerly ESL 675X. The third course in a three-course sequence of reading and writing skills for the workplace for ESL. Sociolinguistic and organizational norms for writing in a U.S. workplace setting are identified, analyzed and practiced.

## ESL $800 \quad 1.5$ units

## Reading Skills for ESL Students 1

27 hours lecture
Grading: pass/no pass.
This first course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read, and build vocabulary. ESL 800 teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students learn the rules for morphology, spelling and reading to assist them in vocabulary building, pronunciation and comprehension.

## ESL $801 \quad 1.5$ units

Reading Skills for ESL Students 2
27 hours lecture
Recommended Preparation: ESL 800.
Grading: pass/no pass.
This second course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 801 teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 800 and in addition learn to analyze a passage for specific content and define words in context.

## ESL $802 \quad 1.5$ units

## Reading Skills for ESL Students 3

## 27 hours lecture

Recommended Preparation: ESL 801.
Grading: pass/no pass.
This third course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 802 teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 801 and in addition learn to analyze a passage for specific content and define words in context.
ESL $803 \quad 1.5$ units
Reading Skills for ESL Students 4

## 27 hours lecture

Recommended Preparation: ESL 802.
Grading: pass/no pass.
This fourth course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 803 teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 802 and in addition learn to make inferences and support opinions about reading selections.

## ESL $804 \quad 1.5$ units

Reading Skills for ESL Students 5

## 27 hours lecture

Recommended Preparation: ESL 803.
Grading: pass/no pass.
This fifth course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 804 teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 803 and in addition learn to compare characters in readings and differentiate word meaning by context.

## ESL $805 \quad 1.5$ units

## Reading Skills for ESL Students 6

27 hours lecture
Recommended Preparation: ESL 804.
Grading: pass/no pass.
This sixth course in a series of six reading skills courses is designed to teach ESL students how to read, comprehend what they read and build vocabulary. ESL 805 teaches students how to read and comprehend words, sentences, paragraphs and passages or texts without the dependency on a dictionary. Working with material appropriate to this level, students build upon the content of ESL 804 and in addition learn to identify central conflicts of stories and make inferences based on facts and details.

ESL 810A 3 units
Fundamentals of English Grammar 1

## 54 hours lecture

Recommended Preparation: ESL 645 or ESL 845.
Grading: pass/no pass.
Formerly ESL 810. This course is the first of a two-course sequence designed to introduce grammatical terminology and guide intermediate ESL students to mastery of the seven major parts of speech. ESL 810A emphasizes the use of verb tenses and agreement between subject and verb, article and noun, as well as verb and adverb. It emphasizes the correct construction of phrases, including noun, verb, and prepositional phrases, and simple sentences.

## ESL 810B 3 units

Fundamentals of English Grammar 2

## 54 hours lecture

Recommended Preparation: ESL 810A.
Grading: pass/no pass.
This course is the second of a two-course sequence designed for high-intermediate ESL students. It enables students to master correct English word order at the phrase, simple sentence, compound sentence and complex sentence level. Students continue to master the usage and word order of the seven major parts of speech, the relationship between phrases and clauses, and the relationship between independent and dependent clauses, focusing on adverbial phrases, noun clauses, adjective clauses, and adverbial/subordinate clauses.

## ESL $812 \quad 1.5$ units

## Reading for Information and Pleasure

## 27 hours lecture

Recommended Preparation: ESL 645 or 845.
Grading: pass/no pass.
Formerly ESL 812AB. This course is designed to improve students' ability to extract essential information from academic passages of a variety of written English material while building vocabulary, improving dictionary skills, and developing comprehension and critical reading skills.

## ESL $813 \quad 1.5$ units

Conversation

## 27 hours lecture

Recommended Preparation: ESL 645 or 845.
Grading: pass/no pass.
Formerly ESL 813AB. This course develops conversational competence and confidence in whole-class, small-group, and partner interactions. Emphasis is on the comprehension and evaluation of oral communications as students practice expressing opinions, feelings, ideas, and abstract concepts.

## ESL $814 \quad 1.5$ units

## Composition for ESL Students

27 hours lecture
Recommended Preparation: ESL 645 or 845.
Grading: pass/no pass.
Formerly ESL 814AB. This course (Composition) offers intermediate level ESL students systematic instruction and practice in the construction of short connected series of sentences which state an opinion, describe a process, give information or instructions, or report an experience. This course provides instruction and practice in organizing ideas and in identifying and writing topic and support sentences.

## ESL 8156 units

Accent Reduction

## 108 hours lecture

Recommended Preparation: ESL 645 or 845.
Grading: pass/no pass.
Formerly ESL 815AB. This intensive semester-long pronunciation course for intermediate to advanced non-native speakers focuses on the mastery of the English vowel/consonant sound system, stress patterns, melody, rhythm, and intonation of intelligible speech. Extended contextual practice enables students to modify nonstandard pronunciation patterns and achieve improved oral communication.

## ESL 8183 units <br> Vocabulary Development <br> 54 hours lecture

Recommended Preparation: ESL 645 or 845.
Grading: pass/no pass.
Formerly ESL 818AB. In this course, nonnative students prepare for academic success in institutions of higher learning by studying the general academic vocabulary encountered across college disciplines. Instruction focuses on incorporating vocabulary mastery strategies that stimulate students to become active lifelong learners of the North American English lexicon.

## ESL 8406 units

English for Everyday 0
108 hours lecture
Grading: pass/no pass.
Formerly ESL 840AB. This course is the first of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 8416 units

## English for Everyday 1

108 hours lecture
Prerequisite: ESL 640 or ESL 840 or qualification through the LBCC
assessment process for ESL.
Grading: pass/no pass.
Formerly ESL 841AB. This course is the second of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 8426 units <br> English for Everyday 2 <br> 108 hours lecture

Prerequisite: ESL 6461 or ESL 841 or qualification through the LBCC assessment process for ESL.
Grading: pass/no pass.
Formerly ESL 842AB. This course is the third in a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written Standard North American English for natives.

## ESL 8436 units

## English for Everyday 3

## 108 hours lecture

Prerequisite: ESL 642 or ESL 842 or qualification through the LBCC assessment process for ESL.
Grading: pass/no pass.
Formerly ESL 843AB. This course is the fourth of a six-course series in the basics of English language structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 8446 units

English for Everyday 4

## 108 hours lecture

Prerequisite: ESL 643 or ESL 843 or qualification through the LBCC assessment process for ESL.
Grading: pass/no pass.
Formerly ESL 844AB. This course is the fifth of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on producing grammatical features and on comprehending spoken and written standard North American English.

## ESL 8456 units <br> English for Everyday 5 <br> 108 hours lecture

Prerequisite: ESL 644 or ESL 844 or qualification through the LBCC assessment process for ESL.
Grading: pass/no pass.
Formerly ESL 845AB. This course is the sixth of a six-course series in the basics of English structure designed to bring students up to basic college level in the language and prepare them for success in academic and vocational programs offered by the college. Emphasis is on the mastery of productive grammatical features and on comprehension of spoken and written standard North American English.

## ESL 8645 units

Integrated College Language Skills 1
90 hours lecture
Recommended Preparation: ESL 645 or ESL 845 or placement through the college placement process.
Grading: letter grade or pass/no pass.
This course is the first of three integrated skills ESL courses in an intensive study of reading and writing English with listening and speaking, focused on the academic language skills needed for success in the transfer-level courses ESL1S or English 1. Skills taught include intensive review verb tenses, parts of speech, parts of sentences, and multi-clause sentences. Also covered are essential reading concepts, focusing on reading comprehension strategies, vocabulary enrichment, and interpretation of extra-textual information, exposure to longer text selections provides opportunities for applying academic reading skills. This course also provides instruction in the strategies necessary for academic college reading and listening with an emphasis on notetaking, the application of comprehension, vocabulary and critical reading and listening skills in academic and literary texts.

## ESL 8655 units <br> Integrated College Language Skills 2 <br> 90 hours lecture

Recommended Preparation: ESL 146 or ESL 147 or ESL 864 or ESL 664 or placement through the college placement process.
Grading: letter grade or pass/no pass.
This course is the second of three integrated skills ESL courses in an intensive study of reading and writing English with listening and speaking, focused on the academic language skills needed for success in the transfer-level courses ESL1S or English 1. Skills taught include intensive summarizing of articles and writing of conceptual paragraphs that incorporate the elements of cohesion, unity, and support to prepare students for college level writing. Rhetorical modes covered include narration, description, explanation, and persuasion. Also covered are essential reading concepts, focusing on reading comprehension strategies, vocabulary enrichment, and interpretation of extra-textual information. Exposure to longer text selections provides opportunities for applying academic reading skills. This course also provides instruction in the strategies necessary for academic college reading and listening with an emphasis on notetaking, the application of comprehension, vocabulary and critical reading and listening skills in academic and literary texts.

## ESL 8665 units

Integrated College Language Skills 3

## 90 hours lecture

Recommended Preparation: ESL 54X or ESL 56X or ESL 865 or ESL 665 or placement through the college placement process.
Grading: letter grade or pass/no pass.
This course is the third and final integrated skills ESL courses in an intensive study of reading and writing English with listening and speaking, focused on the academic language skills needed for success in the transfer-level courses ESL1S or English 1. Skills taught include expository writing and speaking, focusing on a range of rhetorical patterns, summarizing, and an introduction to argumentative essay writing, and research and documentation of sources. This course also provides instruction in the strategies necessary for academic college reading and listening with an emphasis on notetaking, the application of comprehension, vocabulary and critical reading and listening skills in academic and literary texts.

# English as a Second Language, Learning Center (ESLLC) 

ESLLC 6990 units<br>Basic Skills for ESL Students<br>54 hours laboratory<br>Grading: non graded.

This course provides individualized programmed instruction for nonnative speakers of English who are enrolled in courses and need to improve their mastery of English as a Second Language or who are enrolled in ESL courses but need additional assistance in building or improving literary or communicative skills.

# English, Writing Reading Center (EWRC) 

EWRC $890 \quad 0.5$ units
Sentence Structure
4 hours lecture, 16 hours laboratory
Grading: pass/no pass.
Formerly EWRC 890AD. This course offers instruction and practice in a variety of sentence structure skills and is available to students enrolled in classes in any discipline. Instruction may focus on using complete sentences, correcting sentences, and varying sentence structure.

## EWRC 8910.5 units

Spelling Principles
4 hours lecture, 16 hours laboratory
Grading: pass/no pass.
Formerly EWRC 891AD. This course assesses individual spelling needs through a developmentally appropriate tool and provides instruction based on individual need.

EWRC $893 \quad 0.5$ units
Punctuation
4 hours lecture, 16 hours laboratory
Grading: pass/no pass.
Formerly EWRC 893AC. This course offers instruction and practice in a variety of punctuation skills and is available to students enrolled in classes in any discipline.
EWRC $895 \quad 0.5$ units
Functional Writing

## 5 hours lecture, 13 hours laboratory

Grading: pass/no pass.
Formerly EWRC 895AB. This course offers individualized instruction in basic writing skills for students placed at this level. Activities include writing complete sentences, punctuating sentences, spelling correctly, paragraphing, and composing short pieces of writing to prepare students to succeed in future composition courses and to write effectively across the curriculum.

EWRC $897 \quad 1$ units
Developmental Writing
7 hours lecture, 34 hours laboratory
Prerequisite: ENGL 105 or 801A or 801B.
Grading: pass/no pass.
Formerly EWRC 897AD. After being recommended for further work by a classroom English instructor, students in this course will receive the help they need beyond ENGL 105 or 801A-B in order to qualify for and/ or succeed in the next higher course. This course provides individualized instruction in the composing process and helps improve skills in the conventions of written English: grammar, sentence structure, punctuation and spelling.

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# Environmental Science (ENVRS) 

ENVRS 13 units<br>Energy for the Future<br>54 hours lecture<br>Grading: letter grade or pass/no pass.

This is an introductory physical science course which will familiarize the student with the fundamental principles of environmental systems and discuss current environmental issues. Interpretation of data in drawing a conclusion is stressed, along with the ability to criticize methods of data collection and experimentation. Topics include basic physical science, energy production and consumption, scarcity of resources, conservation, pollution, governmental regulation, and developments in environmental remediation.
Transferable to both UC and CSU; see counselor for limitations

## Ethnic Studies (ETHST)

ETHST 13 units<br>Introduction to Ethnic Studies<br>54 hours lecture<br>Grading: letter grade.

This introductory course will take an interdisciplinary and intersectional approach to the examination of the historical, cultural, economic and political issues that impact ethnic/racial groups within the United States, with a specific focus the African American, Asian American, Indigenous/American Indian/Native American, and Chicana/o and Latina/ o communities. Utilizing a socio-historical scope, this course will analyze how racial formations have been historically constructed and resisted, as well as, provide theoretical frameworks to identify and understand the modalities of white supremacy, and to combat racism, in a comparative context, over time in in contemporary society.
Transferable to both UC and CSU; see counselor for limitations

## ETHST 1H 3 units

Honors Introduction to Ethnic Studies
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This introductory course will take an interdisciplinary and intersectional approach to the examination of the historical, cultural, economic and political issues that impact ethnic/racial groups within the United States, with a specific focus the African American, Asian American, Indigenous/American Indian/Native American, and Chicana/o and Latina/ o communities. Utilizing a socio-historical scope, this course will analyze how racial formations have been historically constructed and resisted, as well as, provide theoretical frameworks to identify and understand the modalities of white supremacy, and to combat racism, in a comparative context, over time in in contemporary society.
Transferable to both UC and CSU; see counselor for limitations

## ETHST 63 units

Ethnic Studies for Education/Educators

## 54 hours lecture

Grading: letter grade.
This course will provide students with a foundational background in Ethnic Studies with regard to theories about the construction Race and Ethnicity as well as in the epistemologies derived from scholars within African American, Asian American, Native American, and Latinx/Chicanx Studies fields. Additionally, this course helps students understand the historical inequalities reproduced within education and schools, the knowledge produced by these communities and the strategies used for resistance and liberation. Likewise, students who complete the course will have better understanding of the role of intersectionality, identity, and collective struggle play in educational institutions. Units and lessons taught in this class will prepare students to utilize the concepts and methods of Ethnic Studies in teaching and pedagogical practice in K -12 education to better serve and advocate historically marginalized communities of color. This course is not open to students registered in or with credit in EDUC 6.
Transferable to both UC and CSU; see counselor for limitations

## Family and Consumer Studies (FACS)

## FACS 503 units

## Consumer Awareness

54 hours lecture
Grading: letter grade or pass/no pass.
This course covers personal finance, debt reduction, and investment for individuals and families. Topics include monthly budgeting for food, clothing, housing, transportation, health care, investing and insurance. Additional topics that will be examined are short-term and long-term financial goals related to savings, investments, insurance and wills, and consumer rights and responsibilities. This course is applicable for personal and professional use.
Transferable to CSU Only
FACS 643 units
Life Management

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides individuals with skills for understanding and using resources for effective functioning now and in the future. Major topics include steps in goal setting; problem solving and value clarifications; time, energy, stress, and conflict management; education and career planning; effect of cultural forces and future trends on goals, values, standards, and time management.
Transferable to CSU Only

## Fashion (FASH)

FASH $3 \quad 2$ units
Intro to Careers in Design/Merchandising

## 36 hours lecture

Grading: letter grade or pass/no pass.
This course surveys the fashion industry and related occupations emphasizing employment opportunities, personal qualifications and skills required for employment.
Transferable to CSU Only

## FASH 52 units

## Product Development

## 36 hours lecture

Grading: letter grade or pass/no pass.
Formerly FD 5. This course covers the process of product development in the apparel industry; from the merchandising line plan, design concept, through sourcing and costing, to the production of a clothing line. Transferable to CSU Only

FASH 9 units
Clothing Selection

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly FD 9. Apparel selection based on aesthetic guidelines, cultural influences, quality, workmanship and consumer needs. This course covers the basic elements and principles of art as applied to clothing and is required for fashion design and merchandising majors.
Transferable to CSU Only
FASH 103 units
Textile Fibers and Fabrics
54 hours lecture
Grading: letter grade or pass/no pass.
This course is a study of fibers and fabrics, their production/development, environmental impact, selection, performance, and care of apparel and interior textiles.
Transferable to both UC and CSU; see counselor for limitations
FASH 203 units
Introduction to the Fashion Industry
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly FD 20. This course explains and illustrates the scope of the fashion industry, its value, development and job potential. Included is an overview of fashion, from its history, cyclical nature and development to the materials, producers, and retailers that influence the business on a global level. Also covers the latest industry trends, including developments in sustainability and the impact of social media on fashion marketing.
Transferable to CSU Only
FASH 212 units
Quick Sketch Croquis Drawing
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly FD 21, FD 214, and 214AB. Beginning sketch course focusing on drawing skills necessary for the fashion industry. Learn to draw all aspects of garments on the figure and in flat technical drawings using a croquis (template). Render a variety fabric textures in color using marker techniques. Focus on portfolio formats.
Transferable to CSU Only

## FASH 234 units

Fashion/Merchandise Buying
72 hours lecture
Grading: letter grade or pass/no pass.
Formerly FD 23. This course is designed to provide knowledge of the functions of buying merchandise for retail or wholesale businesses. It is required for all Fashion Merchandising Majors.
Transferable to CSU Only

## FASH 243 units

## Fundamentals of Apparel Construction

36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly FD 24 and FD 24AB. This course covers the construction of simple garments using industry methods of clothing construction techniques. Principles and methods related to constructing both woven and knit fabrics will be covered.
Transferable to CSU Only

## FASH 253 units

Intermediate Apparel Construction
36 hours lecture, 54 hours laboratory
Recommended Preparation: FASH 24.
Grading: letter grade or pass/no pass.
Formerly FD 25 and FD 25AB. An intermediate level clothing construction class using the latest industry methods and focusing on woven fabrics. Typical projects include a shirt or blouse, fitted slacks with a waistband and a fully lined dress with princess seaming.
Transferable to CSU Only
FASH 262 units
Advanced Sewing and Tailoring Techniques
18 hours lecture, 54 hours laboratory
Recommended Preparation: One semester of FASH 24 and FASH 25. Grading: letter grade or pass/no pass.
Formerly FD 26 and FD 26AB. This course uses advanced construction techniques and traditional tailoring steps for jacket construction. The course will also cover working with slippery, difficult fabrics and complex patterns.
Transferable to CSU Only

## FASH $27 \quad 1.5$ units

Production Sewing
18 hours lecture, 36 hours laboratory
Prerequisite: FASH 24 or FASH 624.
Grading: letter grade or pass/no pass.
Formerly FD 27 and FD 27AB. This course focuses on the principles and methods of stitching and garment construction on power industrial machines as applied to factory production methods of the garment manufacturing industry.
Transferable to CSU Only

## FASH 32 units

History of Fashion

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly FD 32. This course is a survey of the evolution of clothing styles from the ancient Egyptian to the present time period. Content includes the importance of dress as a social record and how dress has influenced lifestyle, culture and contemporary fashions. The course emphasizes the effects of dress and relationships to political, social and economic conditions.
Transferable to both UC and CSU; see counselor for limitations

## FASH 363 units

## Flat Pattern Drafting

## 36 hours lecture, 54 hours laboratory

Recommended Preparation: FASH 24 or beginning sewing skills. Grading: letter grade or pass/no pass.
Formerly FD36, FD36A and FD36B. This is a beginning course in flat pattern drafting. Students will develop a basic pattern block and learn to manipulate the block to create patterns for a variety of garment styles. Transferable to CSU Only

## FASH $37 \quad 3$ units

## Pattern Draping

36 hours lecture, 54 hours laboratory
Recommended Preparation: FASH 24.
Grading: letter grade or pass/no pass.
Formerly FD 37A and FD 37B. This is a beginning course which includes
freehand methods of pattern making and creating the basic sloper in muslin on dress forms.
Transferable to CSU Only

## FASH 38A 3 units

Fashion Design I
36 hours lecture, 54 hours laboratory
Prerequisite: FASH 24 and FASH 36.
Recommended Preparation: FASH 21 and FASH 25.
Grading: letter grade or pass/no pass.
Formerly FD 38A. This is an advanced course that provides students an opportunity to design, illustrate, and construct full scale garments using flat pattern drafting techniques with an emphasis on developing unique and creative apparel designs.
Transferable to CSU Only

## FASH 38B 3 units

Fashion Design II
36 hours lecture, 54 hours laboratory
Prerequisite: FASH 24 and FASH 37.
Recommended Preparation: FASH 25.
Grading: letter grade or pass/no pass.
Formerly FD 38B. This is an advanced course that provides students an opportunity to design and construct full scale garments using pattern draping techniques with an emphasis on developing unique and creative apparel designs.
Transferable to CSU Only

## FASH 38C 3 units

Fashion Design III
36 hours lecture, 54 hours laboratory
Prerequisite: FASH 38A or FASH 38B.
Grading: letter grade or pass/no pass.
Formerly FD 38C.This is an advanced course that provides students an opportunity to research, illustrate, develop patterns, design and merchandise a collection of sportswear. Students will construct full-scale garments with an emphasis on developing unique and creative apparel designs.
Transferable to CSU Only
FASH 38D 3 units
Fashion Design IV
36 hours lecture, 54 hours laboratory
Recommended Preparation: FASH 38A, FASH 38B, FASH 38C.
Grading: letter grade or pass/no pass.
Formerly FD 38D. This advanced course provides an opportunity to design a complete line for a given season and classification (i.e., sportswear, junior market). The student will produce a line presentation board consisting of a target customer profile, price range, season, market and sketches. The student will complete production patterns, cost sheets, specification sheets, and toiles for three production quality garments. Transferable to CSU Only

## FASH $39 \quad 1$ units

## Garment Technical Packages

18 hours lecture, 9 hours laboratory
Recommended Preparation: FASH 24 and FASH 45.
Grading: letter grade or pass/no pass.
Formerly FD 39 and FD 39A. This course covers the development of offshore technical packages that include men's and women's woven and knit garments and garment knock-offs. The course includes pattern adjustments to achieve proper fit, garments specifications, quality control and package specifications, identification of seams, construction details, trims, and labels for garments. Students will learn to fit a variety of garments to gain a knowledge of correct terminology and be able to communicate fit comments.
Transferable to CSU Only

## FASH 413 units

## Fashion Promotion

## 45 hours lecture, 45 hours laboratory

Grading: letter grade or pass/no pass.
Formerly FD 41AD. A study of the concepts, practices and procedures related to fashion promotion. Emphasis on the development of concepts, planning, budgeting, social media, and production of fashion promotion. Includes "hands-on" experience producing an actual event.
Transferable to CSU Only

## FASH 453 units

Digital Fashion Illustration

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly FD 45 and 45A. This beginning course is designed to teach students to effectively apply design elements and principles to create mood/trend boards, textile surface designs, and proportional technical flat sketches. Students create lines sheets and a tech pack. Current fashion design computer software such as Adobe Illustrator and Photoshop are used.
Transferable to CSU Only

## FASH $46 \quad 1.5$ units

Advanced Digital Fashion Illustration
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly FD 46 and FD 45B. This Advanced course is designed for students with basic digital fashion illustration skills. The students will develop mastery of computer fashion sketching skills emphasizing the development of ideas in relation to personal/individual concepts. Students will learn to create a digital fashion croquis. There is an emphasis on the refinement of technical skills using current fashion design computer software such as Adobe Illustrator and Photoshop. Transferable to CSU Only

## FASH 473 units

3D Fashion Design

## 54 hours lecture

Grading: letter grade or pass/no pass.
This introductory course will teach students how to create garments from concept to presentation in the 3D environment using avatars. Students will use CLO 3D software to develop patterns for apparel designs, sew garments in 3D, apply fabrics and trims, and conduct fittings to create fully rendered original designs.
Transferable to CSU Only

## FASH $200 \quad 1$ units

## Trend Forecasting

## 18 hours lecture

Grading: letter grade or pass/no pass.
Formerly FD 200. This course presents techniques for identifying and forecasting trends in the fashion industry. Students will learn to recognize and analyze current trends to create their own fashion forecasts.

## FASH 2102 units

Fashion Styling
36 hours lecture
Grading: letter grade or pass/no pass.
Formerly FD 210. This course prepares students for entry-level positions in the field of fashion styling for social media, retail, product advertising, celebrities and influencers, red carpet events, wardrobe planning and film.
FASH 2131 units
Textile Surface Design
9 hours lecture, 27 hours laboratory
Grading: letter grade.
Formerly FD 213 and 213AB. This course focuses on specialty hand techniques of surface design on textiles. Students will gain experience in creating designs using industry standard techniques such as block printing, beading, embroidery, and tie dye.

## FASH 2152 units

Fashion Sketching I
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly FD 215 and FD 215AB. This is a beginning drawing class for both design and merchandising students that stresses the development of elongated fashion figures. The course will cover figure proportion, body movement, action poses, head, hand, foot and leg studies. Students will draw a variety of garments on the fashion figures and experiment with rendering techniques for a variety of fabric textures using design markers, designer's gouache and colored pencils.
FASH 2162 units
Fashion Portfolio Development
18 hours lecture, 54 hours laboratory
Prerequisite: FASH 45 or FASH 45A.
Grading: letter grade or pass/no pass.
Formerly FD 216 and FD 216AB. This advanced course focuses on the skills necessary to produce a well-organized and thoroughly planned online portfolio and portfolio book to be presented on job interviews. The class emphasizes drawing digital flat technical drawings, creating textile prints, creating and rendering a fashion figure, and layout techniques for line presentation.

## FASH $230 \quad 0.5$ units

Fashion Design Laboratory

## 27 hours laboratory

Corequisite: Concurrent enrollment in a fashion design course.
Grading: pass/no pass.
Formerly FD 230AD. This course provides the student enrolled in a technical fashion design course an opportunity for additional hours working in the fashion design lab and access to equipment and supplemental instruction. Lab time is assigned on a space available basis. Students completing 27 hours of lab work during the semester will receive 5 unit of credit.

## FASH $240 \quad 2.5$ units

Fashion Promotion and Management 36 hours lecture, 36 hours laboratory Prerequisite: FASH 41.

Grading: letter grade or pass/no pass.
Formerly FD 240. An advanced study of the concepts, practices and procedures related to fashion promotion. Emphasis on leadership, communication, development of concepts, planning, budgeting, social media, and production of fashion promotion events.

## FASH $244 \quad 1.5$ units

Computer Patternmaking
18 hours lecture, 36 hours laboratory
Recommended Preparation: FASH 24 or FASH 36
Grading: letter grade or pass/no pass.
Formerly FD 244 and FD 244AD. This course is designed to provide hands-on training utilizing the latest versions of apparel pattern making software technology. Industry techniques and methods for creating and manipulating production patterns as related to developing a commercial fit for original designs.

FASH 2581 units
Swimwear
9 hours lecture, 27 hours laboratory
Prerequisite: FASH 24 or FASH 624.
Grading: letter grade or pass/no pass.
Formerly FD 258 and FD 258AD. This course instructs the student in the design, sewing, and fitting of swimwear. Special emphasis is placed on patterns, stretch fabrics, bra construction and fitting issues. It is recommended that students sew at an intermediate sewing level to be successful in this course.

FASH 271WE 1-4 units
Work Experience-Fashion Design
72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly FD 271WE. Students learn and gain on-the-job experience in the fashion field. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of non-paid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1 to 4 units credit. *Note: Transfer limitations

## FASH 6130 units

Textile Surface Design
9 hours lecture, 27 hours laboratory
Grading: non graded.
Formerly FD 613. This course focuses on specialty hand techniques of surface design on textiles. Students will gain experience in creating designs using industry standard techniques such as block printing, beading, embroidery, and tie dye.

FASH $624 \quad 0$ units
Fundamentals of Apparel Construction
36 hours lecture, 54 hours laboratory
Grading: non graded.
Formerly FD 624. This course covers the construction of simple garments using industry methods of clothing construction techniques. Principles and methods related to constructing both woven and knit fabrics will be covered.

FASH 6250 units
Intermediate Apparel Construction
36 hours lecture, 54 hours laboratory
Recommended Preparation: FASH 624.
Grading: non graded.
Formerly FD 625. An intermediate level clothing construction class using the latest industry methods and focusing on woven fabrics. Typical projects include a shirt or blouse, fitted slacks with a waistband and a fully lined dress with princess seaming.

## FASH $626 \quad 0$ units

Advanced Sewing and Tailoring Techniques
18 hours lecture, 54 hours laboratory
Recommended Preparation: FASH 625.
Grading: non graded.
Formerly FD 626. This course uses advanced construction techniques and traditional tailoring steps for jacket construction. The course will also cover working with slippery, difficult fabrics and complex patterns.

FASH $627 \quad 0$ units
Production Sewing
18 hours lecture, 36 hours laboratory
Prerequisite: FASH 24 or FASH 624
Grading: non graded.
Formerly FD 627. This course focuses on the principles and methods of stitching and garment construction on power industrial machines as applied to factory production methods of the garment manufacturing industry.
FASH $630 \quad 0$ units
Fashion Design Laboratory
27 hours laboratory
Grading: non graded.
Formerly FD 630. This course provides the student enrolled in a Fashion Design course an opportunity for additional hours working in the Fashion Design Lab and additional instruction from a lab aide, instructor or student tutor. Lab time is assigned on a space available basis.

FASH 6580 units
Swimwear
9 hours lecture, 27 hours laboratory
Prerequisite: FASH 24 or FASH 624.
Grading: non graded.
Formerly FD 658. This course instructs the student in the design, sewing, and fitting of swimwear. Special emphasis is placed on patterns, stretch fabrics, bra construction and fitting issues. It is recommended that students sew at an intermediate sewing level to be successful in this course.

## Film (FILM)

FILM 1 (C-ID FTVE 105) 3 units

## ntroduction to Film Studies

54 hours lecture
Grading: letter grade or pass/no pass.
An introduction to the art of cinema through lecture, discussion, and screening of a wide variety of films and related media. This course examines aesthetic elements such as cinematography, production design (mise en scène), editing, sound design, and performance styles, in addition to exploring other aspects of filmmaking, cinematic representation, spectatorship, and cultural ideologies.
Transferable to both UC and CSU; see counselor for limitations

## FILM 2A 3 units

Film History I

## 54 hours lecture

Recommended Preparation: FILM 1.
Grading: letter grade or pass/no pass.
This course charts the history of cinema from its invention to World War II. Significant technologies, aesthetic innovations, cultural/industrial contexts, and film movements in both American and international cinema will be covered, in addition to examining the work of several key filmmakers.
Transferable to both UC and CSU; see counselor for limitations
FILM 2B 3 units
Film History II

## 54 hours lecture

Recommended Preparation: FILM 1.
Grading: letter grade or pass/no pass.
This course is a study of the trajectory of film history from World War II to the present. The course will focus on significant cinematic movements and styles in both American and international cinema, technological developments and shifts and their effect on the larger industrial complex, and the work of several historically significant filmmakers.
Transferable to both UC and CSU; see counselor for limitations

## FILM 103 units

Film Genres

## 54 hours lecture

Recommended Preparation: FILM 1.
Grading: letter grade or pass/no pass.
This introductory course surveys the historical development and progression of popular film genres while also exploring their artistic, social, cultural, political, and ideological contexts. Types of genres explored in this course include, but are not limited to, science-fiction, western, gangster, crime and detective thriller ("film noir"), musical, comedy, melodrama, horror film, and/or documentary. The particular genre(s) of study will change each semester, based upon the instructor's choice.
Transferable to both UC and CSU; see counselor for limitations

## FILM 113 units

## Film Directors and Artists

## 54 hours lecture

Recommended Preparation: FILM 1.
Grading: letter grade or pass/no pass.
This class involves a survey and critical analysis of films by various cinema and media directors within the film and media industries. The class will deconstruct a director's or a collection of directors' work (instructor's choice) throughout the course of the semester, focusing on aesthetic, thematic, ideological, socio-cultural, historical, industrial, geographical and/or political continuities and shifts that span the director's/directors' career(s). Students will be expected to articulate specific insights of the director's/directors' work through essay writing, in-class activities, critical and creative projects, and quizzes and exams. Transferable to both UC and CSU; see counselor for limitations

FILM 20 (C-ID FTVE 130) 3 units

## Fundamentals of Digital Film Production

36 hours lecture, 72 hours laboratory
Prerequisite: FILM 1 (may be taken concurrently)
Grading: letter grade or pass/no pass.
This course introduces the basic principles of film production, including operation of equipment and details involved in making a film from idea development to final production. The course encompasses lectures and lab workshops as well as group and individual projects.
Transferable to both UC and CSU; see counselor for limitations
FILM 21 (C-ID FTVE 150) 3 units
Intermediate Digital Film Production
36 hours lecture, 72 hours laboratory
Prerequisite: FILM 20.
Recommended Preparation: FILM 40.
Grading: letter grade or pass/no pass.
This is an intermediate film production course, where students build on the introductory skills and knowledge gained in Film 20. In this course, students will write, pre-produce, produce, direct and edit their own 10minute short film.
Transferable to both UC and CSU; see counselor for limitations

## FILM 253 units

Introduction to Digital Cinematography

## 36 hours lecture, 72 hours laboratory

Prerequisite: FILM 20.
Grading: letter grade or pass/no pass.
This course provides an introduction to the fundamental technical and aesthetic principles of motion picture digital photography. Students are instructed in practical training in the use of motion picture cameras, with an introduction to image control through exposure, lighting, and selection of camera, lenses, and filters. The course also offers an examination of the cinematographer as a visual storyteller to develop a broader understanding of the balance between artist and technician as well as an examination of the different crew positions and processes of the camera crew.
Transferable to both UC and CSU; see counselor for limitations
FILM 40 (C-ID FTVE 110) 3 units
Introduction to Screenwriting

## 54 hours lecture

Recommended Preparation: FILM 1.
Grading: letter grade or pass/no pass.
This course offers basic techniques of short subject dramatic screenplay structure and storytelling. This includes script development from story concept, character design, story treatment, plot and character development.
Transferable to CSU Only

## FILM 70WE 1-4 units

Work Experience-Film
72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly FILM 270WE. Students learn and gain on-the-job experience in the Film industry. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of non-paid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1 to 4 units credit. Prior approval by Film program faculty and compliance with Work Experience regulations as designated in the College Catalog. Qualification for enrollment. Instructor will verify prerequisites and qualifications: 1) completed work experience orientation; 2) submitted work experience application.
Transferable to CSU Only
FILM $220 \quad 0.5$ units
Assistant Camera Skills
27 hours laboratory
Grading: letter grade or pass/no pass.
This course teaches students the basic job skills needed for an Assistant Camera position in the Film \& Television industry. Students will learn key job skills like: setting up the camera, using camera support and building the rig, measuring for focus, pulling focus, checking the gate, handling lenses, and various other necessary duties.

## FILM 2210.5 units

## Film Grip and Electric Skills

27 hours laboratory
Grading: letter grade or pass/no pass.
In this course, students will learn basic job skills in the grip/electric area of the film and television industry. Some of these skills include: operating a c-stand, molding and shaping light, handling and operating lights, safely managing electricity/power.

## FILM 2220.5 units

Assistant Editor Skills
27 hours laboratory
Grading: letter grade.
This course introduces students to the basic job skills necessary for obtaining work as an assistant editor in the Film and Television industry. Students will learn skills necessary to ingest, synch, and organize large film and video projects as well as more specific skills like data management, understanding metadata, and timecode.

FILM 2231 units
Film Set Management Skills

## 18 hours lecture

Grading: letter grade.
This course will introduce students to the basic job skills necessary to work in set management in the film and television industry. Students will primarily learn the duties and responsibilities of a production assistant, but will also be introduced to some of the skills and duties of unit production manager, production office coordinator, and assistant director.

## Fire Science (FIRE)

## FIRE 13 units

Fire Protection Organization

## 54 hours lecture

Grading: letter grade.
This course outlines the components of fire protection and career opportunities in fire protection and suppression fields; introduction to the philosophy and history of fire protection and analysis of the effects of fire losses to the community; the organization and functions of public and private fire protection and emergency services and fire departments as part of local governments including the laws and regulations affecting the fire service; fire service nomenclature, specific fire protection functions, and the culture of the fire service; basic fire chemistry and physics, and fire strategy and tactics.
Transferable to CSU Only

## FIRE 2 units

Fire Prevention Technology

## 54 hours lecture

Grading: letter grade.
This is an introductory class which outlines the history and philosophy of fire prevention, including the organization and operation of a fire prevention bureau utilizing fire prevention codes. This course also identifies fire hazards and the proper method of correction in compliance of each fire hazard. This course allows the students to identify the relationship of fire prevention with fire safety educational codes in accordance with industry standards.
Transferable to CSU Only
FIRE 3 units
Fire Protection Equipment and Systems

## 54 hours lecture

Grading: letter grade.
This course provides educational information relating to the features and operations of fire detection, protection and alarm systems. This course also addresses the use, inspection and maintance of portable fire extinguishers.
Transferable to CSU Only

## FIRE 43 units

## Building Construction

## 54 hours lecture

Grading: letter grade.
This course covers the components of building construction methods which are relevant to firefighter safety. The components of building design and methods of construction of structures are known to be key factors when inspecting buildings, preplanning fire operations and operating at fire scenes. Fires which have occurred in residential, commercial, and industrial buildings are examined and used to illustrate the development and evolution of building and fire codes. An off-site field trip to examine a building under construction is scheduled during regular class hours.
Transferable to CSU Only

## FIRE 5 units

Fire Behavior and Combustion

## 54 hours lecture

Grading: letter grade.
This course will present the theory and fundamentals of how and why fires start, and the factors which affect the spread of fires. A study of the basic fundamentals of fire chemistry and their physical components will be presented and discussed. In addition, an analysis of fire characteristics and the effects of extinguishing agents and fire management methods are studied.
Transferable to CSU Only

## FIRE 533 units

## Fire Hydraulics

## 54 hours lecture

Grading: letter grade.
This course addresses the history of fire apparatus, pump operations, safe driving techniques, tiller and aerial apparatus operation, and water supply considerations. From basic apparatus maintenance to fire pump theory and advanced hydraulic calculations, this course covers everything a fire service driver/operator needs to know. Specific areas that are covered are driver training and selection, fire ground operations, the use of fire hose and nozzles, foam operations, apparatus with aerial devices, driving and operating apparatus with a tiller, and testing and performing daily and weekly safety checks for all types of fire apparatus. Transferable to CSU Only

## FIRE 543 units

## Hazardous Materials 1

## 54 hours lecture

Grading: letter grade.
This course is a study of basic fire chemistry and physics. A variety of topics will be addressed, including problems of flammability encountered by firefighters during fire suppression activities. Topics that will be examined are the dynamics associated during fire suppression activities involving fuels and chemical oxidizers in conjunction with hazardous materials during storage and transport.
Transferable to CSU Only

## FIRE 573 units

Introduction to Fire Tactics \& Strategy

## 54 hours lecture

Grading: letter grade.
This is an introductory course which outlines the principles of fire ground control through the utilization of personnel, equipment and extinguishing agents on the fire ground or emergency incident. This course is the backbone of the Incident Command System, along with the theory of the Rapid Intervention Crew and Standardized Emergency Management System. These topics will be presented as theories and principles with emphasis on practical and appropriateness of key academic strategies. This course provides group interactions and individualized instruction to develop a support system and a mentor experience with the instructor. Attendance and participation at two scheduled field trips will be required during the course.
Transferable to CSU Only

## FIRE 583 units

## Intro to Fire Company Administration

## 54 hours lecture

Grading: letter grade.
This is an introductory level class which outlines the concepts of fire department organization and administration. Students will study planning, organizing and supervisory techniques within a Fire Company operation, with an emphasis on the first line company officer's role as a Fire Captain.
Transferable to CSU Only

## FIRE 613 units

## Rescue Practices

## 54 hours lecture

## Grading: letter grade.

This course is an introduction to the fundamentals of technical rescue, beginning with the technical rescue apparatus, tools and equipment, incident management and conducting search and rescue operations in structures and the environment. Technical rope rescues, confined space, trench, vehicle and machinery extrication are specific emergency incidents that are examined. The course also covers Rapid Intervention Crews (RIC) which are designed to rescue firefighters that may need assistance during emergency operations. Specific skills are covered including Firefighter self survival techniques, emergency escape maneuvers, Self Contained Breathing Apparatus emergency and survival skills.
Transferable to CSU Only

## FIRE 623 units

## Fire Apparatus and Equipment

## 54 hours lecture

Grading: letter grade.
This course focuses on a study of mobile and fixed fire apparatus and equipment, with a review of their perspective construction specifications and performance capabilities. The course outlines the effective deployment, utilization and performance of Fire apparatus and equipment under emergency conditions, when used for firefighting purposes.
Transferable to CSU Only

## FIRE $64 \quad 3$ units

## Hazardous Materials 2

## 54 hours lecture

Prerequisite: FIRE 54.
Grading: letter grade.
This course is a continuing study of hazardous materials addressing the identification of explosives, toxic substances and radioactive materials in storage and in transit.
Transferable to CSU Only

## FIRE 653 units

## Fundamentals of Fire Safety

## 54 hours lecture

Grading: letter grade.
This course will be appropriate for students who wish to pursue a career in a paid or volunteer fire department. A variety of topics will be addressed, including information on current techniques and prevention of injuries while promoting safe routine and emergency fire operations. Transferable to CSU Only

## FIRE $240 \quad 0.5$ units

## Firefighter I Physical Agility

9 hours lecture, 9 hours laboratory
Grading: letter grade or pass/no pass.
This course is designed to assess physical agility requirements for the fire service. The course will cover the review of all physical requirements to successfully pass the Biddle test, including time requirements, successive actions that will result in a failure and activities that will result in an automatic failure of the physical agility test. It includes a review of nutritional facts and physical training principles. The course meets the statewide standards of the CalChiefs organization.

## Floral Design (FLO)

FLO 286A 2 units
Introduction to Floral Design: Fall Flowers
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Materials Fee: \$120.
This course covers the elements and principles of design, color coordination, basic floral arranging and basic corsage construction. Nomenclature of flowers and foliage and their uses are included. FLO 286A covers fall flowers; FLO 286B covers spring flowers.

FLO 286B 2 units
Introduction to Floral Design: Spring Flowers
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Materials Fee: \$120.
This course covers the elements and principles of design, color coordination, basic floral arranging and basic corsage construction. Nomenclature of flowers and foliage and their uses are included. FLO 286A covers fall flowers; FLO 286B covers spring flowers.

## FLO 287A 2 units

Intermediate Floral Design-Wedding
27 hours lecture, 27 hours laboratory
Recommended Preparation: One semester of FLO 286A or FLO 286B.
Grading: letter grade or pass/no pass.
Materials Fee: \$145.
This is one of three courses that constitute a comprehensive overview of techniques used at an intermediate level within the floral industry. This hands-on, step-by-step course covers each phase of wedding flowers: design, mechanics and construction of floral products, marketing and selling flowers for church, hotel and home/garden wedding and reception setup.

## FLO 287B 2 units

Intermediate Floral Design-Sympathy

## 27 hours lecture, 27 hours laboratory

Recommended Preparation: One semester of FLO 286A or FLO 286B.
Grading: letter grade or pass/no pass.
Materials Fee: \$140.
This is one of three courses which constitute a comprehensive overview of techniques used at an intermediate level within the floral industry. Complete instructions on the art and science of designing sympathy flowers are included, from the elaborate casket to simple home tributes. The course focuses on mechanics and construction for efficiency in design.

## FLO 287C 2 units

Intermediate Floral Design-Banquet Holiday
27 hours lecture, 27 hours laboratory
Recommended Preparation: One semester of FLO 286A or FLO 286B. Grading: letter grade or pass/no pass.
Materials Fee: \$140.
This is one of three courses that constitute a comprehensive overview of techniques used at an intermediate level within the floral industry. This course covers skills needed to successfully produce holiday designs and mass production. It also includes indoor, outdoor and poolside events, banquets, parties or related party work.
FLO 2882 units

## Advanced Floral Design

27 hours lecture, 27 hours laboratory
Recommended Preparation: FLO 286A-B and FLO 287A-B-C.
Grading: letter grade or pass/no pass.
Materials Fee: $\$ 140$.
This course provides students with the techniques for the planning, design and execution of intricate and creative art floral arrangements. Topics include terminology, application and methods for creating designs in less time for profit. This course is required for students in the Floral Design Certificate Program.

## FLO 2893 units

Applied Floral Shop Operation
54 hours lecture
Grading: letter grade or pass/no pass.
This course presents techniques for starting a retail or home-based floral business. Topics range from licensing procedures to shop layout and day-to-day operations, including the handling of perishable floral materials. Policies, pricing, personnel and selling techniques are examined. This course is required for Floral Design Majors.

## FLO $290 \quad 0.5$ units

Floral Creativity and Competition

## 9 hours lecture, 18 hours laboratory

Recommended Preparation: Intermediate floral design skills.
Grading: letter grade or pass/no pass.
Materials Fee: \$90.
Individualized, non-standard, contemporary flower arrangements will be created emphasizing the use of the student's own imagination and creative talent. This course will broaden the student"s design experience, expand and develop beyond the student's present personal creativity potential. The course will enhance the student skills required for competitive floral design, including emphasis in design speed. A field trip to the California State Floral Association Top Ten Competition is offered for competing or observing.

## Food Technology (FT)

## FT $651 \quad 0$ units

Cake Decorating Techniques
18 hours lecture, 36 hours laboratory
Grading: non graded.
This course covers cake decorating techniques, recipes, tools and skill development. A variety of icings, designs, and shaping techniques will be covered.

## FT $652 \quad 0$ units

## Cake Decorating for Special Occasions

18 hours lecture, 36 hours laboratory
Grading: non graded.
This course covers cake decorating techniques for special occasions. Included will be creating cakes with special effects, candy molds, novelties, international styles, delivery, set up techniques and business practices.

## Foreign Language

See World Language, Chinese (CHIN) (p. 460),
World Language, French (FREN) (p. 461),
World Language, German (GER) (p. 461),
World Language, Italian (ITAL) (p. 462),
World Language, Japanese (JAPAN) (p. 462),
World Language, Khmer (KHMER) (p. 463),
World Language, Spanish (SPAN) (p. 463)

## GED/HiSET Preparation (GED/HSET)

GED/HSET $600 \quad 0$ units<br>GED/HiSET Preparation: Language Arts<br>\section*{18 hours lecture}<br>Grading: non graded.

Formerly GED 600. This course prepares students to take the GED/
HiSET language arts tests. Reading for meaning, identifying and creating arguments and grammar and language to pass the GED/HiSET language arts tests are covered via group and individualized instruction.

## GED/HSET 6050 units

## GED/HiSET Preparation: Social Studies

## 18 hours lecture

Grading: non graded.
Formerly GED 605. This course prepares students to take the GED/HiSET social studies test. Reading for meaning in social studies, analyzing
historical events and arguments in social studies, and using numbers and graphs in social studies to pass the GED/HiSET social studies test are covered via group and individualized instruction.

## GED/HSET $610 \quad 0$ units <br> GED/HiSET Preparation: Mathematics <br> 18 hours lecture <br> Grading: non graded.

Formerly GED 610. This course prepares students to take the GED/ HiSET mathematics test. Math, geometry, basic algebra and graphs and functions to pass the GED mathematics test are covered via individualized instruction.

## GED/HSET 6150 units <br> GED/HiSET Preparation: Science <br> 18 hours lecture

Grading: non graded.
Formerly GED 615. This course prepares students to take the GED/HiSET science test. Designing and interpreting science experiments, using numbers and graphics in science and reading for meaning in science to pass the GED/HiSET science test are covered via individualized instruction.

## GED/HSET $620 \quad 0$ units

GED/HiSET Prep - Spanish: Language Arts

## 18 hours lecture

Grading: non graded.
Formerly GED 620. This course prepares students to take the Spanish GED/HiSET language arts tests. Reading for meaning, identifying and creating arguments and grammar and language to pass the Spanish GED/HiSET language arts tests are covered via group and individualized instruction in a low-stress environment. Prepara al estudiante para tomar los exámenes de artes del lenguaje español para GED/HiSET. La lectura de significado, la identificación y la creación de argumentos y gramática y lenguaje para aprobar los exámenes de artes del lenguaje español se cubren mediante instrucción grupal e individualizada en un ambiente de menos estrés.

## GED/HSET 6250 units

GED/HiSET Prep - Spanish: Social Studies

## 18 hours lecture

Grading: non graded.
Formerly GED 625. This course prepares students to take the Spanish language GED/HiSET social studies test. Reading for meaning in social studies, analyzing historical events and arguments in social studies, and using numbers and graphs in social studies to pass the GED/HiSET social studies test are covered via group and individualized instruction in a low-stress environment. Prepara al estudiante para tomar el examen de estudios sociales GED/HiSET en español. Leer en busca del significado de en Estudios Sociales, analizar eventos y argumentos históricos en Estudios Sociales, y usar números y gráficas en Estudios Sociales para aprobar el examen de estudios sociales de GED/HiSET se cubren a través de instrucción grupal e individualizada en un ambiente de menos estrés.

## GED/HSET $630 \quad 0$ units <br> GED/HiSET Prep - Spanish: Mathematics <br> 18 hours lecture <br> Grading: non graded.

Formerly GED 630. This course prepares students to take the Spanish GED/HiSET mathematics test. Math, geometry, basic algebra and graphs and functions to pass the Spanish GED/HiSET mathematics test are covered via individualized instruction in a low-stress environment.
Prepara al estudiante para tomar el examen de matemáticas GED/ HiSET en español. Matemáticas, geometría, álgebra básica y gráficas y funciones para aprobar el examen de matemáticas GED/HiSET se cubren a través de instrucción individualizada en un ambiente de menos estrés.

## GED/HSET 6350 units

GED/HiSET Prep - Spanish: Science

## 18 hours lecture

Grading: non graded.
Formerly GED 635. This course prepares students to take the GED/HiSET science test. Designing and interpreting science experiments, using numbers and graphics in science and reading for meaning in science to pass the GED/HiSET science test are covered via individualized instruction in a low-stress environment. Prepara al estudiante para tomar el examen de ciencias GED/HiSET. El diseño e interpretación de experimentos científicos, el uso de números y gráficos en ciencias y la lectura del significado en ciencias para aprobar el examen de ciencias GED/HiSET están cubiertos a través de la instrucción individualizada en un ambiente de menos estrés.

# Foundation Skills Development (FS) 

FS $600 \quad 0$ units<br>Foundational Skills Language Arts<br>18 hours lecture

Recommended Preparation: Intermediate Reading Level in English. Grading: non graded.
This course is part of a non-credit program designed to improve the foundational skills required for college and career readiness. Students will participate in a self-paced, flexible, open-entry/exit course that provides structured and supportive modularized instruction based off the student's academic and career goals. This course emphasizes the development of reading, writing, and college and career preparation skills for students who: (1) are enrolled, or plan to enroll, in credit courses and need to improve their foundational skills, (2) are returning and/or adult students wishing to prepare for academic success, (3) are preparing to take exams or certifications for academic, employment, or special vocational programs, or (4) wish to improve their mastery of English as a Second Language. This course is part of a sequence of courses leading to a Certificate of Competency in Foundational Skills.

## FS 6050 units

Foundational Skills Math
18 hours lecture
Recommended Preparation: Intermediate Reading Level in English. Grading: non graded.
This course is part of a non-credit program designed to improve the foundational skills required for college and career readiness. Students will participate in a self-paced, flexible, open-entry/exit course that provides structured and supportive modularized instruction based off the student's academic and career goals. This course emphasizes the development of math and college and career preparation skills for students who: (1) are enrolled, or plan to enroll, in credit courses and need to improve their foundational skills, (2) are returning and/or adult students wishing to prepare for academic success, or (3) are preparing to take exams or certifications for academic, employment, or special vocational programs. This course is part of a sequence of courses leading to a Certificate of Competency in Foundational Skills.

## Geography (GEOG)

## GEOG 2 (C-ID GEOG 120) 3 units

Elements of Cultural Geography
54 hours lecture
Grading: letter grade or pass/no pass.
This course introduces students to the patterns and processes that shape the spatial distribution of human activity on the surface of earth. Topics covered include population change, migration patterns, the distribution of religion and language, political boundaries, cities and urban growth, economic development, and environmental impacts of human activity.
Transferable to both UC and CSU; see counselor for limitations

## GEOG 5 units

## The Global Economy

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the location and organization of international economic activities from an economic, cultural, political, and environmental perspective. Topics covered by a faculty team drawn from economics and geography include the spatial distribution of resources and production, global flows of information, capital and labor, and regional inequalities such as income distribution, poverty, discrimination and standard of living. This class is recommended for students in business, social science and liberal arts with an interest in global and international issues, including regional and social inequalities, marketing and international trade, and tourism. This course is not open to students registered in or with credit in ECON 5.
Transferable to both UC and CSU; see counselor for limitations
GEOG 10 (C-ID GEOG 155) 3 units
Intro to Geographic Information Systems

## 54 hours lecture

Recommended Preparation: Familiar with Internet or computer literacy. Grading: letter grade.
This course provides an introduction to mapping and geographic information science, which includes computer systems and software for geographic analysis, cartography, global positioning systems and remote sensing. Included are geographic concepts for spatial analysis and work on practical applications with computer software.
Transferable to both UC and CSU; see counselor for limitations
GEOG 40 (C-ID GEOG 125)
3 units
World Regional Geography
54 hours lecture
Grading: letter grade or pass/no pass.
The basic concepts and fundamentals of both physical and cultural geography are used in this course for an interpretation of the geographic regions of the Americas, Africa, Europe, Asia, the Middle East and the Pacific area.
Transferable to both UC and CSU; see counselor for limitations
GEOG 48 (C-ID GEOG 140) 3 units
Geography of California

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides a thematic approach to issues, processes and topics relevant to a study of California geography, including climate, landforms, natural vegetation, water resources, cultural landscapes, ethnic diversity, urban and agricultural regions, and the economy.
Students will explore the physical, and human landscapes that have evolved as a result of the human-environment interface.
Transferable to both UC and CSU; see counselor for limitations

## Geography, Physical (PGEOG)

PGEOG 1 (C-ID GEOG 110) 3 units
Physical Geography
54 hours lecture
Grading: letter grade or pass/no pass.
This is an introductory physical science course, which will emphasize an understanding of the salient scientific principles underlying the spatial distribution of phenomena that exist in the Earth's hydrosphere, biosphere, atmosphere, and lithosphere and the role humans play within these systems.
Transferable to both UC and CSU; see counselor for limitations

PGEOG 1L (C-ID GEOG 111) 1.5 units
Physical Geography Lab
18 hours lecture, 36 hours laboratory
Corequisite: PGEOG 1.
Grading: letter grade or pass/no pass.
Physical Geography Laboratory emphasizes the practical application of concepts presented in PGEOG1 Physical Geography. Physical Geography Lab introduces the student to the tools and methods used in Physical Geography and related disciplines. Emphasis is given to Earth-sun relationships, atmosphere-hydrosphere interactions, lithospheric processes and materials, integration of climate, soils and biome spatial patterns, map interpretation, and geographic grid systems.
Transferable to both UC and CSU; see counselor for limitations

## PGEOG 2 (C-ID GEOG 130) 3 units

## Weather and Climate

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the physical properties of the atmosphere, radiation heating and cooling, precipitation, clouds, weather disturbances, air pollution, global climate patterns and climate change. There is an emphasis on the analysis and forecasting of weather using real-time data from satellites, weather charts/maps, and other remote sensing platforms.
Transferable to both UC and CSU; see counselor for limitations

## Geology (GEOL)

GEOL 1 (C-ID GEOL 101) 4.5 units

## General Physical Geology

63 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This is a class that covers the materials and structure of the Earth and the physical processes by which it has been and is being changed. It is a general physical science course for liberal arts students and a beginning course for geology majors. Included with the class is a required one-day, Saturday or Sunday, field trip to acquaint students with the local geology. Transferable to both UC and CSU; see counselor for limitations

## GEOL 1H (C-ID GEOL 101) 4.5 units

## Honors General Physical Geology

63 hours lecture, 54 hours laboratory
Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This is a class that covers the materials and structure of the Earth and the physical processes by which it has been and is being changed. It is a general physical science course for liberal arts students and a beginning course for geology majors. Included with the class is a required one-day, Saturday or Sunday, field trip to acquaint students with the local geology. Transferable to both UC and CSU; see counselor for limitations

## GEOL 2 (C-ID GEOL 100) 3 units <br> General Geology, Physical <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This is a class that covers the materials and structure of the Earth and the physical processes by which it has been and is being changed. It is a general physical science course for liberal arts students combined with GEOL 2 L and a beginning course for geology majors.
Transferable to both UC and CSU; see counselor for limitations

GEOL 2F 1 units

## Geology Field Trips

## 23 hours lecture

Corequisite: GEOL 1 or GEOL 2.
Grading: letter grade or pass/no pass.
This is a field trip class offering three single-day field trips, including the San Andreas Fault, Palos Verdes Hills and the Santa Ana Mountains-
Dana Point. The purpose of these trips is to acquaint students with the
local geology, support student study of GEOL 1 or 2 , and associated environmental problems. This class does not fulfill the requirement for a laboratory science.
Transferable to both UC and CSU; see counselor for limitations
GEOL 2L (C-ID GEOL 100L) 1.5 units
General Geology, Physical Geology Lab
18 hours lecture, 36 hours laboratory
Corequisite: GEOL 2.
Grading: letter grade or pass/no pass.
This class provides laboratory exercises in identification of rocks and minerals, an introduction to geologic time and dating techniques, reading and interpretation of topographic maps and aerial photographs, study of geologic structures, faults and geomorphology.
Transferable to both UC and CSU; see counselor for limitations

## GEOL 3 (C-ID GEOL 111) 4.5 units

## Historical Geology

72 hours lecture, 45 hours laboratory
Grading: letter grade or pass/no pass.
This course is a study of earth history through an analysis of the fossil and rock record. Subjects include geologic dating, global tectonics, stratigraphy, fossils, biological evolution, and the planet's origin.
Particular emphasis is placed on the paleogeographic reconstruction of Earth beginning in the Precambrian and ending with current conditions.
This is a general course for liberal arts students and a beginning course for geology majors. One single-day weekend field trip is required.
Transferable to both UC and CSU; see counselor for limitations
GEOL 3H (C-ID GEOL 111) 4.5 units
Honors Historical Geology
72 hours lecture, 45 hours laboratory
Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is a study of earth history through an analysis of the fossil and rock record. Subjects include geologic dating, global tectonics, stratigraphy, fossils, biological evolution, and the planet's origin.
Particular emphasis is placed on the paleogeographic reconstruction of Earth beginning in the Precambrian and ending with current conditions.
This is a general course for liberal arts students and a beginning course for geology majors. One single-day weekend field trip is required.
Transferable to both UC and CSU; see counselor for limitations

## GEOL 42 units

## Field Geology

27 hours lecture, 27 hours laboratory
Corequisite: GEOL 1, 2, 2L, 3, 3H or 5 .
Grading: letter grade or pass/no pass.
This is a field course to selected locations in the Owens Valley and Death Valley. This course is an excellent opportunity to travel through California and experience many different examples of geology firsthand.
Transferable to both UC and CSU; see counselor for limitations

## GEOL 53 units

## Environmental Geology

## 54 hours lecture

Grading: letter grade or pass/no pass.
Students enrolled in this course will learn about natural hazards affecting the greater Los Angeles area, how to assess danger from these hazards and what they can do to minimize personal damage. Students will explore environmental issues of the Los Angeles basin that are directly related to the earth, such as water supply, pollution and land use. One Saturday field trip is required.
Transferable to both UC and CSU; see counselor for limitations

## GEOL 72 units

## Field Studies: Western Environments

27 hours lecture, 27 hours laboratory
Recommended Preparation: GEOL 1, 2, 3 or 18 or concurrent enrollment. Grading: letter grade or pass/no pass.
This course is a field studies course to geologically interesting areas of the west. The emphasis of the course will be to identify clues in the rock and fossil record which indicate past environmental and geologic conditions in the Western United States.
Transferable to CSU Only
GEOL 10 (C-ID GEOL 121) 4 units
Earth Science for Educators

## 54 hours lecture, 54 hours laboratory

Grading: letter grade.
This is an inquiry-based Earth Science course that fulfills general education requirements for students aspiring to become elementary school teachers. Students will develop a meaningful understanding of geology, oceanography, meteorology and solar system astronomy through lecture and laboratory activities. An earth-systems approach will be emphasized to explain natural phenomena that impact human societies. The course will cover the breadth and depth of Earth Science topics covered in the Next Generation Science Standards (NGSS). Included with the class is a required field trip to acquaint the student with field examples of topics covered in the class. Note: Geology 10 is not designed to meet the requirements for Geology or Earth Science majors. Transferable to both UC and CSU; see counselor for limitations

GEOL 163 units
Field Techniques/Geol: So Calif Deserts
36 hours lecture, 54 hours laboratory
Corequisite: GEOL 1, 2 or 5.
Grading: letter grade or pass/no pass.
This is a class designed to expose geology majors and others to the techniques employed by geologists in the field and laboratory. The class includes: geologic map reading and preparation, identification of geologic features in the field, and microscope laboratory techniques. Attendance at two week-end field trips is required.
Transferable to CSU Only
GEOL 172 units
Geology of Southern California Deserts
27 hours lecture, 27 hours laboratory
Corequisite: GEOL 1, 1H, 2 or 5.
Grading: letter grade or pass/no pass.
This is a field trip class offering two weekend 3-day field trips. The purpose of these trips is to acquaint students with the interesting and diverse geologic features of the California Deserts. Not open to students with credit in GEOL 16.
Transferable to both UC and CSU; see counselor for limitations

GEOL 183 units
Geology of California

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course presents the basic principles of geology through the examination of the rocks, minerals, fossils, and tectonic events unique to California. The class further places California's unique geology in context of Earth's plate tectonic processes and geologic history.
Transferable to both UC and CSU; see counselor for limitations

## GEOL 203 units

Physical Oceanography
54 hours lecture
Grading: letter grade.
This introductory course explores the major physical features of the world's oceans. Course topics include the formation and history of the ocean basins, ocean-atmosphere interactions, ocean circulation, and the dynamics of waves, tides, and coastlines. This course also reviews ocean chemical and sedimentation cycles as well as the general distribution of marine life. The ocean as a resource for people and human impact on the marine environment will also be considered. Class will include an instructional field trip.
Transferable to CSU Only

## Global Studies (GLST)

## GLST 1 (C-ID GLST 101) 3 units

Introduction to Global Studies

## 54 hours lecture

Grading: letter grade.
This course is an introduction to the interdisciplinary field of Global Studies, including the history of globalization, and economic, political, social, cultural and ecological developments related to the process of globalization.
Transferable to both UC and CSU; see counselor for limitations
GLST 2 (C-ID GLST 102) 3 units
Global Issues
54 hours lecture
Grading: letter grade.
This course introduces students to the origins, current status, and future trends of major transnational issues confronting the global community.
Topics can include population trends, economic development and inequality, basic human needs (for food, water health care), human rights, international conflict and security concerns, and environmental problems. The course also focuses on global governance, including the study of collective global responsibilities.
Transferable to both UC and CSU; see counselor for limitations

## Health Education (HLED)

HLED 3 (C-ID PHS 100) 3 units<br>Contemporary Health Issues

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores today's major health issues and behaviors in the various dimensions of health. The importance of individual responsibility for personal health and the promotion of informed, positive health behaviors is emphasized. Topics that will be discussed include the dimensions of health, vital statistics, infectious diseases, chronic diseases, nutrition, weight management, exercise, reproductive health, aging, mental health and stress, substance use and abuse, healthcare, and environmental health.
Transferable to both UC and CSU; see counselor for limitations

## HLED 43 units <br> Women's Health Issues

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores women's health issues within the context of the dimensions of health. Topics include gender differences in health and mortality, reproductive health issues, sexuality, mental health, stress management, positive body image and self-esteem, nutrition, weight management, chronic and infectious diseases, and substance use and abuse. The importance of individual responsibility for personal health and the promotion of informed, positive health behaviors will be discussed. Transferable to both UC and CSU; see counselor for limitations

## HLED 53 units

## Men's Health Issues

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is designed to explore contemporary health issues and how they affect men. A variety of topics will be addressed, including; cardiovascular disease, relationships and sexuality, alcohol and substance abuse, stress, and psychological health. These topics will be examined with a focus on how they influence the wellness of men. Transferable to both UC and CSU; see counselor for limitations

## HLED 10 (C-ID PSY 130) 3 units

## Human Sexuality

## 54 hours lecture

Recommended Preparation: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course provides a comprehensive overview to human sexuality from multiple perspectives including biological, psychological, sociological, cultural and historical perspectives. Students will examine knowledge, sexual attitudes, values and behaviors within the context of society and their own personal lives. Individual value systems, sexual development and interpersonal relationships will be evaluated. Current sexual norms and various aspects of interpersonal and individual sexual adjustment will be explored. This course is not open for credit to students registered in or with credit in PSYCH 10.
Transferable to both UC and CSU; see counselor for limitations

HLED 21 (C-ID PHS 101) 3 units

## Introduction to Public Health

## 54 hours lecture

Recommended Preparation: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course provides an introduction to the discipline of Public Health and satisfies the requirements of the Public Health Transfer Model curriculum. Students will gain an understanding of the basic concepts and terminologies of public health, and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions, and an in-depth examination of the field of public health will be addressed. Topics of the discipline include the epidemiology of infectious and chronic disease, prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations, community organizing and health promotion programming, environmental health and safety, global health, and healthcare policy and management.
Transferable to both UC and CSU; see counselor for limitations
HLED 22 (C-ID PHS 102) 3 units
Health and Social Justice

## 54 hours lecture

Recommended Preparation: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course provides an introduction to health inequities/disparities in the United States. Students will explore how education, socioeconomic status, racism and gender impact health outcomes, access to health care, and policy development. Students will analyze public health issues and the skills for advocating for health and social justice. Case studies will include prevalent health issues, such as obesity, drug addiction, chronic disease, and newly emerging infectious disease.
Transferable to both UC and CSU; see counselor for limitations

## HLED 24 (C-ID PHS 103) 3 units

Drugs, Health and Society

## 54 hours lecture

Recommended Preparation: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade.
This course provides an overview of substance use and abuse in the United States and the impact on personal and public health. In addition to the concept of substance abuse and dependence, the course will cover the distinction between licit and illicit drugs, risk factors, the pharmacology of various drugs, and the neurological and physiological effects on the central nervous system. An analysis of health, social, political and economic factors relative to legal and illicit drugs will also be examined. Epidemiological data on the prevalence, incidence and trends as it pertains to smoking, alcohol, prescription and other drug dependencies in the U.S. will be considered. Prevention, treatment and rehabilitation methods will also be discussed.
Transferable to both UC and CSU; see counselor for limitations

## History (HIST)

## HIST 1A (C-ID HIST 170) 3 units

History of Western (European) Civilization
54 hours lecture
Grading: letter grade.
This course is a broad survey of the history of European civilization and its world significance from pre-history to the end of the Thirty Years
War, including Greece, Rome, the Middle Ages, the Renaissance, and the Reformation through the Age of Discovery.
Transferable to both UC and CSU; see counselor for limitations

## HIST 1AH (C-ID HIST 170) 3 units

Honors History of Western (European) Civilization

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This course is a broad survey of the history of European civilization and its world significance from pre-history to the end of the Thirty Years
War, including Greece, Rome, the Middle Ages, the Renaissance, and the Reformation through the Age of Discovery.
Transferable to both UC and CSU; see counselor for limitations
HIST 1B (C-ID HIST 180) 3 units
History of Western (European) Civilization

## 54 hours lecture

Grading: letter grade.
This course traces the history of European civilization from the end of the Thirty Years War in 1648 to the present, including the French Revolution, the Napoleonic era, the Industrial Revolution, the age of nationalism and imperialism, World Wars I and II, the atomic age, the rise and fall of Soviet power and the post-Cold War era.
Transferable to both UC and CSU; see counselor for limitations
HIST 1BH (C-ID HIST 180) 3 units
Honors History of Western (European) Civilization

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This course traces the history of European civilization from the end of the Thirty Years War in 1648 to the present, including the French Revolution, the Napoleonic era, the Industrial Revolution, the age of nationalism and imperialism, World Wars I and II, the atomic age, the rise and fall of Soviet power and the post-Cold War era.
Transferable to both UC and CSU; see counselor for limitations
HIST 2B (C-ID HIST 150) 3 units
World History to 1500

## 54 hours lecture

Grading: letter grade.
This course is an introduction to world history from the origins of civilization to 1500 with an emphasis on interactions between civilizations. Topics include the role of universal religions; political, social, and gender structures; economic and demographic development; diffusion of culture and technology via migration, commerce, and imperial expansion.
Transferable to both UC and CSU; see counselor for limitations

HIST 2C (C-ID HIST 160) 3 units
World History Since 1500

## 54 hours lecture

Grading: letter grade.
This course is a survey of the major world civilizations since 1500 with an emphasis on global interactions. Topics include economic globalization;
demographic, environmental and gender transitions; intellectual, religious and cultural transformations; imperialism and resistance to empire, birth of nations; and historical origins of contemporary world.
Transferable to both UC and CSU; see counselor for limitations

## HIST 2CH (C-ID HIST 160) 3 units

Honors World History Since 1500

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.

## Grading: letter grade.

This course is a survey of the major world civilizations since 1500 with an emphasis on global interactions. Topics include economic globalization; demographic, environmental and gender transitions; intellectual, religious and cultural transformations; imperialism and resistance to empire, birth of nations; and historical origins of contemporary world.
Transferable to both UC and CSU; see counselor for limitations

## HIST 73 units

## Ancient Egypt History

## 54 hours lecture

Grading: letter grade.
This course surveys Egyptian politics, economy, society, religion, and the arts from the Pre-dynastic period through Cleopatra. It also investigates Egypt's connections with neighboring cultures of Africa, the Mediterranean, and the Middle East. An introduction to hieroglyphs is included.
Transferable to both UC and CSU; see counselor for limitations

## HIST 8A 3 units

History of the Americas

## 54 hours lecture

Grading: letter grade.
This course is a comprehensive survey of the Western Hemisphere from the development of its earliest human communities, the subsequent encounters with European civilizations, and the formation of colonial empires. The course focuses on a comparative analysis of the social, economic and political structures of the region through the movement for independence in the nineteenth century.
Transferable to both UC and CSU; see counselor for limitations

## HIST 8AH 3 units <br> Honors History of the Americas <br> 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This course is a comprehensive survey of the Western Hemisphere from the development of its earliest human communities, the subsequent encounters with European civilizations, and the formation of colonial empires. The course focuses on a comparative analysis of the social, economic and political structures of the region through the movement for independence in the nineteenth century.
Transferable to both UC and CSU; see counselor for limitations

## HIST 8B 3 units

## History of the Americas (Modern Era)

## 54 hours lecture

## Grading: letter grade.

The course presents a comprehensive survey of the distinct national identities of the nations of the Western Hemisphere as they developed and matured during the mid-nineteenth to the modern era. The course analyzes North and South America as the new nations developed social, economic, cultural, and political identities. HIST 8B meets the U.S. History, Constitution, and American Ideals graduation requirement. Effective Fall 2016, students may now take either 8A/8AH or 8B/8BH to meet aforementioned U.S. History, Constitutional, and American Ideals requirement.
Transferable to both UC and CSU; see counselor for limitations

## HIST 8BH 3 units

Honors History of the Americas (Modern Era)

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
The course presents a comprehensive survey of the distinct national identities of the nations of the Western Hemisphere as they developed and matured during the mid-nineteenth to the modern era. The course analyzes North and South America as the new nations developed social, economic, cultural, and political identities. HIST 8BH meets the U.S. History, Constitution, and American Ideals graduation requirement. Effective Fall 2016, students may now take either 8A/8AH or 8B/8BH to meet aforementioned U.S. History, Constitutional, and American Ideals requirement.
Transferable to both UC and CSU; see counselor for limitations

## HIST 9A 3 units

## History of China

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a survey of major political, social, and cultural developments in Chinese history from antiquity to the present. Major themes emphasized in this course include the rise of Chinese civilization and philosophies, the rise and fall of dynasties, the emergence of religious traditions, the nature of international relations and intercultural exchanges, the impact of modernization, and China's ongoing transformation into a new political and economic power during the contemporary era of the 20 th and 21 st centuries.
Transferable to both UC and CSU; see counselor for limitations

## HIST 9B 3 units

History of Japan and Korea

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a survey of major political, social, and cultural developments Korean and Japanese history from antiquity to the present. Key themes emphasized in this course include the rise of Korean and Japanese civilization, the histories of dynasties and ruling periods, the evolution of religious traditions, the contours of international relations and intercultural exchanges, and the impact of modernization. Particular emphasis will be given to Korea's and Japan's relationship to each other as well as to Chinese civilization and history.
Transferable to both UC and CSU; see counselor for limitations

## HIST 9C 3 units <br> History of India and Southeast Asia <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This class is a survey of the history of India and Southeast Asia from antiquity to the present. Emphasis is placed on the political, economic, social, religious and intellectual institutions of traditional India and representative cultures in Southeast Asia. Special attention is given to the impact of modernization on the Subcontinent, the development of modern India, and the history of representative cultures of Southeast Asia: Vietnam, Laos, Cambodia, Thailand, Burma, Malaya, Sumatra, and Java.
Transferable to both UC and CSU; see counselor for limitations

## HIST 10 (C-ID HIST 130) 3 units

Hist./Early America (Colonial-Reconstr)

## 54 hours lecture

Grading: letter grade.
This course is a survey of major political, economic, social, and intellectual trends in the history of the United States from the colonial era through Reconstruction (1877). Attention is given to the collision and creation of cultures during colonization, the development of slavery, the American Revolution and national origins, and the growth and division of the nation before the Civil War. HIST 10 and 11 need not be taken in sequence, if the student desires to take both courses.
Transferable to both UC and CSU; see counselor for limitations

## HIST 10H (C-ID HIST 130) 3 units <br> Honors Hist/Early Am (Colonial-Reconstr) <br> 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This course is a survey of major political, economic, social, and intellectual trends in the history of the United States, from the colonial era through Reconstruction (1877). Attention is given to the collision and creation of cultures during colonization, the development of slavery, the American Revolution and national origins, and the growth and division of the nation before the Civil War. HIST 10 H and 11 H need not be taken in sequence, if the student desires to take both courses.
Transferable to both UC and CSU; see counselor for limitations

## HIST 11 (C-ID HIST 140) 3 units

Hist./Modern America (Reconstr-Present)

## 54 hours lecture

Grading: letter grade.
This course is a survey of major political, economic, social, diplomatic and intellectual trends and events in United States history from the end of Reconstruction (1877) to the present. The course emphasizes the building of the modern industrial society, growing involvement in international relations, the evolution of a multi-ethnic community and social reform movements of the 20th and 21 st century. HIST 10 and 11 need not be taken in sequence if the student desires to take both courses.
Transferable to both UC and CSU; see counselor for limitations

## HIST 11H (C-ID HIST 140) 3 units

## Honors History/Modern America

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This course is a survey of major political, economic, social, diplomatic and intellectual trends and events in United States history from the end of reconstruction (1877) to present. The course emphasizes the building of the modern industrial society, growing involvement in international relations, the evolution of a multi-ethnic community and social reform movements of the 20th century. HIST 10H and HIST 11 H need not be taken in sequence if the student desires to take both courses.
Transferable to both UC and CSU; see counselor for limitations

## HIST 183 units

History of Mexico

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a comprehensive survey from the pre-Columbian era to the present focusing on social, cultural, intellectual, political, and ecological Mexican institutions. This course traces flashpoints of Mexican history from pre-Columbian society, Spanish conquest, colonization, Independence, U.S.-Mexican War, Revolution, muralist and arts movement, to the contemporary period.
Transferable to both UC and CSU; see counselor for limitations

## HIST 253 units

History of Women and Gender in the U.S.

## 54 hours lecture

Grading: letter grade.
This course is an intersectional survey of the history of women, gender, and sexuality in the United States from the pre-colonial period to the present. Emphasis is on the relevant political, economic, intellectual, and social roles filled by women, trans, and nonbinary people, reflecting the broad diversity of American society.
Transferable to both UC and CSU; see counselor for limitations

## HIST 27A 3 units

African American History to 1877

## 54 hours lecture

Grading: letter grade.
This course provides a comprehensive survey of the African American experience in the United States from the colonial period through Reconstruction. Emphasis is placed on African civilization prior to European enslavement, the American institution of slavery and the role of African Americans during colonial wars. Particular attention is given to contributions of African Americans to the social, economic and political development of the United States.
Transferable to both UC and CSU; see counselor for limitations

## HIST 27B 3 units

African American History 1877 to present

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides a comprehensive survey of African-American social, political and economic development in the United States from the Reconstruction period to the present. Emphasis is placed on Jim Crow and white supremacy, the modern civil rights movement and the new struggle for community economic development. Special attention is given to inequality of educational and employment opportunity in the twentyfirst century. Special attention is given to inequality of educational and employment opportunity in the twenty-first century.
Transferable to both UC and CSU; see counselor for limitations

HIST 333 units
Introduction to Chicana/o History

## 54 hours lecture

Grading: letter grade.
This course is a survey of major political, economic, social, and cultural trends and events in United States history from a Chicana/o perspective.
The course traces flash points of American and Chicana/o History from the pre-Columbian era, the colonial era, the U.S.-Mexican War, the Gold Rush period, Repatriation, World War II, the Civil Rights movement, and current issues impacting Chicana/os in the twenty-first century. Emphasis is placed on this group's identity formation, experiences, and contributions to the development of the United States.
Transferable to both UC and CSU; see counselor for limitations

## HIST 473 units

Facts, Evidence, and Explanation

## 54 hours lecture

Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade.
This course presents an overview of research methods used by historians and an introduction to critical analysis and historical writing. Students will develop these skills through a variety of written assignments such as primary source response papers, review essays, and bibliographies. The research component of this course will enhance students' information competency skills by familiarizing them with the use of resources like online databases, applets, and archives.
Transferable to both UC and CSU; see counselor for limitations

## Homeland Security Administration (HSA)

## HSA 4013 units

Introduction to Homeland Security

## 54 hours lecture

Grading: letter grade.
This course will introduce students to the vocabulary and important components of Homeland Security. It will include the importance of the agencies associated with Homeland Security and their interrelated duties and relationships. It will examine historical events and state, national and international laws that impact Homeland Security. The most critical threats confronting Homeland Security will be examined.

## HSA 4023 units

Intelligence Analysis/Security Mgmt

## 54 hours lecture

Grading: letter grade.
This course examines intelligence analysis and its indispensable relationship to the security management of terrorist attacks, man-made disasters and natural disasters. It examines vulnerabilities of the national defense and private sectors, as well as the threats posed to these institutions by terrorists, man-made disasters and natural disasters. Students will examine issues regarding intelligence support of homeland security measures and explore how the intelligence community operates.

## HSA 4033 units

## Transportation and Border Security

## 54 hours lecture

Grading: letter grade.
This course provides an in-depth view of modern border and transportation security. Specific topics include security for seaports, ships, aircraft, trains, trucks, pipelines, buses and other transportation modes. The course focuses on the technology needed to detect terrorists and their weapons as well as discussion on legal, economic, political and cultural aspects of the problem.

## Horticulture (HORT)

## HORT 11A 3 units

Plant Identification: Trees
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course focuses on the study of trees, including identification, growth habits, and ornamental uses in the landscape. Trees emphasized will come from the current California Association of Nurserymen \& Garden Centers and Associated Landscape Contractors of America Certification Test Plants list. Required field trips will be part of the course requirements.
Transferable to CSU Only

## HORT 11B 3 units

Plant Identification: Shrubs

## 36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
This course will focus on the study of shrubs, including identification, growth habits, and ornamental uses in the landscape. Shrubs emphasized will come from the current California Association of
Nurserymen \& Garden Centers and Associated Landscape Contractors of America Certification Test Plant lists.
Transferable to CSU Only

## HORT 11C 3 units

Plant Identification: Herbaceous
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course will focus on the study of herbaceous plant materials, including identification, growth habits, and ornamental uses in the landscape. Herbaceous plant material emphasized will come from the current California Association of Nurserymen \& Garden Centers and Associated Landscape Contractors of America Certification Test Plants lists.
Transferable to CSU Only

## HORT 11D 3 units

Plant Identification: Tropicals
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course will focus on the study of tropical plant materials, including identification, growth habits, and ornamental uses in the landscape. Tropical material emphasized will come from the current California Association of Nurserymen \& Garden Centers and Associated Landscape Contractors of America Certification Test Plants lists.
Transferable to CSU Only

HORT 15A 2 units
Basic Horticulture
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
This course will present the basic aspects and techniques of the horticulture industry for spring: nomenclature, plant physiology, soils,
fertilizers, propagation, plant cultivation and pest identification and control. This course also includes field trips.
Transferable to CSU Only

## HORT 15B 2 units

Basic Horticulture

## 27 hours lecture, 27 hours laboratory

Grading: letter grade or pass/no pass.
This course will present the basic aspects and techniques of the horticulture industry for fall: nomenclature, plant physiology, soils, fertilizers, plant propagation, pest identification and plant cultivation. This course also includes field trips.
Transferable to CSU Only
HORT 194 units
Turf Management
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
This course is an introduction to the study of the maintenance and management of turfgrasses that are used in athletic fields, golf courses, parks, cemeteries, commercial, and residential lawns. Discussion will focus on identification, installation, cultural requirements, and maintenance practices. Students will participate in the removal of sod and installation of new turf from seed or sod.
Transferable to CSU Only

## HORT 213 units

Principles of Landscape Design

## 54 hours lecture

Grading: letter grade or pass/no pass.
Students in this course will learn basic landscape design and drafting skills in accordance to industry standards, including landscape symbols and lettering for plant materials, hardscape, irrigation, lighting and electrical, local and state codes. Students will prepare a finished drawing of a new landscape site with cost estimates for materials and labor. This course also includes field trips.
Transferable to CSU Only

## HORT 26A 4 units

Plant Propagation - Spring

## 54 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass.
This course concentrates on plant propagation and production practices for the spring season. Emphasis is on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, and plant pest and disease control. Instruction includes an overview of structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment, and regulations pertaining to plant production based on industry standards and trends. This course also includes field trips. Transferable to CSU Only

## HORT 26B 4 units

Plant Propagation - Fall
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course concentrates on plant propagation and production practices for the fall season. Emphasis is on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, and plant pest and disease control. Instruction includes an overview of structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment, and regulations pertaining to plant production based on industry standards and trends. This course also includes field trips.
Transferable to CSU Only

## HORT 303 units

Integrated Pest Management

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course will focus on the study of diagnosing pests and diseases of ornamental plants and turf, chemical and biological control and their regulation, local, and state and federal laws pertaining to pesticide application. Students will prepare for the pesticide applicator's exam. This course also includes field trips.
Transferable to CSU Only

## HORT 2024 units

Principles of Pruning
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
Formerly HORT 202AB. Students will learn to properly prune trees, shrubs, vines and identify pruning periods for deciduous and evergreen plants. Students will also identify and safely operate tools and equipment to industry standards as well as perform maintenance and repair of tools and equipment.

## HORT 2234 units

Landscape Construction
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
Formerly HORT 223AD. This course will enable students to develop a basic knowledge of the theory and application of soil preparation, equipment operation, planting, installation and maintenance and hardscape techniques. Emphasize will be placed on landscape plan layout as well as bidding along with decking and masonry construction, irrigation troubleshooting, design and installation.

## HORT 2272 units

Interior Plant Design/Installation/Maint.
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass.
Students in this course will learn interior landscape design, installation, and maintenance techniques, as well as cultural and climatic conditions, and pests and diseases and their prevention, control or eradication. Students will learn color and seasonal plants and how to bid and sell a design.

HORT 3230.5 units

## Landscape Construction

7 hours lecture, 20 hours laboratory
Grading: letter grade or pass/no pass.
Formerly HORT 323AD. This course will aid students in developing a basic knowledge of the theory and application of soil preparation, equipment operation, planting, maintenance and techniques in irrigation, masonry, wood fences and gates and bidding.

## HORT 4304 units

Landscape Maintenance
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course prepares students to enhance the function and aesthetic value of public and private landscapes by applying appropriate maintenance techniques. Topics include planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices.

## Human Services

See Social Work (SW) (p. 453).

# Human Services, Addiction Studies (HS_AS) 

## HS_AS $41 \quad 3$ units

Introduction to Chemical Dependency
54 hours lecture
Grading: letter grade.
Formerly HS 41. This course takes the student through the history of abuse of alcohol and other mood-altering substances. How persons develop the ability to abuse and become addicted to other behaviors, such as food and sex, will also be examined. Psychological, social and physical contributions and outcomes of addictive behavior will be presented. This course is designed for those students interested in the helping professions, especially those interested in a career in Alcohol and Drug Studies. This course will assist students in preparation for the California Association of Alcohol/Drug Educators (CAADE) and/or California Association of Alcohol and Drug Abuse Counselors (CAADAC) certification tests.
Transferable to CSU Only

## HS_AS 43 units

Case Management: Treatment \& Aftercare
54 hours lecture
Grading: letter grade.
Formerly HS 43. Students will examine ways to conduct initial intake assessments, design, implement and evaluate a treatment plan plus examine various types of treatment programs and major issues to address for effective termination of clients. Client/case manager legal and confidentiality issues will also be presented. This course is designed for those interested in the helping fields. This course is required for students in preparing for the California Association of Alcohol/Drug Educators (CAADE) and/or California Association of Alcohol and Drug Abuse Counselors (CAADAC) certification.
Transferable to CSU Only

## HS_AS 463 units

Physiology \& Pharmacology of Drugs

## 54 hours lecture

Grading: letter grade.
Formerly HS 46. This course examines the effects that alcohol and several other psychoactive drugs have on our brain, body and everyday behavior. Issues including drug tolerance, co-occurring disorders and the effects of drugs on sexual performance are examined and as well as how to utilize this information when developing a treatment plan. This course is required for students preparing for both the California Association of Alcohol/Drug Educators (CAADE) and/or California Association of Alcohol and Drug Abuse Counselors (CAADAC) certification.
Transferable to CSU Only

## HS_AS 473 units

Intervention, Treatment \& Recovery

## 54 hours lecture

Grading: letter grade.
Formerly HS 47. This course examines the treatment and recovery communication process from the perspective of both the client and case manager. Several therapeutic educational approaches will be presented and applied through homework skills assignments and case presentations. This course is designed for students interested in the helping professions or pursuing a career in alcohol/drug studies. This course will assist students in preparation for the California Association of Alcohol/Drug Educators (CAADE) and/or California Association of Alcohol and Drug Abuse Counselors (CAADAC) certification exam.
Transferable to CSU Only

## HS_AS 483 units

## Group \& Family Process

## 54 hours lecture

Grading: letter grade.
Formerly HS 48. Students will explore the counseling process from the perspective of both the client and counselor. Therapeutic orientations of group/family counseling will be learned and applied through class discussions, case vignettes, and role-play. The course is designed for students interested in the helping professions. The course will assist students in preparation for the California Association of Alcohol/Drug Educators (CAADE) and/or California Association of Alcohol and Drug Abuse Counselors (CAADAC) certification.
Transferable to CSU Only
HS_AS 503 units
Law and Ethics

## 54 hours lecture

Grading: letter grade.
Formerly HS 50. Topics covered include the applicable laws and ethics related to case manager/client relationships in a treatment setting.
Laws addressing confidentiality, patient rights, assessments, sharing of personal information and crisis intervention requirements will be presented. Learning how to deal with issues such as evaluating a person's potential for suicide, child or elder abuse as well as when individuals pose a serious potential of harm to themselves or others are also examined. This is a core course for Human Services Generalist and Addiction Studies curricula.
Transferable to CSU Only

## HS_AS 72A 3.5 units

Field Instruction and Seminar I
27 hours lecture, 108 hours laboratory
Prerequisite: HS_AS 41, 43, 50 and HS 252.
Grading: letter grade.
Formerly HS 72A. This course provides supervised field-instruction experience in approved community agencies serving clients in the field of addiction treatment. The focus of the course is allowing the student to apply knowledge and learn new skills outside of the classroom environment. This course is designed to provide the student with an opportunity to develop skills that would facilitate gaining employment in the addiction services field. Development and use of helping skills, client record documentation, service coordination, self-awareness, and beginning professional growth are also emphasized.
Transferable to CSU Only

## HS_AS 72B $\quad 3.5$ units

Field Instruction and Seminar II
27 hours lecture, 108 hours laboratory
Prerequisite: HS_AS 72A.
Grading: letter grade.
Formerly HS 72B. This course provides continued supervised fieldinstruction experience in an approved agency focused on the addiction treatment. Students increase development of helping skills, client record documentation and service coordination. The course emphasizes the increased integration of theoretical human services concepts, industryrelated and evidence-based competencies and practices in the field of addiction studies and treatments. This course is intended only for students in their final semester of an Addiction Studies Program. Transferable to CSU Only

## HS_AS 1533 units

## Multicultural and Diverse Populations

## 54 hours lecture

Grading: letter grade.
Formerly HS 153. This course focuses on the major cultural, historical and societal themes in the United States and highlights the competencies needed to address and work effectively with people from various ethnic, racial, and religious groups. The course examines the knowledge, skills, and attitudes needed for the treatment providers to understand the full context of the clients' sociocultural environment and examines those that have been disadvantaged or excluded from the mainstream of US society. Includes those with co-occurring disorders. Students seek understanding across differences and focus on psychoeducation in subject areas that serve the goals of treatment and rehabilitation.

## HS_AS 1623 units <br> Addiction Counseling Skills <br> 54 hours lecture

Grading: letter grade.
Formerly HS 162. This course is an introduction to the basic skills and techniques of counseling for addiction counselors. This course describes characteristics of an effective counselor, explores several theoretical models of counseling, and assists the individual to develop skills in active listening, building rapport and trust, reflecting feelings and content, and using evidenced-based applications of counseling practices.

## HS_AS 2523 units <br> Co-Occurring Disorders <br> 54 hours lecture

Grading: letter grade.
Formerly HS 252. This course explores understanding mental illness and persons with more than one mental/psychiatric disorder. It introduces students to the various disorders in infancy, childhood, adolescence and adulthood. It will introduce students to co-existing disorders and various diagnosis and treatment techniques used to treat this unique population. Students will tour two different types of mental health facilities to provide an additional understanding of mental health issues.

## Humanities (HUMAN)

HUMAN 13 units<br>Comparative World Cultures<br>\section*{54 hours lecture}

Grading: letter grade or pass/no pass.
This course compares and contrasts major civilizations using interdisciplinary approach or team teaching drawn from the Humanities and the Social Sciences. It covers the study of two or more major cultures to determine how these human communities met their basic biological, material, religious and intellectual needs, and experienced both continuity and change through time. This course is not open for credit to students who have completed Humanities 1H, Social Science 1, or Social Science 1H.
Transferable to both UC and CSU; see counselor for limitations

## HUMAN 1H 3 units

Honors Comparative World Cultures

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course compares and contrasts major civilizations using an interdisciplinary approach or team teaching drawn from the Humanities and the Social Sciences. It covers the study of two or more major cultures to determine how these human communities met their basic biological, material, religious and intellectual needs, and experienced both continuity and change through time. This course is not open for credit to students who have completed Humanities 1, Social Science 1, or Social Science 1H.
Transferable to both UC and CSU; see counselor for limitations
HUMAN 73 units
Intro to Ethnic Histories and Identity

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores the intersection of ethnicity, race and identities in American society from the humanities and social science perspectives. The course examines social justice movements in relation to ethnic and racial groups in the United States to provide a basis for a better understanding of the socioeconomic, cultural and political conditions among key social groups and an enhanced appreciation of the complexity of the processes effecting the interaction of the American people. Not open to students registered in or with credit in SOCSC 7.
Transferable to both UC and CSU; see counselor for limitations

## Journalism (JOURN)

JOURN 5 (C-ID JOUR 150) 4 units
Introduction to Public Relations

## 72 hours lecture

Grading: letter grade.
This course includes instruction in fundamentals of publicity and public relations for community groups and business organizations. Students identify and discover sources, techniques and outlets to gain publicity. Students practice planning and preparing various types of publicity programs and press releases.
Transferable to CSU Only

JOURN 10 (C-ID JOUR 100) 3 units

## Intro to Global Media Communications

## 54 hours lecture

Grading: letter grade.
In this course students study the social, economic, political, and cultural influence of the mass media on the individual and society. The class is designed for all majors. In this course students study the social, economic, political, and cultural influence of the mass media on the individual and society. The class is designed for all majors.
Transferable to both UC and CSU; see counselor for limitations
JOURN 20 (C-ID JOUR 110) 4 units
Beginning Newswriting and Reporting
72 hours lecture
Grading: letter grade.
Students will gain experience recognizing, researching and writing news stories, including college topics, breaking news, issues, government, elections, entertainment, sports, obituaries and profiles. Students will learn the importance of accuracy, the First Amendment, libel, media responsibility, fairness, balance and neutrality.
Transferable to both UC and CSU; see counselor for limitations
JOURN 35 (C-ID JOUR 160) 3 units

## Photojournalism

## 54 hours lecture

Grading: letter grade.
Formerly JOURN 35AD. This course offers instruction in basic and advanced photojournalism techniques and practical experience in newspaper photography. It is not open to students registered in or with credit in PHOT 35.
Transferable to CSU Only
JOURN 80 (C-ID JOUR 130) 4 units
Multimedia Newsroom: News
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly JOURN 80AD. In the Multimedia Newsroom, students will produce material for a variety of electronic media outlets and the printed Viking newspaper. Students will gather news about Long Beach City
College for stories, photos, videos, blogs, artwork, tweets, postings, informational graphics and other products under deadline pressures. The course will involve field work on campus to cover news about Long Beach City College.
Transferable to CSU Only

## JOURN 814 units

Multimedia Newsroom: Features
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course focuses on the production of multimedia news as it relates to feature stories. Students will research, write and produce feature and sports stories about Long Beach City College utilizing photos, videos, blogs, artwork, tweets, postings, informational graphics and other products under deadline pressures. Students will produce material for a variety of electronic media outlets and the printed Viking newspaper. The course will involve field work on campus to cover news about Long Beach City College.
Transferable to CSU Only
JOURN $82 \quad 4$ units
Multimedia Newsroom: Profiles
$\mathbf{5 4}$ hours lecture, $\mathbf{5 4}$ hours laboratory
Grading: letter grade or pass/no pass.
This course concentrates on the production of news profiles and
obituaries. Students will learn how to research and interview human
subjects by combining observations, facts, responses from a variety of
sources. Students will produce special interest profiles and obituaries
utilizing a variety of multimedia formats. The course will involve field
work on campus to cover profiles and obituaries about Long Beach City
College.
Transferable to CSU Only

## JOURN 834 units

## Multimedia Newsroom: Politics

54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course concentrates on the reporting of politics and government. Students will gather information by attending political speeches, government meetings, rallies, protests and other related events. Students will then compile research data and materials to produce a news story utilizing a variety of multimedia and print formats. The course will involve field work on and off campus to cover politics and government.
Transferable to CSU Only
JOURN 86 (C-ID JOUR 131) 4 units
Multimedia Editors: Design
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Students will gain skills in designing a layout for news or magazine websites, other electronic products or printed materials. Topics will include news copy editing, news judgment, ethics and responsibility, headline writing, page design and selection and placement of photos and art for on-line formats and the printed newspaper or magazine. The class is designed for Viking news or City magazine website and newspaper or City magazine student editors and will require visits to campus settings outside of the classroom.
Transferable to CSU Only
JOURN 87 (C-ID JOUR 131) 4 units
Multimedia Editors: Visuals
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course concentrates on the visual aspects of electronic products and printed materials. Topics will include editing photos, artwork, infographics, videos, ethics and responsibility. Students will focus on the visual aspects of the Viking news website, newspaper and/or City magazine.
Transferable to CSU Only

## JOURN 88 (C-ID JOUR 131) 4 units

Multimedia Editor Training: Management
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course focuses on executive editing skills. Topics will include responsibility for overall content of the products, formulating a news or magazine content budget and leading a group of fellow students in news judgment, directing reporters, photographers, bloggers and artists and selection and placement of stories and visuals for online formats and the printed newspaper or magazine. The class is designed for experienced Viking news website, newspaper and City magazine student editors and will require visits to campus settings outside of the classroom.
Transferable to CSU Only

# Kinesiology, Adapted (KINA) 

KINA $1 \quad 1$ units<br>PE for the Physically Limited<br>54 hours laboratory<br>Grading: letter grade.

Formerly KINA 1AD. This course is designed to produce a program of individual and group exercises and physical activities that develop motor patterns and perceptual-motor skills, endurance, strength and selfawareness. All activities will be adapted to the interests, capabilities and limitations of each student.
Transferable to both UC and CSU; see counselor for limitations

## Kinesiology, General (KING)

## KING 21 units <br> Ultimate Frisbee <br> 54 hours laboratory

Grading: letter grade or pass/no pass.
This course is designed to provide an overview of the sport of Ultimate Frisbee with focus on instruction in the rules, techniques and strategies. Transferable to both UC and CSU; see counselor for limitations

## KING 2B 1 units

Ultimate Frisbee

## 54 hours laboratory

Recommended Preparation: KING 2.
Grading: letter grade or pass/no pass.
This course provides the continued study of and practice in ultimate frisbee. Topics that will be examined are performance skill techniques, fitness, offensive strategies and defensive strategies. Emphasis will be placed on game and tournament play.
Transferable to CSU Only
KING 101 units
Badminton
54 hours laboratory
Grading: letter grade.
Formerly KING 10AD. This course is designed to provide instruction in the fundamentals of badminton and involves targeted skill practice and tournament play. The course includes a brief history of badminton, terminology, rules, conditioning, strokes, footwork, tactics, and strategies utilized in single and doubles play.
Transferable to both UC and CSU; see counselor for limitations

## KING 10B 1 units

## Badminton

54 hours laboratory
Recommended Preparation: KING 10.
Grading: letter grade or pass/no pass.
This course provides continued instruction in the sport of badminton. The course involves the rules, conditioning, strokes, footwork, tactics, singles and doubles skill practice and tournament play.
Transferable to both UC and CSU; see counselor for limitations
KING 141 units
Basketball
54 hours laboratory
Grading: letter grade.
Formerly KING 14AD. This course will provide an overview of the sport of basketball with focus on instruction in rules, techniques and strategies. Course goals will be achieved through guided instruction and participation in various types of basketball competition.
Transferable to both UC and CSU; see counselor for limitations

## KING 14B 1 units

## Basketball

## 54 hours laboratory

Recommended Preparation: KING 14.
Grading: letter grade or pass/no pass.
This course provides the continued study of the sport of basketball with focus on instruction in rules, techniques and strategies. Emphasis will be placed on game and tournament play.
Transferable to both UC and CSU; see counselor for limitations

## KING 554 units

## Lifeguard/Water Safety Training

54 hours lecture, 54 hours laboratory
Recommended Preparation: Advanced swimming ability.
Grading: letter grade.
Materials Fee: \$42.
Formerly KING 55AD. This is a certification course for American Red Cross water safety instructors and lifeguards. This course enables students to instruct swimming courses and to serve as lifeguards at aquatic facilities.
Transferable to both UC and CSU; see counselor for limitations
KING 651 units
Martial Arts
54 hours laboratory
Grading: letter grade.
Formerly KING 65AD. This physical activity course is an introduction to the basic techniques of martial arts systems. Discussion of each style, as well as physical and mental attributes of those likely to excel within each system is included. This non-sparring exercise program improves reflexes, coordination, strength, flexibility, balance, conditioning, endurance and muscle tone. Emphasis is placed on the fundamentals of martial arts, including martial arts safety skills and etiquette, punches, blocks, strikes, kicks, stances, vital points, and kick/strike analysis Transferable to both UC and CSU; see counselor for limitations

KING 65B 1 units

## Martial Arts

## 54 hours laboratory

Recommended Preparation: KING 65.
Grading: letter grade or pass/no pass.
This course provides the continued study of and practice in techniques of martial arts systems at an intermediate level. Discussion of each style, as well as, physical and mental attributes of those likely to excel within each system is included. This non-sparring exercise program improves reflexes, coordination, strength, flexibility, balance, conditioning endurance, and muscle tone. Emphasis is placed on the continued development of the fundamentals of martial arts safety skills and etiquette, punches, blocks, strikes, kicks, stances, vital points, and kick/ strike analysis.
Transferable to both UC and CSU; see counselor for limitations
KING 661 units

## Self-Defense

54 hours laboratory
Grading: letter grade.
Formerly KING 66AD. The physical activity course covers safety, defense, techniques and practical applications of skills for self-defense, psychological defenses and assertiveness training in a technical and practical framework. Strikes, kicks, blocks, take downs, take down defense, throws, sweeps, ground fighting, and core strengthening will be covered.
Transferable to both UC and CSU; see counselor for limitations

## KING 66B 1 units

## Self Defense

54 hours laboratory
Recommended Preparation: KING 66.
Grading: letter grade or pass/no pass.
This course provides the continued study of Self Defense. Topics will include strikes, kicks, blocks, take downs, take down defense, throws, sweeps, ground fighting, and core strengthening.
Transferable to both UC and CSU; see counselor for limitations
KING 701 units
Soccer
54 hours laboratory
Grading: letter grade.
Formerly KING 70AD. This course is designed to provide an overview of the sport of soccer with focus on instruction in the rules, techniques and strategies.
Transferable to both UC and CSU; see counselor for limitations

## KING 70B 1 units

Soccer

## 54 hours laboratory

Recommended Preparation: KING 70.
Grading: letter grade or pass/no pass.
This course provides the continued study of and practice in soccer.
Topics that will be examined are performance skill techniques, fitness,
offensive and defensive strategies. Emphasis will be placed on game and
tournament play.
Transferable to both UC and CSU; see counselor for limitations

## KING 741 units

Softball
54 hours laboratory
Grading: letter grade.
Formerly KING 74AD. This is a physical activity course designed to provide an overview of softball as a team sport. Instruction will focus on basic skills, rules, techniques, teamwork and strategies.
Transferable to both UC and CSU; see counselor for limitations

## KING 761 units

Swimming

## 54 hours laboratory

Grading: letter grade.
Formerly KING 76AD. This course is designed to provide instruction in the fundamentals of swimming including basic skills, stategies, rules, stroke mechanics and techniques.
Transferable to both UC and CSU; see counselor for limitations
KING $84 \quad 1$ units
Tennis
54 hours laboratory
Grading: letter grade.
Formerly KING 84AD. This course is designed to provide instruction in the fundamentals of tennis, including strategy, rules, the forehand and backhand groundstrokes, and the serve.
Transferable to both UC and CSU; see counselor for limitations
KING 861 units
Touch Football
54 hours laboratory
Grading: letter grade.
Formerly KING 86AD. This course offers instruction in the rules, strategies, and proper techniques required by the game of touch football. Transferable to both UC and CSU; see counselor for limitations

KING $90 \quad 1$ units
Volleyball
54 hours laboratory
Grading: letter grade
Formerly KING 90AD. This course is designed to provide instruction in the basic fundamentals of volleyball including setting, passing, hitting, and team play.
Transferable to both UC and CSU; see counselor for limitations
KING 90B 1 units
Volleyball
54 hours laboratory
Recommended Preparation: KING 90.
Grading: letter grade or pass/no pass.
This course provides the continued study of and practice in volleyball at an intermediate level. Topics that will be examined are performance skills, fitness, and offensive and defensive strategies. Emphasis will be placed on game and tournament play.
Transferable to both UC and CSU; see counselor for limitations
KING 921 units

## Sand Volleyball

## 54 hours laboratory

Grading: letter grade or pass/no pass.
This is a physical activity course designed to provide an overview of sand volleyball as a team sport. Instruction will focus on basic skills, rules, techniques, teamwork and strategies.
Transferable to both UC and CSU; see counselor for limitations
KING 92B 1 units
Sand Volleyball
54 hours laboratory
Recommended Preparation: KING 92.
Grading: letter grade or pass/no pass.
This course provides the continued study of and practice in sand volleyball at an intermediate level. Topics that will be examined are performance skills, fitness, and offensive strategies and defensive strategies. Emphasis will be placed on game and tournament play. Transferable to both UC and CSU; see counselor for limitations
KING 941 units
Rugby
54 hours laboratory
Grading: letter grade or pass/no pass.
This course provides the study of and practice in the team sport of rugby. Topics that will be examined are fundamental skills, rules, history, scoring, and etiquette.
Transferable to both UC and CSU; see counselor for limitations

# Kinesiology, Intercollegiate Athletics (KINIA) 

KINIA 1AD 3 units

Baseball (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course provides specific conditioning, techniques, strategies and instruction in baseball. The course is designed for men of exceptional ability who wish to participate in intercollegiate baseball. The course fulfills the requirements for a physical education activity and meets the state intercollegiate requirement for conditioning in preparation for competition. Instructor Consent required.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 2AD 0.5-3 units

Off-Season Conditioning for Athletes
180 hours laboratory
Grading: letter grade.
This is a variable unit course that is designed for any student preparing for intercollegiate athletic competition. The specific physical fitness routines required by the intercollegiate athlete during the off-season will be addressed. The purpose of the course is to develop a level of physical fitness, strength, and conditioning that will enhance the athlete's ability to be successful in intercollegiate competition. This course unit value can range from .5 (27hours) - 3 (162 hours).
Transferable to both UC and CSU; see counselor for limitations

## KINIA 3AD 3 units

Basketball (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course is designed for students who possess advanced basketball skills and abilities and who intend to to participate in intercollegiate competitive basketball, which fulfills the legal requirement for a physical education activity.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 4AD 0.5-3 units

Pre-Season Training for Athletes
180 hours laboratory
Grading: letter grade or pass/no pass.
This is a variable unit course in which enrollment is limited to athletic team candidates. Emphasis is placed on sport specific technique development, team strategies and competitive performance. The course is designed with the intent of peaking performance for the upcoming intercollegiate athletic season. Students who repeat this course will improve skills and fitness specific to the chosen sport. This course unit value can range from .5 to 3 .
Transferable to both UC and CSU; see counselor for limitations

## KINIA 5AD 3 units

Cross Country (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of Men's Cross Country. The course is designed for men of exceptional ability who wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 7AD 3 units

Football (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course provides specific conditioning, techniques, strategies, nutrition for and instruction in football. The course is designed for men of exceptional ability who wish to participate in intercollegiate football. The course fulfills the requirements for Plan B and the physical fitness/ wellness requirement for Plan A of the General Education pattern at LBCC. Instructor Consent required.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 13AD 3 units

Soccer (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course provides specific conditioning, techniques, strategies, nutrition for and instruction in soccer. The course is designed for men of exceptional ability who wish to participate in intercollegiate soccer.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 15AD 3 units

Swimming (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course provides specific conditioning, techniques, strategies and instruction in the rules of swimming. The course is designed for men of exceptional ability who wish to participate with the intercollegiate swimming team.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 19AD 3 units

Track \& Field (Men)

## 180 hours laboratory

Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of Men's Track \& Field. The course is designed for men of exceptional ability who wish to participate in Intercollegiate Athletics.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 21AD 3 units

Volleyball (Men)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course provides specific conditioning, techniques and strategies, in the instruction of volleyball. The course is designed for men of exceptional ability who wish to participate in intercollegiate volleyball. This course meets the health education requirement for Plan B and the physical fitness/wellness requirement for Plan A of the General Education pattern at LBCC.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 23AD 3 units

## Water Polo (Men)

## 180 hours laboratory

Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of water polo. The course is designed for men of exceptional ability who wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 27AD 3 units

Basketball (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of Women's Basketball. The course is designed for women of exceptional ability who wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations
KINIA 29AD 3 units
Cross Country (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course is designed to provide advanced preparatory instruction in Women's Intercollegiate Cross Country. The students will have multiple opportunities to apply running strategies to actual racing situations.
Running performance will be assessed and evaluated by the students in order to improve performance. Try outs, out-of-season conditioning and training will be integral components of the class.
Transferable to both UC and CSU; see counselor for limitations
KINIA 33AD 3 units
Beach Volleyball (Women)
180 hours laboratory
Grading: letter grade.
This course is designed to develop advanced skills in sand volleyball with intended participation on the women's intercollegiate competitive team.
The course includes in-season conditioning and training in preparation for competition. The course fulfills the legal requirement for a physical education activity.
Transferable to both UC and CSU; see counselor for limitations
KINIA 35AD 3 units
Soccer (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This class is offered as part of a diverse program of intercollegiate athletics for women of exceptional ability which fulfills the legal requirement of a physical education activity.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 37AD 3 units

Softball (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of softball (fast-pitch). The course is designed for women of exceptional ability who wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations

## KINIA 39AD 3 units

## Swimming (Women)

180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of competitive swimming. The course is designed for women of exceptional ability that wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations
KINIA 41AD 3 units
Tennis (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of tennis. The course is designed for women of exceptional ability who wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations
KINIA 43AD 3 units
Track \& Field (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques and strategies of Women's Track \& Field. The course is designed for women of exceptional ability who wish to participate in Intercollegiate Athletics.
Transferable to both UC and CSU; see counselor for limitations
KINIA 45AD 3 units
Volleyball (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course is designed to provide the instruction and training for intercollegiate competition in women's volleyball for students of exceptional ability who wish to participate at this level of competition. Transferable to both UC and CSU; see counselor for limitations

KINIA 47AD 3 units
Water Polo (Women)
180 hours laboratory
Recommended Preparation: Enroll by Instructor Consent.
Grading: letter grade.
This course offers instruction in the rules, techniques, and strategies of water polo. The course is designed for women of exceptional ability who wish to participate in intercollegiate athletics.
Transferable to both UC and CSU; see counselor for limitations

## Kinesiology, Physical Fitness (KINPF)

## KINPF 31 units

Aqua Calisthenics
54 hours laboratory
Grading: letter grade.
Formerly KINPF 3AD. This course involves instruction and practice in water aerobic exercise. Emphasis will be placed on toning, trimming and firming skeletal muscles through water resistance exercises in shallow water. Increasing flexibility, strengthening the cardiovascular system, and improving the respiratory system will also be stressed. Students do not need to have swim skills for this course.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 41 units

Deep Water Aerobics
54 hours laboratory
Grading: letter grade.
Formerly KINPF 4AD. This course will provide instruction in the developmnt of the fundamental elements of fitness through the application of deep water reisistance and buoyancy. Progressive instruction includes the development of increasingly more strenous exercises for cardiorespiratory fitness, muscular strength, endurance and flexibility.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 61 units

Cardio Fitness
54 hours laboratory
Grading: letter grade.
Formerly KINPF 6AD. This course focuses on improving cardiovascular fitness while also strengthening and toning the entire body. High energy, easy to follow exercises and movements are incorporated. Examples of exercises that may be used are: spin, step, aerobics, core and sculpting workouts set to music
Transferable to both UC and CSU; see counselor for limitations

## KINPF $8 \quad 1$ units

Circuit Weight Training

## 54 hours laboratory

Grading: letter grade.
Formerly KINPF 8AD. This course covers cardiovascular and strength fitness training in a circuit weight training setting. Students will learn to combine the muscle-building benefits of resistance training with a cardiovascular boost to help burn excess body fat, develop lean muscle tissue, and improve cardiovascular and muscular endurance.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 8B 1 units

Circuit Weight Training
54 hours laboratory
Recommended Preparation: KINPF 8.
Grading: letter grade or pass/no pass.
This course covers cardiovascular and strength fitness training in a circuit weight training setting. Students will learn to combine the musclebuilding benefits of resistance training with a cardiovascular boost to help burn excess body fat, develop lean muscle tissue, and improve cardiovascular and muscular endurance.
Transferable to both UC and CSU; see counselor for limitations
KINPF $10 \quad 1$ units
Stretch \& Relaxation
54 hours laboratory
Grading: letter grade
This course emphasizes the development of flexibility in muscles and joints to prevent injury and to improve body alignment and posture. Relaxation and stretching techniques will be used to improve general fitness and reduce stress.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 10B 1 units

## Stretch \& Relaxation

## 54 hours laboratory

Recommended Preparation: KINPF 10.
Grading: letter grade or pass/no pass.
This course provides the continued study and development of flexibility in muscles and joints at an intermediate to advanced level. Relaxation and stretching techniques will be used to improve general fitness and reduce stress.
Transferable to both UC and CSU; see counselor for limitations
KINPF 121 units
Core Conditioning

## 54 hours laboratory

Grading: letter grade or pass/no pass.
Formerly PEPF 12AD. This course is an introduction to conditioning
through the understanding and practice of exercise using the anatomical core. This class promotes improved muscular strength and endurance,
flexibility, cardiorespiratory conditioning, and body composition through
the usage of resistance training, mat and stability ball training, HIIT and circuit training.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 12B 1 units

## Core Conditioning

## 54 hours laboratory

Recommended Preparation: KINPF 12.
Grading: letter grade or pass/no pass.
This course is an intermediate level of conditioning through the understanding and practice of exercise using the anatomical core. Muscular strength and endurance, flexibility, cardiorespiratory conditioning, and body composition will be improved through the usage of resistance training, mat and stability ball training, HIIT and circuit training.
Transferable to both UC and CSU; see counselor for limitations
KINPF 141 units
Yoga

## 54 hours laboratory

Grading: letter grade or pass/no pass.
This course will provide students with designed breathing, flexibility, strength, balance, and meditation exercises to enhance the relationship between the mind and body. Students will be introduced to the basic language, philosophy, history, and styles of yoga.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 171 units <br> Jogging <br> 54 hours laboratory

Grading: letter grade or pass/no pass.
Formerly PEPF 17AD. This course is designed to be an introduction to develop a personal jogging program that will benefit a broad spectrum of fitness levels. This course will incorporate a weekly mileage progression with an emphasis on jogging mechanics and prevention of injuries. Transferable to both UC and CSU; see counselor for limitations

KINPF 17B 1 units
Jogging
54 hours laboratory
Recommended Preparation: KINPF 17
Grading: letter grade or pass/no pass.
This course provides the continued study and development of a personal jogging program that will benefit a broad spectrum of fitness levels. This course will continue to incorporate a weekly mileage progression with an emphasis on jogging mechanics and prevention of injuries.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 181 units

## Triathlon Training

## 54 hours laboratory

Recommended Preparation: KING 76.
Grading: letter grade or pass/no pass.
Formerly PEPF 18AD. This course provides a dynamic physical fitness program that focuses on swimming, cycling (spin bike) and running.
The student will gain thorough body conditioning as well as knowledge and experience in the sport of triathlon. Topics consistent with triathlon training will be covered. Students should be at an intermediate fitness level and know how to swim freestyle.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 18B 1 units

Triathlon Training

## 54 hours laboratory

Recommended Preparation: KINPF 18.
Grading: letter grade or pass/no pass.
This course provides the study of and practice in triathlon training at an intermediate level. The course continues to focus on a dynamic physical fitness program which includes swimming, cycling, and running. The process will allow the student to gain thorough body conditioning as well as knowledge and experience in the sport of triathlon. Topics will include cardio-respiratory training, strength training, and flexibility activities which are consistent to triathlon training. This course will contribute to students who are obtaining a kinesiology degree or who wish to develop more intensive physical training techniques. Participants entering this course should be at an intermediate fitness level and know how to swim freestyle. Students will need to provide their own bicycle and helmet. Transferable to both UC and CSU; see counselor for limitations

## KINPF $21 \quad 1$ units

Low Impact Cardio
54 hours laboratory
Grading: letter grade.
Formerly KINPF 21 AD. This course is designed to improve aerobic capacity and strength endurance through low impact cardio exercise and will provide students with a foundation of aerobic fitness through walking and other forms of low impact cardiovascular exercise. Students will progress from shorter duration, lower intensity walks and movement exercise to higher intensity power walking and movement activity. Transferable to both UC and CSU; see counselor for limitations

## KINPF 221 units

Physical Fitness
54 hours laboratory
Grading: letter grade.
Formerly KINPF 22AD. This course will include the fitness components of cardiorespiratory, strength training, and flexibility activities. This course will include both indoor and outdoor experiences in fitness training. Assessment testing will be done to determine levels of performance in the areas of muscular strength and endurance, aerobic fitness, flexibility, and body composition.
Transferable to both UC and CSU; see counselor for limitations
KINPF 22B 1 units

## Physical Fitness

## 54 hours laboratory

Recommended Preparation: KINPF 22.
Grading: letter grade or pass/no pass.
This course provides the continued study and expansion of the 5 components of fitness: muscular strength, muscular endurance, cardiovascular endurance, flexibility and body composition. Topics focus on aerobic vs. anaerobic training, functional fitness principles, and current health risks. The course will utilize both indoor and outdoor experiences in fitness training at the intermediate level. Assessment testing will be done to determine levels of performance within each component of fitness.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 231 units

## Cycling Conditioning

## 54 hours laboratory

Grading: letter grade or pass/no pass.
Formerly PEPF 23AD. This course is an introduction to physical fitness through indoor cycling. The cycling program is an individually paced, noncompetitive, group training program designed for all riders and all fitness levels. Cycling is an exercise performed on a stationary bicycle and is performed to music. The course is open to anyone who is interested in developing muscular endurance, improved cardio-respiratory endurance and body composition.
Transferable to both UC and CSU; see counselor for limitations
KINPF 241 units

## Cardio Cross Fit

54 hours laboratory
Recommended Preparation: KINPF 22.
Grading: letter grade or pass/no pass.
Formerly PEPF 24AD. This course encompasses the development of cardiovascular capacity, core strength (muscle strength and endurance), flexibility, coordination and balance. A variety of aerobic and anaerobic training techniques as well as body weight resistance exercises will be presented in a "boot camp" format.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 421 units

## Swimming Fitness

54 hours laboratory
Grading: letter grade.
Formerly KINPF 42AD. Swim fitness is a pool-based physical fitness activity. The course consists of swimming and related circuit training exercises performed primarily in the water, but also on land. Topics will include cardio-respiratory training, strength training, interval training, cross training and program design all as applied to swim fitness.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 531 units

## Resistance Training

## 54 hours laboratory

Recommended Preparation: KINPF 54.
Grading: letter grade.
Formerly KINPF 53AD. The course will provide students the opportunity to learn the techniques of functional movement exercises. Students will be instructed on a wide variety of resistance training modalities and how they are implemented in different weight lifting genres. Proper technique will be a major emphasis with a high importance placed on students lifting weights that are within a safe capacity of their individual limits. Students will work cooperatively in small groups and be placed together according to level of expertise and strength capacity.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 53B 1 units

Resistance Training

## 54 hours laboratory

Recommended Preparation: KINPF 53.
Grading: letter grade or pass/no pass.
The course will provide students the opportunity to continue to learn techniques of functional movement exercises at an intermediate to advanced level. Students will be instructed on a wide variety of resistance training modalities and how they are implemented in different weight lifting genres. Proper technique will be a major emphasis with a high importance placed on students lifting weights that are within a safe capacity of their individual limits. Students will work cooperatively in small groups and be placed together according to level of expertise and strength capacity.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 541 units

## Weight Training

## 54 hours laboratory

Grading: letter grade.
This weight training course is designed to present a variety of lifting techniques. Students will use these techniques and their understanding of basic anatomy to increase strength and flexibility to reach their weight lifting goals.
Transferable to both UC and CSU; see counselor for limitations

## KINPF 54B 1 units

Weight Training

## 54 hours laboratory

Recommended Preparation: KINPF 54.
Grading: letter grade or pass/no pass.
This course continues to provide study and practice in a variety of weight lifting techniques at an intermediate to advanced level. Students will use these techniques and their understanding of basic anatomy to continue focus on increasing strength and flexibility to reach their weight lifting goals.
Transferable to both UC and CSU; see counselor for limitations

## KINPF $81 \quad 1$ units

Fitness and Wellness Center
9 hours lecture, 27 hours laboratory
Grading: letter grade.
This course is an introduction to fitness and wellness. Students will complete weekly workouts in the fitness center while focusing on individualized goals. Safe and effective nutrition and exercise, wellness lifestyles that reduce health risks and self-evaluation will be covered. Transferable to both UC and CSU; see counselor for limitations

## KINPF 84A 2 units

## Fitness and Wellness

18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly KINPF 84AD. Physical fitness tests are administered before, during and after exercise programs to improve reserve capacity in endurance, muscular strength and joint mobility. Lectures and assignments focus on nutrition and diet, exercise, and modifications of lifestyle to enhance the qualify of life and reduce health risks. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format. This allows for specific lecture and/or lab instructional activities to be delivered through more flexible scheduling of days and times but for a specified number of hours and in accordance with the requirements and specific instructional activities of the course outline of record. This will be expected of all enrolled students. Please see the schedule of classes for the number of TBA hours to be completed for this course.
Transferable to CSU Only

## KINPF 84B 2 units

## Fitness \& Wellness

18 hours lecture, 54 hours laboratory
Recommended Preparation: KINPF 84.
Grading: letter grade or pass/no pass.
This course provides for the continued study of and practice in Fitness \& Wellness techniques and issues. Selected physical fitness tests are administered before, during and after exercise programs to improve endurance, strength, and joint mobility. Lectures and assignments focus on exercise and modifications of lifestyle to enhance the quality of life and reduce health risks.
Transferable to both UC and CSU; see counselor for limitations

## KINPF $681 \quad 0$ units

Exercise for Fitness and Wellness
9 hours lecture, 27 hours laboratory
Grading: non graded.
This course is a physical fitness course that is designed for cardiorespiratory, strength and flexibility exercises within a prescribed fitness program. Students will learn concepts of fitness and wellness, workout design, and exercise techniques.

## Kinesiology, Professional Preparation (KINPP)

KINPP 1 (C-ID KIN 100)
3 units
Introduction to Kinesiology

## 54 hours lecture

Grading: letter grade.
This course is a survey of the discipline of Kinesiology, including knowledge of the nature and importance of performing and studying physical activity. It includes an analysis of the lifelong importance of physical activity in daily life. The course surveys the general knowledge base of the discipline as reflected in the major sub-disciplines and reviews selected ideas in the historical, philosophical, sociological, physical, and psychological domains within human movement. In addition, the course introduces students to the general characteristics of the field's professions, to specific types of physical activity professions typically pursued by Kinesiology students and assists them in making some early career decisions.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 43 units

## Lifetime Wellness Principles

## 54 hours lecture

Grading: letter grade.
The course focuses on holistic and inter-related dimensions of wellness and explores the choices available that may encourage and enhance the quality of life. The dimensions of wellness include: physical, social, emotional, occupational, intellectual, environmental, and spiritual. The course provides an opportunity for students to learn positive life skills and expand self-awareness. The course promotes personal, family and community wellness.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 53 units

Sports Appreciation
54 hours lecture
Grading: letter grade.
This class will explore sports and its role in society. Topics will include a survey of a variety of sports and spectator appreciation. The class will explore careers in amateur and professional sports organizations.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 73 units

Intro to Community Recreation

## 54 hours lecture

Grading: letter grade.
This course is designed for recreation majors and non-majors. This is a general orientation to the field of recreation and parks services. Included is a history of the development of the recreation profession, and a survey of recreation and leisure services. The course also includes a description and interpretation of recreation as a form of community service, and the nature, scope, and significance of leisure and recreation as a social force in contemporary society. The role of the professional leader in a variety of settings is emphasized.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 83 units

## Stress Management through Physical Activity

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course addresses many facets of stress with an emphasis on physical activity as a coping strategy. Many training methods and activities are taught along with the practice of relaxation techniques. The physiology of stress, disease and stress, and performance anxiety are also within the scope of this course.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 103 units

Prevention \& Care of Athletic Injuries
54 hours lecture, 9 hours laboratory
Grading: letter grade.
This course introduces the basic concepts of athletic training, including instruction for prevention, recognition, management and treatment of common injuries in an active population. The skills of basic strapping, bracing, padding and taping for the prevention and support of injuries will be presented and practiced in class.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 122 units

## Techniques of Physical Fitness

## 36 hours lecture

Grading: letter grade or pass/no pass.
Formerly KINPF 83AD. This course provides methods and concepts of lifetime physical fitness and nutritional understanding. Analyses of instruction, practice, and practical techniques for evaluating one's own physical fitness status will be covered. This course is designed to explore approaches for practice and evaluation of physical fitness status for reserve capacity in cardiovascular endurance, local muscular endurance, muscular strength and joint mobility.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 143 units

Theory of Athletic Coaching

## 54 hours lecture

Grading: letter grade.
This course is an introduction to the profession of athletic coaching. With emphasis on a comprehensive approach to the art and science of coaching, the development of a coaching philosophy will be explored and validated by a greater understanding of the psychology, physiology and management of sport. Areas of concentration will include, coaching objectives and style, communication and motivation skills, training principles and techniques and team management strategies.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 153 units

## Sports Officiating (Fall)

36 hours lecture, 54 hours laboratory
Grading: letter grade.
The course provides theory in officiating both intramural college and high school fall/winter sports. Students will participate as actual game officials during on-campus intramural competition. This course is open to all students and is designed for those seeking professional preparation to be able to officiate fall/winter sports. Students may have to attend offcampus sporting events for observation purposes.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 173 units

Sports Officiating (Spring)
36 hours lecture, 54 hours laboratory
Grading: letter grade.
The course provides theory in officiating both intramural college and high school winter/spring sports. Students will participate as actual game officials during on campus intramural competition. This course is open to all students and is designed for those seeking professional preparation to be able to officiate winter/spring sports. Students may have to attend offcampus sporting events for observation purposes.
Transferable to both UC and CSU; see counselor for limitations

## KINPP 23 (C-ID KIN 101) <br> 3 units

## First Aid and Safety

## 54 hours lecture

Grading: letter grade.
This course will introduce students to the techniques and the principles involved in rendering prompt and necessary emergency care to the injured or ill. Instruction will cover core material for breathing and cardiac emergencies, sudden illnesses, soft tissue injuries, environmental incidents, musculoskeletal injuries, and other special circumstances. Students will practice the skills and procedures for cardiopulmonary resuscitation (CPR), rescue breathing, and the proper use of an Automatic External Defibrillator (AED). With the successful completion of this course students will have the opportunity to become certified in the Standard First Aid and Personal Safety and Cardiopulmonary Resuscitation (CPR) Certificates granted by the American Red Cross.
Transferable to both UC and CSU; see counselor for limitations

## KINPP $70 \quad 3$ units

Fitness Program Design \& Instruction

## 54 hours lecture

Grading: letter grade.
This course is designed to provide the student with the theoretical knowledge and practical skills needed to prepare for the National Academy of Sports Medicine Personal Training Certification Examination. Topics will include application of the applied sciences, program design and implementation of integrated fitness training for healthy adults and special populations, communication, health psychology, teaching techniques, injury prevention and safety, professional responsibilities, and business fundamentals. This course fulfills half of the necessary coursework needed to prepare for the NASM certification. (Formerly KINPP 70B)
Transferable to CSU Only

## KINPP 753 units

Exercise Science \& Fitness Assessment

## 54 hours lecture

Grading: letter grade.
This course is designed to provide the theoretical knowledge necessary to prepare for the National Academy of Sports Medicine Personal
Training Certification exam. Topics include exercise physiology, human anatomy, applied kinesiology, basic nutrition, health screening, the theory of fitness assessment, and exercise adaptation. This course fulfills half of the necessary coursework needed to prepare for the NASM certification.
(Formerly KINPP 70A)
Transferable to CSU Only

## KINPP 2033 units

## Kines and Musculoskeletal Foundations

## 54 hours lecture

Grading: letter grade.
This course approaches the study of the human body primarily from a functional perspective. There will be emphasis on the relationship between muscle and bone as they relate to human movement. The content is designed for kinesiology students, personal trainers, coaches and others interested in the overall health of the individual.
KINPP 2203 units
Yoga Theory
54 hours lecture
Grading: letter grade.
This course includes the history of yoga, the evolution of yoga from its earliest development, and the exploration of ancient texts of yoga. Major lineages of yoga and related practices will be covered, with a focus on the integration of these ideas in contemporary teaching.

KINPP 2223 units
Foundations of Teaching Yoga 1

## 54 hours lecture

Grading: letter grade.
This course is designed to effectively train and prepare students to become knowledgeable teachers of Hatha Yoga. Emphasis on variations, adjustments and modifications of basic yoga poses for teaching different levels in various settings. Focus on developing skill for instructing yoga, including verbal cueing for anatomically supportive sequences, sequencing of postures, proper alignment, positive communication, cueing verbally and physically and stress management techniques for healthier lifestyles.

## KINPP 2243 units

Foundations of Teaching Yoga 2
54 hours lecture
Prerequisite: KINPP 222.
Recommended Preparation: KINPP 220.
Grading: letter grade.
This course is designed for students to increase their knowledge and build on the concepts from Foundations of Teaching Yoga 1. Emphasis on asana variations, adjustments, and modifications of asanas will be considered. Anatomy, physiology and biomechanics will be observed through the practical application of asanas (postures). In addition, we will look at the business and ethics side of Yoga.

KINPP 2263 units
Yoga Practicum
54 hours lecture
Prerequisite: KINPP 222.
Corequisite: KINPP 224.
Recommended Preparation: KINPP 220.
Grading: letter grade.
This course provides practical experience in yoga teaching, class planning, auditioning for employment, and establishing professionalism in a yoga class. Students will learn how to prepare to teach diverse populations, enhance the teacher-student experience, and prepare for yoga studios, corporate, and private employment. Students learn about the business aspects of teaching yoga. Field trips may be required outside of regularly-scheduled class times.

KINPP 2303 units
Kinesiology Practicum
36 hours lecture, 54 hours laboratory
Prerequisite: KINPP 70
Grading: letter grade.
This course is designed to provide students in the Kinesiology Major or Personal Training Certificate programs with practical experience in the field. Students will be expected to participate in a minimum number of hours in a supervised practice setting at an on-campus facility. Emphasis is placed on, but not limited to, subject assessment, communication skills, program design, teaching strategies, selfmarketing and professional responsibility and liability.

## KINPP 2333 units

Techniques of Strength and Conditioning
54 hours lecture
Grading: letter grade.
This course is designed for the student in the Personal Trainer Certificate Program, planning to study and teach movement as it relates to exercise under both normal and injured conditions. Students learn the practical implications of bone, joint, nerve, and muscle actions. Emphasis is placed on applying body alignment, range of motion, stabilization, and acceleration principles to the development of safe exercise programs.

# Learning and Academic Resources (LEARN) 

LEARN 113 units

Learning and Academic Strategies
54 hours lecture
Grading: letter grade.
This is a comprehensive learning and academic strategies success course designed to assist students in developing an understanding of learning theories and academic principles, concepts, and strategies, along with their direct and practical application, with the goal of achieving or maximizing college success. In addition, this course provides an exploration of the psychological, social and physical factors that influence success in college and in life. In order to assist students with the challenges of the course content, students are required to complete 3 hours of Supplemental Learning Assistance activities in a Multidisciplinary Success Center over the course of the semester. Transferable to both UC and CSU; see counselor for limitations

LEARN 11H 3 units
Honors Learning and Academic Strategies
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This is a comprehensive learning and academic strategies success course designed to assist students in developing an understanding of learning theories and academic principles, concepts, and strategies, along with their direct and practical application, with the goal of achieving or maximizing college success. In addition, this course provides an exploration of the psychological, social and physical factors that influence success in college and in life. In order to assist students with the challenges of the course content, students are required to complete 3 hours of Supplemental Learning Assistance activities in a Multidisciplinary Success Center over the course of the semester. Transferable to both UC and CSU; see counselor for limitations

## LEARN 6100 units

Basic Study Skills Laboratory
54 hours laboratory
Grading: non graded.
This is a non-credit course in basic learning and success skills. This course covers a variety of fundamental learning, college success, and study skills. The content will be presented through a selection of instructional options.

## LEARN $650 \quad 0$ units

Supervised Tutoring
18 hours laboratory
Corequisite: Concurrent enrollment in an LBCC course.
Grading: non graded.
This course is designed to provide students with individual and small-group tutoring in specific subject areas to improve academic performance. Tutoring appointments will be scheduled, per the guidelines established by the specific location at which tutoring is offered, on a recurring, as-needed, and/or drop-in basis.

## Library (LIB)

## LIB 12 units

Introduction to Information

## 36 hours lecture

Grading: letter grade or pass/no pass.
This course will assist students in accessing and evaluating information. Topics include the landscape of credible information, bias in media, fake news, deep fakes, and the roles libraries play in providing access to credible information.
Transferable to both UC and CSU; see counselor for limitations

## LIB 23 units <br> Introduction to Academic Research <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course helps students prepare for, and complete, college-level research assignments by offering overviews of scholarly authority and research strategies, including how to find books, ebooks, and peerreviewed articles.
Transferable to CSU Only

## LIB 2003 units

Foundation of Library Services

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is designed to help students become familiar with the mission and roles of libraries. It surveys the roles of library staff and the responsibilities of Access Services, Collection Services, Information
Services, and Technical Services. Additional topics include ethics, values, and issues faced by library support staff in libraries.

## LIB 2103 units <br> Introduction to Access Services <br> 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: letter grade or pass/no pass.
Formerly LIB 202. This course is designed to teach students the valuable skills necessary to become qualified technicians. This course focuses on the major functions of library public and access services and topics will include: circulation management, collection maintenance, supervision of staff, confidentiality, intra and interlibrary loan, reserve collections, copyright laws, statistical design and compilation.

## LIB 2203 units <br> Introduction to Acquisitions <br> 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: letter grade or pass/no pass.
Formerly LIB 203. This course is designed to teach students the valuable skills required to become qualified library technicians. This course focuses on the goals, functions, standards, and practices of collection development and acquisitions in the Technical Services unit of libraries.

## LIB 2303 units

Technology and Teamwork

## 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: letter grade or pass/no pass.
This course is designed to help students become familiarized with the mission and roles of libraries. It surveys the roles of library staff by introducing communication strategies, productive teamwork, and technology found in various library services.

## LIB 2403 units <br> Introduction to Cataloging <br> 54 hours lecture

Prerequisite: LIB 200 or LIB 600, and LIB 220 or LIB 620.
Recommended Preparation: LIB 210 or LIB 610.
Grading: letter grade or pass/no pass.
Formerly LIB 201. This course is designed to teach students to original and copy catalog books and other materials. Students will be prepared and equipped with the skills necessary to function in the workplace. This course is aimed at library support staff but may serve as a review for practicing librarians. Although print and non-print formats will be covered, emphasis will be placed primarily on print format, in particular, books. This course introduces students to cataloging principles and procedures including but not limited to: Copy and original cataloging of varying formats; descriptive and subject cataloging; Machine Readable Cataloging (MARC) formats; classification systems; and access points in the bibliographic record.

## LIB 2503 units <br> Introduction to Youth Services <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course is designed to teach students the valuable skills necessary to become qualified technicians. Topics will include: the needs and literacy skills of youth from infant to teen, familiarization with print and digital library resources for youth, customer service and outreach strategies, creating programs, and instruction.

## LIB 2513 units

## School Library Media Assistant

## 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: letter grade or pass/no pass.
This course prepares students with theory and skillsets needed as a library media technician in a school setting, including the creation of curriculum that supports reading, effective library visits, and administrative skills for running school libraries.

## LIB 271WE 1-4 units

Work Experience-Library Technician

## 72 hours laboratory

Prerequisite: LIB 200.
Recommended Preparation: LIB 210, LIB 220, LIB 230, LIB 240, LIB 250. Grading: letter grade or pass/no pass.
This is a variable unit course, ranging from 1 to 4 units depending on the hours of work experience. See schedule of classes. Students learn and gain on-the-job experience in the Library Science and Information field. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of non-paid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1 to 4 units credit. *Note: Transfer limitations.

## LIB $600 \quad 0$ units

Foundations of Library Services

## 54 hours lecture

Grading: non graded.
This course is designed to help students become familiar with the mission and roles of libraries. It surveys the roles of library staff and the responsibilities of Access Services, Collection Services, Information Services, and Technical Services. Additional topics include ethics, values, and issues faced by library support staff in libraries.

## LIB $601 \quad 0$ units

Introduction to Information
36 hours lecture
Grading: non graded.
This course will assist students in accessing and evaluating information. Topics include the landscape of credible information, bias in media,
fake news, deep fakes, and the roles libraries play in providing access to credible information.

## LIB 6020 units

Introduction to Academic Research
54 hours lecture
Grading: non graded.
This course helps students prepare for, and complete, college-level research assignments by offering overviews of scholarly authority and research strategies, including how to find books, ebooks, and peerreviewed articles.

## LIB $610 \quad 0$ units <br> Introduction to Access Services <br> 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: non graded.
This course is designed to teach students the valuable skills necessary to become qualified technicians. This course focuses on the major functions of library public and access services and topics will include: circulation management, collection maintenance, supervision of staff, confidentiality, intra and interlibrary loan, reserve collections, copyright laws, statistical design and compilation.

## LIB $620 \quad 0$ units <br> Introduction to Acquisitions <br> 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: non graded.
This course is designed to teach students the valuable skills required to become qualified library technicians. This course focuses on the goals, functions, standards, and practices of collection development and acquisitions in the Technical Services unit of libraries.

## LIB $630 \quad 0$ units

## Technology and Teamwork

## 54 hours lecture

Recommended Preparation: LIB 200 or LIB 600.
Grading: non graded.
This course is designed to help students become familiarized with the mission and roles of libraries. It surveys the roles of library staff by introducing communication strategies, productive teamwork, and technology found in various library services.

## LIB $640 \quad 0$ units

Introduction to Cataloging
54 hours lecture
Prerequisite: LIB 200 or LIB 600, and LIB 220 or LIB 620.
Recommended Preparation: LIB 210 or LIB 610.
Grading: non graded.
This course is designed to teach students to original and copy catalog books and other materials. Students will be prepared and equipped with the skills necessary to function in the workplace. This course is aimed at library support staff but may serve as a review for practicing librarians. Although print and non-print formats will be covered, emphasis will be placed primarily on print format, in particular, books. This course introduces students to cataloging principles and procedures including but not limited to: Copy and original cataloging of varying formats; descriptive and subject cataloging; Machine Readable Cataloging (MARC) formats; classification systems; and access points in the bibliographic record.

LIB 6500 units
Introduction to Youth Services

## 54 hours lecture

Grading: non graded.
This course is designed to teach students the valuable skills necessary to become qualified technicians. Topics will include: the needs and literacy skills of youth from infant to teen, familiarization with print and digital library resources for youth, customer service and outreach strategies, creating programs, and instruction.

LIB 6510 units

## School Library Media Assistant

54 hours lecture
Recommended Preparation: LIB 200 or LIB 600.
Grading: non graded.
This course prepares students with theory and skillsets needed as a library media technician in a school setting, including the creation of curriculum that supports reading, effective library visits, and administrative skills for running school libraries.

## Linguistics (LING)

LING 13 units
Linguistics 1
54 hours lecture
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S. Grading: letter grade.
This course provides insight into the structure of language, an introduction to methods of linguistic analysis and an overview of the sub-fields of linguistics studies. This includes surveys of the sounds, structure, and development of language, the differences and relationships among languages, and the study of language in connection with its social and cultural function.
Transferable to both UC and CSU; see counselor for limitations

## LING 1H 3 units

## Honors Linguistics 1

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S. Grading: letter grade.
This course provides insight into the structure of language, an introduction to methods of linguistic analysis and an overview of the sub-fields of linguistics studies. This includes surveys of the sounds, structure, and development of language, the differences and relationships among languages, and the study of language in connection with its social and cultural function. Eligibility for the Honors Program required for enrollment.
Transferable to both UC and CSU; see counselor for limitations

## LING 3 units

Introduction to World Languages
54 hours lecture
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, ESL 1S, LIB 1, or LING 1.
Grading: letter grade.
This course provides an introduction to the languages of the world: the diversity, structural characteristics, and methods of classifying languages into families and types. It examines the distinctive features of several representative languages through class discussion, readings, and online materials. It addresses pidgins and creoles; unaffiliated languages;
language contact; language endangerment, death, and revitalization; and new directions in research, along with related ethical and socio-political issues and concerns.
Transferable to both UC and CSU; see counselor for limitations

## LING 3H 3 units

Honors Introduction to World Languages
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, ESL 1S, LIB 1, or LING 1.
Grading: letter grade.
This course provides an introduction to the languages of the world: the diversity, structural characteristics, and methods of classifying languages into families and types. It examines the distinctive features of several representative languages through class discussion, readings, and online materials. It addresses pidgins and creoles; unaffiliated languages; language contact; language endangerment, death, and revitalization; and new directions in research, along with related ethical and socio-political issues and concerns. Eligibility for the Honors Program is required for enrollment.
Transferable to both UC and CSU; see counselor for limitations

## Machine Tool (MACHT)

## MACHT 2023 units

## CNC Programming

36 hours lecture, 72 hours laboratory
Grading: letter grade.
This course covers the study of Computer Numerical Control (CNC) programming with emphasis on contouring, canned cycles, cutter diameter compensation, looping, macro subroutines and multiple part programming for three axis milling machines and CNC lathes.

# Mathematics (MATH) 

MATH 21A 5 units<br>Statistics Pathway A

90 hours lecture
Prerequisite: MATH 815.
Grading: letter grade.
Part A of the two-course Statway series. Math 21A and 21B together condense the sequence of beginning algebra, intermediate algebra and statistics into a two-semester sequence. Students will study: experiment and observational study design, sample methods, data measures, graphical techniques, scatter plots, correlation and regression, probability, sampling, exponential functions, residual plots, two-way tables, probability, the normal distribution and z-scores, and probability distributions. Emphasis is on the collection and analysis of actual data. Algebraic skills and techniques are integrated into the presentation of statistical methods. This course is intended for non-STEM majors. Math 21 A and 21 B together provide STAT 1 credit.
Transferable to CSU Only

## MATH 21B (C-ID MATH 110) 5 units <br> Statistics Pathway B <br> 90 hours lecture

Prerequisite: MATH 21A.
Grading: letter grade.
Part B of the two-course Statway series. Math 21A and 21B together condense the sequence of beginning algebra, intermediate algebra and statistics into a two-semester sequence. Students will study: averages, variability, graphical techniques, probability, probability distributions, normal distribution, Chi-Square distributions, hypothesis testing, sampling, estimation and confidence intervals, correlation, prediction, linear regression, and ANOVA analysis. Emphasis is on the collection and analysis of data and how inferences about a population are made from a sample. Algebraic skills are integrated into the presentation of statistical methods. This course is intended for non-STEM majors. Math 21A and 21B together provide STAT 1 credit.
Transferable to both UC and CSU; see counselor for limitations

## MATH 273 units

## Probability and Statistics for Elementary Teachers

54 hours lecture, 18 hours laboratory
Prerequisite: MATH 130, 130B, 140 or one year of high school intermediate algebra with a grade of B or better, and MATH 28 and MATH 120 or one year high school geometry.
Grading: letter grade.
Probability and Statistics for Elementary Teachers is a general education course that is strongly recommended for prospective elementary teachers. This activity-based course covers such topics as probability, statistics, representing and interpreting data, and variability.
Transferable to both UC and CSU; see counselor for limitations

## MATH 28 (C-ID MATH 120) 3 units

Mathematics for Elementary Teaching I
54 hours lecture, 18 hours laboratory
Prerequisite: MATH 140 or MATH 130 or MATH 130B or one year of high
school intermediate algebra with a grade of B or better as reflected by the second semester grade.
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S. Grading: letter grade.
This course is one of several courses designed for prospective elementary teachers. Topics that are covered include pattern recognition, problem solving, sets, numeration systems, number theory, and models and algorithms for operations with whole numbers, integers, rational numbers and decimals. Writing is emphasized throughout the course, as is the problem solving process. The lab incorporates individual and group activities in the exploration of topics.
Transferable to both UC and CSU; see counselor for limitations

## MATH 293 units

Math for Elementary Teaching II

## 54 hours lecture, 18 hours laboratory

Prerequisite: MATH 28 and MATH 120 or one year of high school geometry.
Grading: letter grade.
This course is designed for prospective elementary teachers. Topics include basic geometric vocabulary and notation, constructions, congruence, similarity, measurement, the Pythagorean Theorem, motion geometry and tessellations. The problem-solving process is emphasized throughout the course. The course incorporates group activities and exploration of topics through the use of manipulatives and a geometry drawing utility. Writing is emphasized throughout the course.
Transferable to both UC and CSU; see counselor for limitations

## MATH 37 (C-ID MATH 130) 3 units

## Finite Mathematics

54 hours lecture
Prerequisite: MATH 130 or MATH 130B or MATH 140.
Grading: letter grade.
This course is a study of linear equations, systems of linear equations and inequalities, matrices, matrix applications, sets and counting, probability, and statistics.
Transferable to both UC and CSU; see counselor for limitations

## MATH 403 units

Trigonometry
54 hours lecture
Prerequisite: MATH 130, 130B, 140 or one year of high school intermediate algebra with a grade of B or better as reflected by the second semester grade, and MATH 120 or one year high school geometry.
Grading: letter grade.
The topics covered in this course include right triangle trigonometry, circular functions, inverse functions, identities and formulas, graphing, trigonometric equations, the Law of Sines and the Law of Cosines, and complex numbers and polar coordinates.
Transferable to CSU Only

## MATH 454 units

College Algebra

## 72 hours lecture

Prerequisite: MATH 130 or MATH 130B or MATH 140.
Grading: letter grade.
This course covers advanced algebra topics, including linear, quadratic, polynomial, exponential and logarithmic functions; graphs of functions; inverse functions; systems of equations and inequalities; the Binomial Theorem; and conics. A graphing utility is required for this course. Students preparing for MATH 60 should take MATH 50 instead. This course is not open for credit to students registered in or with credit in MATH 50.
Transferable to both UC and CSU; see counselor for limitations

## MATH 473 units

## Calculus for Business

## 54 hours lecture

Prerequisite: MATH 45 or MATH 50.
Grading: letter grade or pass/no pass.
This course is a study of differentiation of functions of one and several variables, optimization methods, integration of functions of one variable, and exponential and logarithmic functions. The course is appropriate for students who wish to pursue a career in business and economics.
Transferable to both UC and CSU; see counselor for limitations

## MATH 505 units

Precalculus Math
90 hours lecture
Prerequisite: MATH 40.
Grading: letter grade.
This Course serves as a preparation for calculus. The topics covered include a review of algebra, polynomial, rational, exponential, logarithmic and trigonometric functions, applications of trigonometry including complex numbers and vectors, systems of equations and inequalities including matrices, sequences and series, and topics from analytic geometry.
Transferable to both UC and CSU; see counselor for limitations
MATH 554 units
Discrete Mathematics

## 72 hours lecture

Prerequisite: MATH 50 or a high school precalculus with a grade of B or better as reflected by the second semester grade.
Recommended Preparation: Knowledge of Java, C++, or Python. Grading: letter grade.
This is a one semester course in discrete math, intended for computer science related disciplines. The topics covered include logic, truth tables, set theory, techniques of proofs, recursive definitions, combinatorics, probability, and statistics.
Transferable to both UC and CSU; see counselor for limitations
MATH 60 (C-ID MATH 210) 5 units
First Calculus Course
90 hours lecture
Prerequisite: MATH 50 or one year high school precalculus with a grade of $B$ or better as reflected by the second semester grade.
Grading: letter grade.
This course is the first in our three-semester calculus sequence. Topics covered include limits; differentiation rules for all basic functions including exponential, logarithmic, and inverse trigonometric functions; applications of differentiation including optimization problems, l'Hospital's Rule, and graphing; and definite/indefinite integrals including Riemann sums and the fundamental theorem of calculus.
Transferable to both UC and CSU; see counselor for limitations

## MATH 60H (C-ID MATH 210)

## Honors First Calculus Course

## 90 hours lecture

Prerequisite: MATH 50 or one year high school precalculus with a grade of $B$ or better as reflected by the second semester grade and qualification for the Honors Program.
Grading: letter grade.
This course is the first in our three-semester calculus sequence. Topics covered include limits; differentiation rules for all basic functions including exponential, logarithmic, and inverse trigonometric functions; applications of differentiation including optimization problems, l'Hospital's Rule, and graphing; and definite/indefinite integrals including Riemann sums and the fundamental theorem of calculus.
Transferable to both UC and CSU; see counselor for limitations

## MATH 70 (C-ID MATH 220) 5 units

## Second Calculus Course

## 90 hours lecture

Prerequisite: MATH 60.
Grading: letter grade.
This course is the second in our three-semester calculus sequence. Topics covered include applications of integration including areas between curves, volumes, and work problems; techniques of integration; further applications of integration including arc length, surface area, and center of mass; differential equations; parametric equations and polar coordinates; and infinite sequences and series including power series, Taylor series, and Maclaurin series.
Transferable to both UC and CSU; see counselor for limitations

## MATH 70H (C-ID MATH 220) 5 units

Honors Second Calculus Course

## 90 hours lecture

Prerequisite: MATH 60 and qualification for the Honors Program. Grading: letter grade.
This course is the second in our three-semester calculus sequence. Topics covered include applications of integration including areas between curves, volumes, and work problems; techniques of integration; further applications of integration including arc length, surface area, and center of mass; differential equations; parametric equations and polar coordinates; and infinite sequences and series including power series,

## Taylor series, and Maclaurin series.

Transferable to both UC and CSU; see counselor for limitations

## MATH 80 (C-ID MATH 230) 5 units <br> \section*{Third Calculus Course}

90 hours lecture
Prerequisite: MATH 70.
Grading: letter grade.
This course is the third in our three-semester calculus sequence. Topics covered include vectors and the geometry of space; vector functions; partial derivatives including tangent planes and Lagrange multipliers; multiple integrals; and vector calculus including vector fields, curl and divergence, Green's theorem, Stokes' theorem, and the divergence theorem.
Transferable to both UC and CSU; see counselor for limitations

MATH 84 (C-ID MATH 240) 5 units
Intro Differential Eqns and Linear Alg

## 90 hours lecture

Prerequisite: MATH 80.
Grading: letter grade.
This course is an introduction to the solutions of ordinary differential equations and their relationship to linear algebra. Topics include systems of linear equations, matrix algebra, determinants, vector spaces, linear transformations and linear second order differential equations. Other topics include power series solutions, numerical methods, Laplace transforms, Eigenvalues, Eigenvectors and systems of linear differential equations and applications. This course also has activities in which students use computers to enhance their understanding of the topics covered in the course.
Transferable to both UC and CSU; see counselor for limitations

## MATH $110 \quad 5$ units

## First Course in Algebra

## 90 hours lecture

Grading: letter grade or pass/no pass.
This is the first course in algebra. Topics in this course include solving linear equations and inequalities in one variable; graphing linear equations and inequalities in two variables; solving systems of linear equations; factoring; performing operations on polynomials, rational expressions, and radical expressions; and solving rational, radical, and quadratic equations. Application problems are solved throughout the course. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center. A student may take either MATH 110 or Math 110A and Math 110B to fulfill the course requirement.

## MATH 110A 3 units

## First Course in Algebra-Part 1

## 54 hours lecture, 18 hours laboratory

Grading: letter grade or pass/no pass.
This is the first of a two-semester sequence of the first course in algebra. Topics include solving linear equations and inequalities in one variable, graphing linear equations and inequalities in two variables, solving systems of linear equations, and simplifying polynomial and exponential expressions. Application problems are solved throughout the course. Group activities are incorporated within the lab portion of the course. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center. A student may receive credit for either MATH 110 or 110A and 110B.

## MATH 110B 3 units

First Course in Algebra-Part 2
54 hours lecture, 18 hours laboratory
Prerequisite: MATH 110A.
Grading: letter grade or pass/no pass.
This is the second of a two-semester sequence of the first course in algebra. Topics include factoring, simplifying rational and radical expressions, solving rational and radical equations, and solving quadratic equations. Application problems are solved throughout the course. Group activities are incorporated within the lab portion of the course. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center. A student may receive credit for either MATH 110 or Math 110A and 110B.

## MATH 1154 units

## Applied Math

72 hours lecture
Grading: letter grade or pass/no pass.
This course is modified intermediate algebra course meant as an alternative pathway for students not intended to take trigonometry or college algebra. Intermediate algebra concepts will be studied, but lessons will be infused with more real world applications that will not only prepare students for statistics and liberal arts math but will appeal to certain trades students who would use this class to satisfy the math requirement for their AA degree. Topics would include linear equations, functions, applications and their graphs, polynomial equations and applications, exponential and logarithmic applications, as well as basic geometry, trigonometric applications, vectors, counting and probability, and basics statistics concepts. Students are required to complete 4 hours of supplemental learning activities in a designated Success Center.

## MATH 1204 units

Geometry

## 72 hours lecture

Grading: letter grade or pass/no pass.
This is a traditional Euclidean geometry course covering such topics as deductive reasoning, basic postulates and theorems, congruency, similarity, constructions, area, and volume.

## MATH 1305 units <br> Intermediate Algebra <br> 90 hours lecture

Prerequisite: MATH 110 or MATH 110B or one year high school elementary algebra with a grade of $B$ or better as reflected by the second semester grade
Grading: letter grade or pass/no pass.
This course continues the study of algebra in preparation for transfer level courses. Topics include polynomial, rational polynomial, root, quadratic, exponential and logarithmic functions and equations; graphing; systems of equations and inequalities; factoring; and numerical expressions with roots and complex numbers. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center.

MATH 130A 3 units
Intermediate Algebra, Part A
54 hours lecture
Prerequisite: MATH 110 or MATH 110B or one year high school elementary algebra with a grade of $B$ or better as reflected by the second semester grade
Grading: letter grade or pass/no pass.
This is the first of a two-semester sequence of intermediate algebra. This course continues the study of algebra in preparation for transfer level courses. Topics include solving linear equations and inequalities; graphing functions and inequalities; solving systems of equations and inequalities; factoring; and solving rational equations. Application problems are solved throughout the course. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center. A student may receive credit for either Math 130 or 130A and 130B. This course may be scheduled using the "To Be Arranged" (TBA) scheduling format. Please see the section on "Curriculum Offerings" for a description of requirements for completing TBA.

## MATH 130B 3 units <br> Intermediate Algebra, Part B <br> 54 hours lecture

Prerequisite: MATH 130A.
Grading: letter grade or pass/no pass.
This is the second of a two-semester sequence of intermediate algebra. This course continues the study of algebra in preparation for transfer level courses. Topics include radicals and complex numbers; quadratic functions; exponential and logarithmic functions; and conic sections. Application problems are solved throughout the course. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center. A student may receive credit for either Math 130 or 130A and 130B.

## MATH 1406 units <br> Beginning \& Intermediate Algebra <br> 108 hours lecture

Recommended Preparation: READ 882.
Grading: letter grade or pass/no pass.
This course combines the topics found in a beginning and intermediate algebra class and is meant as an accelerated 1-semester alternative to the normal Math 110/130 2-semester sequence. Topics typically duplicated in an intermediate algebra course shall be covered once, at greater length and in greater detail. Topics include solving linear and quadratic equations and inequalities; polynomial, exponential and logarithmic functions; graphing linear and quadratic functions; polynomial, rational, and radical arithmetic; solving rational, radical, exponential and logarithmic equations; graphing lines, parabolas, and other conic sections; and complex numbers. Application problems are solved throughout the course. Students are required to complete 5 hours of supplemental learning activities in any designated Success Center.

## MATH 6050 units

Ethnomathematics
18 hours lecture
Grading: non graded.
Ethnomathematics provides a method of quantitative reasoning and critical thinking skills in mathematics. Students will explore a spectrum of cultures and civilizations that contribute to the field of mathematics. The course will integrate identity, sense of belonging, and culturally relevant teaching with mathematical concepts. Ethnomathematics is encouraged to be taken as a non-transferable course to establish a sense-of-belonging for students in math courses.

## MATH $650 \quad 0$ units <br> Math Learning Center <br> 18 hours laboratory

Grading: non graded.
This course is designed to facilitate students' learning of mathematics by offering one-to-one and small group tutoring. Students can also take advantage of multimedia instruction including videos and a variety of computer software programs. This course is recommended for all students concurrently enrolled in a LBCC mathematics course and is available in the open-access Math Success Center.

## MATH 8054 units

Modern Arithmetic

## 72 hours lecture

Grading: pass/no pass.
The topics covered in this course include operations on whole numbers, fractions, and decimals; ratios and proportions; and percent problems. Application problems are solved throughout the course. This course is not applicable for degree credit.

## MATH 8154 units

## Preparation for Algebra

72 hours lecture
Grading: pass/no pass.
The topics covered in this course include the order of operations, operations with integers, the solution of linear equations, an introduction to graphing, operations with polynomials, and an introduction to the properties of exponential expressions. Applications of algebraic concepts are included throughout the course. This course is not applicable for degree credit. Students are required to complete 3 hours of supplemental learning activities in any designated Success Center.
MATH $825 \quad 1$ units
Culinary Math
18 hours lecture
Grading: pass/no pass.
This course is designed for students in the Culinary Arts program to study the mathematical principles in the context of commercial food production. Topics include recipe conversion, scaling and yields, production baking formulas, weights and measures, product yield tests, and recipe and food cost analysis.

## MATH 828X 1 units

Foundations for Elementary Math Teaching

## 18 hours lecture

Corequisite: MATH 28.
Grading: pass/no pass.
Math 828X utilizes a contextualized "just-in-time" approach to provide review of the core pre-requisite skills, competencies, and concepts required to be successful in the co-requisite MATH 28 Math for Elementary Teaching I course. Classroom activities are designed to build collegiate mathematics skills with an emphasis on foundations for teaching of mathematics in elementary school.

## MATH 840X 2 units

Trigonometry Skills Support
36 hours lecture
Corequisite: MATH 40.
Grading: pass/no pass.
This course offers concurrent instructional support for MATH 40 students whose placement indicates they need additional practice in topics such as angles and trigonometric functions, graphs of trigonometric functions, trigonometric identities, foundations for solving trigonometric equations, foundations for applications of trigonometry and foundations for complex numbers and polar coordinates. The course supplements the skills and support necessary to complete MATH 40 concurrently during a single semester.

## MATH 845X 2 units

Algebra Skills Support
36 hours lecture
Corequisite: MATH 45.
Grading: pass/no pass.
This course offers concurrent instructional support for MATH 45 students whose placement indicates they need additional practice in algebra topics such as equations, inequalities, problem solving, graphing, polynomials and polynomial functions. The course supplements the skills and support necessary to complete MATH 45 concurrently during a single semester.

# Medical Assisting (MA) 

MA 2703 units

Introduction to Medical Assisting
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This is the first course of three courses designed for prospective medical assistants. Topics will include instruction of procedures utilized by medical assistants. This includes the beginning level skills of asepsis, vital signs, health history, office emergencies, telephone techniques, patient education, and appointment scheduling. Typically offered for nine weeks. In order to assist students with the challenges of the course content, students are required to complete 3 hours of Supplemental Learning Assistance activities in a Multidisciplinary Success Center over the course of the semester.

## MA $280 \quad 3$ units

Health Care Clinical Procedures
36 hours lecture, 54 hours laboratory
Corequisite: MA 270.
Grading: letter grade.
This is the second course of three courses designed for prospective clinical medical assistants. This course develops the skills required to assist the physician with instruction in the advanced level of psychosocial skills, surgical asepsis, assisting with minor surgery, physical exams, specialty exams, patient positioning, drug administration, and resume preparation.

## MA 2823 units

Advanced Health Care Clinical Procedures
36 hours lecture, 54 hours laboratory
Prerequisite: MA 280.
Grading: letter grade.
This is the third of three courses designed for prospective clinical medical assistants. Topics will include instruction in the advanced level of psychosocial skills, electrocardiograph techniques, phlebotomy, injections and in office laboratory skills.

## MA 2864 units

Medical Assisting Combined Practicum
216 hours laboratory
Corequisite: MA 282 and MA 288.
Grading: pass/no pass.
This course is designed to give the student work experience in selected health care offices and/or clinics. Students in this course will experience the administrative as well as the clinical aspects of Medical Assisting.

## MA $288 \quad 1$ units

Medical Assisting Practicum Seminar
18 hours lecture
Corequisite: MA 282 and MA 286.
Grading: letter grade.
This course offers students in the Medical Assisting Program an advanced level of skills and theory, including office emergencies, professional office conduct, health care office management, resume writing and techniques utilized in job seeking.

## MA 2903 units

Basic Medical Insurance Billing
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This course is designed for prospective medical assistants and those students interested in medical insurance billing. This course will include medical insurance billing requirements, ICD-10, and CPT coding, to successfully file claims and effect collection of payment for medical services given.

## Metal Fabrication (MTFAB)

MTFAB $50 \quad 4$ units

Introduction to Metalworking
54 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass.
Formerly SHMET 50. This course is designed to provide students with a basic introduction to sheet metal fabrication, layout and career opportunities related to the industry and "green technologies." Students will learn to identify and safely operate hand tools and power machinery used in sheet metal fabrication. They will be instructed in the characteristics and properties of different sheet metal materials. The course will introduce students to measurement, shop math and sheet metal layout. Students will be assigned and evaluated on lab projects which will involve sheet metal layout, forming and fabrication and include the use of mechanical seams, welding and soldering techniques. Students will be required to attend 5 hours in the CTE Success Center for specially designed activities and assignments that relate to this course's content.
Transferable to CSU Only

## MTFAB 903 units

Computer Integrated Manufacturing
36 hours lecture, 72 hours laboratory
Recommended Preparation: MATH 815 or ELECT 202 and ENGL 801A or equivalent
Grading: letter grade or pass/no pass.
This course covers the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on Computer Numerically Controlled (CNC) machine tools. Additional topics covered include machine tool operations, simulations, Rapid Prototyping (RP), robotics, and manufacturing systems.
Transferable to CSU Only

## MTFAB 2024 units

Advanced Metal Layout/Fabrication
54 hours lecture, 72 hours laboratory
Corequisite: MTFAB 50
Grading: letter grade or pass/no pass.
Formerly SHMET 220B and MTFAB 220B. This course is designed for people working in or wishing to enter the Sheet Metal trade in the fields of air conditioning, industrial sheet metal or architectural sheet metal. This course will provide comprehensive instruction in advanced sheet metal layout, including parallel lines, radial lines and triangulation. Students will be introduced to the safe set up and operation of sheet metal fabrication power equipment with emphasis on training equal to industry standards. The course will also introduce the student to "green technologies" as they relate to energy efficiency and Solar Energy Systems found in the Sheet Metal industry. Students will be required to attend 5 hours in a designated Success Center for specially designed activities and assignments that relate to this course's content.

## MTFAB 2044 units

Power Metalworking Machine Operations
54 hours lecture, 72 hours laboratory
Recommended Preparation: MTFAB 50.
Grading: letter grade or pass/no pass.
Formerly SHMET 220C and MTFAB 220C. This course is designed for people working in or wishing to enter the metalworking trades in the fields of construction and manufacturing. This is a comprehensive course in powered sheet metal fabrication equipment. The course will cover the safe set up and operation of press brakes, ironworkers, turret punch, rotary machines, welders, shears, rollformers, tube benders, and notchers. Individualized hands-on experience in tool setup and job shop performance equal to industry standards will be provided. Students will also be introduced to the materials and fabrication techniques necessary to build a solar air heater.

## MTFAB 2064 units

CNC Metal Fabrication Systems
54 hours lecture, 72 hours laboratory
Recommended Preparation: MTFAB 50.
Grading: letter grade or pass/no pass.
Formerly SHMET 220D and MTFAB 220D. This course is designed for people working in or wishing to enter the metalworking trades in the fields of construction and manufacturing. This is a comprehensive course on CNC metal fabrication software as it relates to press brake, plasma cutter, router and tube bender. The course will cover the use of software to design metal components as they relate to the construction and manufacturing fields, with additional emphasis placed on the design of metal products used in the emerging "green energy" fields.

## MTFAB 220A 4 units

Basic Metal Layout and Fabrication
54 hours lecture, $\mathbf{7 2}$ hours laboratory
Grading: letter grade or pass/no pass.
Formerly SHMET 220A. This course is designed to provide students with a basic introduction to sheet metal fabrication, layout and career opportunities related to the industry and "green technologies." Students will learn to identify and safely operate hand tools and power machinery used in sheet metal fabrication. They will be instructed in the characteristics and properties of different sheet metal materials. The course will introduce students to measurement, shop math and sheet metal layout. Students will be assigned and evaluated on lab projects which will involve sheet metal layout, forming and fabrication and include the use of mechanical seams, welding and soldering techniques. Students will be required to attend 5 hours in a designated Success Center for specially designed activities and assignments that relate to this course's content.

## MTFAB 2212 units

## Construction Blueprint Reading

36 hours lecture
Recommended Preparation: MTFAB 220A or MTFAB 50.
Grading: letter grade or pass/no pass.
This course covers the principles of interpreting building blueprints and specifications required by the tradesman in the construction trades. The student will learn to use building plans and specifications to layout and order components used in mechanical systems. The course will also cover the interpretation of schematic drawings of "Green Technologies" as they relate to the construction trades in regards to solar energy systems and architectural roofing systems.

## MTFAB $223 \quad 2$ units

## Sheet Metal Duct Systems and Fabrication

## 36 hours lecture

Recommended Preparation: MTFAB 220A or MTFAB 50.
Grading: letter grade or pass/no pass.
This course is designed to introduce the student to techniques used to install sheet metal duct systems. Various types of duct systems and their components will be discussed with added emphasis on energy efficiency and sustainability.

## MTFAB $260 \quad 3$ units

Blueprint Reading for Metal Fabrication

## 54 hours lecture

Grading: letter grade.
Examines blueprint interpretation practices commonly used by metal fabrication industries. Exposure to common drawing types, symbols, views, lines, dimensions, and tolerances. Emphasis placed on the analysis of welding symbols as approved by the American Welding Society (AWS) and International Organization of Standardization (ISO).
MTFAB $270 \quad 2.5$ units

## Metallurgy

45 hours lecture, 9 hours laboratory
Grading: letter grade.
Introduces basic metallurgy as applied to metal fabrication and welding. Common heat treatment procedures, welding enhancement procedures, and thermal control of stress and strain in relation to ferrous and nonferrous metals are emphasized. Proper determination of chemical contents of common steels, cast irons, stainless steels, and aluminum alloys are demonstrated.

## MTFAB $280 \quad 2.5$ units

## Introduction to Robotic Welding

## 36 hours lecture, 27 hours laboratory

Recommended Preparation: MTFAB 50 or WELD 50.
Grading: letter grade.
The first of a two-part series introducing fundamental theory and handson application of robotic welding automation. Emphasizes safety awareness, programming techniques, and basic gas metal arc welding applications using six-axis robotic welding systems.

## MTFAB $281 \quad 2.5$ units

Advanced Robotic Welding
36 hours lecture, 27 hours laboratory
Prerequisite: MTFAB 280.
Grading: letter grade.
The second of a series of two, introducing advanced level theory and hands-on application of robotic welding automation. Emphasizes safety awareness, programming techniques, and intermediate and advanced gas metal arc welding applications using six-axis robotic welding systems.

## MTFAB $420 \quad 2$ units

Metal Fabrication and Layout
108 hours laboratory
Recommended Preparation: MTFAB 220A or MTFAB 50.
Grading: letter grade or pass/no pass.
Formerly SHMET 420. This course will address the techniques used in basic metal layout and fabrication. The course will also reinforce safe and correct setup and use of metal fabrication machinery and hand tools. This class is an open entry/exit program, and requires the completion of 108 lab hours.

## MTFAB $421 \quad 1$ units

## Metal Fabrication and Layout

## 54 hours laboratory

Corequisite: MTFAB 50, 202, 204, 206 or 650.
Grading: pass/no pass.
This course will address the techniques used in basic metal layout and fabrication. The course will also reinforce safe and correct setup and use of metal fabrication machinery and hand tools.

## MTFAB $423 \quad 3$ units

Metal Fabrication and Layout

## 162 hours laboratory

Recommended Preparation: MTFAB 220A or MTFAB 50.

## Grading: pass/no pass.

This course will address the techniques used in basic metal layout and fabrication. The course will also reinforce safe and correct setup and use of metal fabrication machinery and hand tools.

## MTFAB $601 \quad 0$ units

## Exploring Metal Fabrication

## 4 hours lecture, 13 hours laboratory

Grading: non graded.
This course is an introduction to metal fabrication. This course will allow the student to explore the basic safety requirements and metal fabrication processes found in the advance manufacturing and welding industries.

## MTFAB 6210 units

Metal Fabrication and Layout

## 54 hours laboratory

Corequisite: MTFAB 50, 202, 204, 206 or 650.

## Grading: non graded.

This course will address the techniques used in basic metal layout and fabrication. The course will also reinforce safe and correct setup and use of metal fabrication machinery and hand tools.

## MTFAB $650 \quad 0$ units

Introduction to Metalworking

## 54 hours lecture, 72 hours laboratory

Grading: non graded.
This course is designed to provide students with a basic introduction to metal fabrication, layout and career opportunities related to the industry. Students will learn to identify and safely operate hand tools and power machinery used in metal fabrication. They will be instructed in the characteristics and properties of different materials. The course will introduce students to measurement, shop math and metal layout. Students will be assigned and evaluated on lab projects which will involve metal layout, forming and fabrication and include the use of mechanical seams, welding and soldering techniques. Students will be required to attend 4 hours in a designated Success Center for specially designed activities and assignments that relate to this course's content.

## Money Management (MONEY)

MONEY $690 \quad 0$ units<br>Money Basics and Goal Setting<br>9 hours lecture<br>Corequisite: MONEY 695.<br>Grading: non graded.<br>This course provides students the essential skills for personal money management. Students learn about basic budgeting, savings, debt, credit and set personal financial goals.

MONEY 6950 units
Your Personal Financial Plan
9 hours lecture
Corequisite: MONEY 690.
Grading: non graded.
Students apply the personal financial management skills learned in MONEY 690 and explore education, housing, transportation and investing to create a comprehensive financial plan specific to their life's vision

## Music, Commercial (CMUSIC)

CMUSIC $18 \quad 2$ units
Techniques of Jazz \& Commercial Vocalist
36 hours lecture, 18 hours laboratory
Recommended Preparation: MUSIC 7AB or MUSIC 29 or MUSIC 43. Grading: letter grade or pass/no pass.
This course covers intermediate level performance techniques and communication skills appropriate for singing various styles of jazz, commercial, and popular music. Focus will continue to be on healthy vocal technique, established jazz/commercial singers, traditions, repertoire selections, phrasing, improvisation, band-leading, and basic lead sheet arrangements. Students will work with a professional accompanist and receive critiques from the instructor.
Transferable to CSU Only
CMUSIC 292 units
Jazz and Commercial Theory

## 36 hours lecture

Grading: letter grade.
This course covers the following topics through analysis and application of common jazz practices: chord symbols and nomenclature, extended harmony, scales and modes, voicings, bass lines, form, and chord substitutions. This course is for musicians who already possess a basic understanding of music theory (staff notation, keys, scales, intervals). Transferable to CSU Only

CMUSIC 2002 units
Introduction to Music Technology
36 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly MUSIC 71. This introductory course examines the terminology, equipment, techniques, and concepts related to the basics of music technology. The course will survey the principles and practices of sound, MIDI, synthesis, notation, and audio recording utilizing hardware and software platforms.

## CMUSIC $210 \quad 2$ units

Electronic and Acoustic Music Production
36 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course offers hands-on instruction for students that want to develop their skills producing beats, samples/loops, live acoustic instruments, analog and digital instruments, and more.

CMUSIC $220 \quad 2$ units
Live Sound Techniques
36 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly MUSIC 68. This course is an overview of live concert and event sound reinforcement. Topics include basic sound system theory and its application. It also covers individual sound system component operation, including microphones, mixers, effects, power amplifiers, and speaker systems. This course offers opportunities for hands-on experiences in troubleshooting, sound checking, and mixing sound for live performance applications.

## CMUSIC $230 \quad 2$ units

## Music Recording Techniques

36 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly MUSIC 96. This course offers hands-on instruction for beginners in the use of multi-track recording systems, emphasizing critical listening skills, and the development of a recording project.

CMUSIC 2403 units
Music Industry and Entrepreneurship
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly MUSIC 75A. This course covers the study of how the music industry is structured and how it works. Job opportunities, job responsibilities, and jobs related to the industry will be surveyed and discussed. Students are directed toward research in their areas of interest. Guest speakers serve as industry resources.

## CMUSIC 2502 units

## Songwriting

36 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course is a study of contemporary songwriting principles and techniques. The course is designed to explore the use of state-of-the-art technology in the songwriting process and is appropriate for students who wish to pursue careers as songwriters, artists, producers and/or recording engineers. Students will be introduced to systematic analytical techniques that aid in the developmental skills related to the songwriting process.

## Music (MUSIC)

MUSIC 1A (C-ID MUS 120) 3 units
Music Theory I
54 hours lecture
Prerequisite: MUSIC 6.
Grading: letter grade or pass/no pass.
This course covers the following topics through analysis and application of compositional practices of pieces from the common-practice period: diatonic harmony through four-part writing and roman numeral analysis, including the use of figured bass and early-species counterpoint, 7 th chords, and the basic elements of form.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 1B (C-ID MUS 130) 3 units

Music Theory II
54 hours lecture
Prerequisite: MUSIC 1A.
Grading: letter grade or pass/no pass.
This course covers the following topics through analysis and application of compositional practices of pieces from the common-practice period: chromatic harmony through four-part writing and roman numeral analysis, including applied functions, modulation, mixture, Neapolitan chords, Augmented 6th chords, and small forms.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 2A (C-ID MUS 140) 3 units
Music Theory III

## 54 hours lecture

Prerequisite: MUSIC 1B.
Grading: letter grade or pass/no pass.
This course covers the following topics through analysis and application of compositional practices of pieces from the common-practice period, and early-mid 20th Century: enharmonic spellings and modulations, extended and advanced chromatic and altered chords, advanced chromatic sequences, alternate scales, advanced rhythmic techniques, and post-tonal techniques.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 5 (C-ID MUS 125)
1 units
Musicianship I

## 54 hours laboratory

Corequisite: MUSIC 6 and MUSIC 92AD.
Grading: letter grade or pass/no pass.
Formerly MUSIC 5AD. This course covers the techniques of music dictation and sight-singing with basic, tonal materials. Topics covered are scales, intervals, basic chord structures, and harmonic-melodic-rhythmic dictation.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 6 (C-ID MUS 110) 3 units
Introduction to Music Theory

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a complete introduction to music fundamentals and basic musicianship. Traditional topics are covered such as notation, meter, scales, intervals, triads, and chords. This class is designed for both music majors and non-music majors.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC $7 \quad 2.5$ units

## Elementary Voice

36 hours lecture, $\mathbf{3 6}$ hours laboratory
Grading: letter grade or pass/no pass.
Formerly MUSIC 7AB. Elementary Voice is a performance class designed to improve singers of all ages and talent levels. Students will learn correct techniques in tone production, breathing, diction, repertoire and song interpretation. The students will also be able to develop their self confidence through class performance.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 8AD 2.5 units

## Advanced Voice

36 hours lecture, 36 hours laboratory
Recommended Preparation: MUSIC 7AB.
Grading: letter grade or pass/no pass.
Advanced voice is a performance class designed to improve vocal techniques of the more accomplished singer. Students will be able to perform standard repertoire from classical literature which includes art songs and arias in English, German, French and Italian as well as vocal selections from Musical Theater. Students will be able to work with a professional accompanist, improve their vocal and musical technique and receive written critiques by the instructor.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 9 (C-ID MUS 135) 1 units
Musicianship II
54 hours laboratory
Prerequisite: MUSIC 5.
Corequisite: MUSIC 1A.
Grading: letter grade or pass/no pass.
Formerly MUSIC 9AD. This course covers the techniques of musical dictation and sight-singing with intermediate, diatonic tonal materials. Topics covered are intermediate scales, intervals, chord structures, and harmonic-melodic-rhythmic dictation.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 10 (C-ID MUS 145) 1 units
Musicianship III

## 54 hours laboratory

Prerequisite: MUSIC 9.
Corequisite: MUSIC 1B.
Grading: letter grade or pass/no pass.
Formerly MUSIC 10AD. This course covers the techniques of musical dictation and sight-singing with intermediate and semi-advanced, diatonic and chromatic tonal materials. Topics covered are advanced scales, intervals, chord structures, and harmonic-melodic-rhythmic dictation.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 11 AD (C-ID MUS 180) 1.5 units

Long Beach City College Viking Chorale

## 90 hours laboratory

Grading: letter grade or pass/no pass.
This course is a large choral ensemble that includes the study and performance of the classical choral repertoire from all historical musical periods. Attendance at all rehearsals and performances is mandatory. It is advisable that participating students have some previous choral experience, though it is not required. Auditions to be placed in the appropriate vocal section of the choir (soprano, alto, tenor, or bass) will occur during the first class meeting or as scheduled in the schedule of classes.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 12AD (C-ID MUS 180) 1.5 units
Long Beach City College Viking Singers

## 90 hours laboratory

Grading: letter grade or pass/no pass.
This choir is a smaller, select ensemble with performances throughout
the year. All periods and styles of choral music, especially classical
chamber literature, are performed.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 13AD (C-ID MUS 180) 1.5 units
College Symphony Orchestra
90 hours laboratory
Recommended Preparation: Prior instrumental/Orchestral experience.
Grading: letter grade or pass/no pass.
This course is a study of orchestral techniques through reading, rehearsal
and performance of standard literature. Participation in performances is
required.

Transferable to both UC and CSU; see counselor for limitations
MUSIC 14AD 1.5 units

## Orchestra

## 90 hours laboratory

Recommended Preparation: Prior instrumental experience.
Grading: letter grade or pass/no pass.
This course is a study of orchestral techniques through reading, rehearsal, and performance of orchestral repertoire.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 15AD 1.5 units

Chamber Orchestra
90 hours laboratory
Recommended Preparation: Prior Instrumental experience.
Grading: letter grade or pass/no pass.
This is a course that consists of reading, study and performance of standard repertoire for the small/chamber orchestra.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 16 (C-ID MUS 155) 1 units
Musicianship IV
54 hours laboratory
Prerequisite: MUSIC 10.
Corequisite: MUSIC 2A.
Grading: letter grade.
Formerly MUSIC 16AD. This course covers the techniques of musical dictation and sight-singing with advanced, chromatic tonal and atonal materials. Topics covered are advanced scales, intervals, chord structures, and harmonic-melodic-rhythmic dictation.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 17A 0.5 units

## Advanced Applied Vocal \& Instrumental Music

 36 hours laboratoryPrerequisite: At least 2 semesters of MUSIC 92AD and performing audition before the program faculty.
Corequisite: MUSIC 11 AD or 14AD or 46AD and MUSIC 6 or 1 A or $1 B$ or $2 A$ and MUSIC 5 or 9 or 10 or 16.
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade.
Formerly MUSIC 17. This course continues the skills and outcomes of Music 92AD in preparation for advanced repertoire and techniques in performance, and also serves as major preparation for the transfer audition. This also serves as the final preparation for a sophomore recital. Transferable to both UC and CSU; see counselor for limitations

## MUSIC $20 \quad 1.5$ units <br> LBCC Southland Chorale <br> 90 hours laboratory

Recommended Preparation: Prior vocal experience.
Grading: letter grade or pass/no pass.
Formerly MUSIC 20AD. The Southland Chorale will study and perform choral music of all historical musical periods. Singers will perform repertoire including a'capella, orchestra choral works, secular and sacred, light opera and musical theatre. The Southland Chorale involves participation in all concerts and performances.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 23AD (C-ID MUS 180) 1.5 units

Jazz Choir
90 hours laboratory
Grading: letter grade or pass/no pass.
This course involves the study and performance of the standard large ensemble jazz repertoire from all historical jazz musical periods.
Attendance at all rehearsals and performances is mandatory. Vocal
placement will occur during the first class meeting or as scheduled in the schedule of classes.
Transferable to CSU Only

## MUSIC 24AD (C-ID MUS 180) 1.5 units

## Vocal Jazz Ensembles

## 90 hours laboratory

Grading: letter grade or pass/no pass.
This course will focus on small vocal/chamber Jazz repertoire with performances. All periods and styles of vocal Jazz ensemble music will be covered and performed as it pertains to small vocal/chamber Jazz ensembles. Attendance at all rehearsals and performances is mandatory. Audition to qualify for enrollment will occur during the first class meeting or as scheduled in the schedule of classes.
Transferable to CSU Only

## MUSIC 25AD 1.5 units

Chamber Music Ensemble
90 hours laboratory
Recommended Preparation: Prior vocal or instrumental experience. Grading: letter grade or pass/no pass.
This course includes the study and performance of music for chamber ensembles including: brass ensemble, woodwind ensemble, string ensemble, and guitar ensemble. The repertoire performed is mainly classical in nature, but may include contemporary compositions and popular arrangements.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 28AD 1.5 units

Percussion Ensemble
90 hours laboratory
Grading: letter grade or pass/no pass.
Students will learn various skills and techniques for playing snare drum and various other percussion instruments. Music reading, drum rudiments, percussion techniques, and musicianship are emphasized. Students will perform in small and large percussion ensembles. Students must provide their own sticks and practice pad.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 323 units

## History of Jazz

## 54 hours lecture

Grading: letter grade.
This course traces the development of the jazz tradition from its multicultural roots into styles like blues, ragtime, swing, bebop, and post-bop. This course also focuses on the development of jazz music alongside the critical, cultural, and social issues associated with black society and American history.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 33B 3 units <br> Intercultural Music

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a survey of various types of music from Latin America and the Caribbean. Students will learn to recognize numerous styles of music through rhythmic patterns, as well as the historical, geographic, and political dimensions of the genres, with emphasis on the contribution of African and European music on Latin styles.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 353 units

Music of Multicultural America

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a comparative and integrative study of the multicultural musical styles of the United States, based on the fundamental principles of music appreciation. This class will feature the music histories and progression of Native Americans, European Americans, African Americans, Chicano/Latino Americans, Pacific Islanders, Asian Americans and Middle Eastern Americans. Students will gain the knowledge and skills necessary to understand and interpret analyses of musical traditions from technical and cultural perspectives. Students will progress through the sequential development of listening and descriptive skills with a variety of media including films, recordings, hands-on performance activities, and computer-assisted instruction.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 38AD (C-ID MUS 180) 1.5 units Wind Ensemble <br> 90 hours laboratory

Recommended Preparation: Prior instrumental experience.
Grading: letter grade or pass/no pass.
This course involves the study and performance of music composed for winds and percussion instruments, usually with one player per part. The musical literature represented includes all contemporary wind ensemble music as well as classical arrangements and transcriptions. The wind ensemble typically performs at least two concerts per semester.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 40 (C-ID MUS 100) <br> 3 units

## Appreciation of Music

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course serves as a broad approach to musical literature and its place in the cultural development of western civilization. It is designed for the non-music major.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 40H (C-ID MUS 100) 3 units

## Honors Appreciation of Music

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course serves as a broad approach to musical literature and its place in the cultural development of western civilization. The course is designed for non-music majors.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 41AD 1.5 units <br> Madrigal A Cappella Choir <br> 90 hours laboratory

Recommended Preparation: Prior vocal experience.
Grading: letter grade or pass/no pass.
This choir provides the study of vocal techniques and music reading through performance of a cappella choral literature. Participation in several performances each semester is required.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 431 units

Jazz Improvisation Techniques
54 hours laboratory
Prerequisite: MUSIC 6.
Grading: letter grade or pass/no pass.
This course covers basic techniques in Jazz improvisation, beginning with simple question and answer phrases and progressing to extended solos. The course will study standard instrumental and vocal jazz repertoire and students will learn detailed and applied knowledge of standard chord progressions.
Transferable to CSU Only

## MUSIC 46AD 1.5 units

## College Symphonic Band

90 hours laboratory
Recommended Preparation: Prior instrumental experience.
Grading: letter grade or pass/no pass.
This is a performance organization dedicated to the production of a wide variety of musical literature for a symphonic band. Instrumentation includes brass, woodwinds, and percussion instruments. The symphonic band typically performs two times per semester. The musical literature represented includes both new symphonic band music as well as classical arrangements and transcriptions.
Transferable to both UC and CSU; see counselor for limitations
MUSIC 49AD 1.5 units
Viking Show Band

## 90 hours laboratory

Recommended Preparation: Prior instrumental experience.
Grading: letter grade or pass/no pass.
The Viking Show Band will perform for all home football and basketball games as well as pep rallies, performances on campus, and at a variety of special activities in and around the Long Beach community. While all repertoires are considered, the majority of music performed is popular in nature such as pop, rock, jazz, swing, and funk. The instrumentation of the Viking Show Band includes woodwinds and brass instruments that are found in a marching as well as electric guitar, electric bass, drum set, auxiliary percussion and vocalists.
Transferable to CSU Only

## MUSIC 51A 1.5 units

Beginning Piano 1
18 hours lecture, 36 hours laboratory
Grading: letter grade.
This course is an introduction to beginning keyboard skills. It includes basic technique, major and minor five finger patterns, major scales,
sight reading and basic chord progressions, as they are encountered in
beginning piano music. This course is the first in a sequence to fulfill
keyboard skills for music majors.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 51B 1.5 units

Beginning Piano 2
18 hours lecture, 36 hours laboratory
Prerequisite: MUSIC 51A.
Grading: letter grade.
In this course students refine and further develop beginning keyboard skills. This includes piano technique, major scales and arpeggios, sightreading, chord progressions and harmonization skills, as encountered in upper-beginning/early intermediate piano music.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 51C 1.5 units

Intermediate Piano I
18 hours lecture, 36 hours laboratory
Prerequisite: MUSIC 51B.
Grading: letter grade.
This course will allow students to refine and develop beginning keyboard skills. Piano technique, major and minor scales and arpeggios, sightreading, expanded chord progressions and harmonization skills are encountered in intermediate piano music.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 51D 1.5 units

Intermediate Piano II
18 hours lecture, 36 hours laboratory
Prerequisite: MUSIC 51C.
Grading: letter grade.
This course will allow students to refine and develop intermediate keyboard skills. Piano technique, harmonization techniques, ensemble skills, and stylistic considerations are encountered in upper-intermediate piano repertoire.
Transferable to CSU Only
MUSIC 54AD (C-ID MUS 180) 1.5 units
Jazz Big Band

## 90 hours laboratory

Recommended Preparation: Prior Instrumental experience.
Grading: letter grade.
This course involves the study and performance of jazz ensemble music. The Jazz Ensemble rehearses and performs music ranging from the classic big band repertoire to contemporary and cutting-edge concert jazz music by today's leading jazz composers. Typically two concert performances are required each semester. Audition to qualify for enrollment will occur during the first class meeting or as scheduled in the schedule of classes.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC $55 \quad 1.5$ units

Beginning Guitar
18 hours lecture, 36 hours laboratory
Grading: letter grade.
Formerly MUSIC 55AD. This course provides beginning instruction in the guitar, using a classical approach to basic technique, musicianship, and repertoire.
Transferable to both UC and CSU; see counselor for limitations
MUSIC $56 \quad 1.5$ units
Intermediate Guitar
18 hours lecture, 36 hours laboratory
Prerequisite: MUSIC 55.
Grading: letter grade.
Formerly MUSIC 56AD. This course provides intermediate/advanced instruction in the guitar, using a classical approach to advanced technique, musicianship, ensemble work, and repertoire.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 57AD (C-ID MUS 180) 1.5 units

Jazz Combos

## 90 hours laboratory

Grading: letter grade or pass/no pass.
The students in this course will perform original jazz classics, American songbook standards, and new compositions. Jazz combos consist of a rhythm section (bass, drums, piano or guitar) and one to four other instruments. Students perform one or two times each semester. Audition to qualify for enrollment will occur during the first class meeting or as scheduled in the schedule of classes.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC $58 \quad 1.5$ units

College Philharmonia
90 hours laboratory
Recommended Preparation: Prior successful orchestral experience. Grading: letter grade or pass/no pass.
Formerly MUSIC 58AD. This course involves the study and performance of the orchestral repertoire and works by contemporary composers. It emphasizes ensemble techniques including articulation, balance, phrasing, expression and accompanying. Participation in two concerts per semester, at minimum, is required.
Transferable to both UC and CSU; see counselor for limitations

## MUSIC 893 units

History of Rock

## 54 hours lecture

Grading: letter grade or pass/no pass.
The History of Rock Music will be treated as a chronological study. This allows for brief overviews of society in periods and then illustrates how the music of a particular period either supports or contradicts societal views. Although the main emphasis of study will be from 1955 to the present, brief attention will be given to sixteenth through twentieth century musical history and form as it relates to this period. Transferable to both UC and CSU; see counselor for limitations

## MUSIC 912 units

## Special Studies

18 hours lecture, 54 hours laboratory
Recommended Preparation: Prior vocal or instrumental experience.
Grading: letter grade or pass/no pass.
Formerly MUSIC 91 AD. This course entails the directed study of special topics in music theory, composition, musicology, performance practice, organization and administration of instrumental or vocal ensembles, or commercial music activities. The purpose is to further explore in-depth application of skills and concepts used for transfer (such as audition or proficiency exams) or placement in an internship or job.
Transferable to CSU Only

## MUSIC 92AD (C-ID MUS 160) 0.5 units <br> Applied Vocal \& Instrumental Music <br> 36 hours laboratory

Prerequisite: Performance audition before the program faculty. Corequisite: (MUSIC 6, 1A, 1B or 2A) and (MUSIC 5, 9, 10 or 16) and
(MUSIC 11AD, 12AD, 14AD, 23AD, 24AD, 28AD or 54AD).
Grading: letter grade.
This course is designed for music majors planning to transfer to a university music program. It includes individual and master class instruction on either a keyboard instrument, voice, guitar or any standard instrument of the band or orchestra. The course includes performance of representative music literature from various periods and composers. The level of proficiency is determined by faculty adjudication.
Transferable to both UC and CSU; see counselor for limitations

## Nursing, Vocational Nursing (VN)

## VN 2156 units

## Fundamentals of Nursing

63 hours lecture, 135 hours laboratory
Recommended Preparation: MATH 805.
Grading: letter grade.
This combined lecture/lab course is designed to prepare students to perform basic-fundamental nursing skills required in the care of residents in long-term/skilled nursing facilities. Content includes safety principles, physical care, emotional support and infection control. Upon completion of the course, the student qualifies for the certified nursing assistant (CNA) written and performance examination to be administered at regional testing centers. Students are required to complete 4 hours through out the course of the semester in a Multidisciplinary Success Center to complete activities and assignments that relate specifically to this course's content.

## VN $216 \quad 1.5$ units

Home Health Aide

## 18 hours lecture, 27 hours laboratory

Prerequisite: Completion of VN 215 or possession of a valid current California Nursing Assistant (CNA) certificate.
Grading: letter grade.
This course meets the requirements set by the California State Department of Public Health Services for a Certified Nursing Assistant to become a Certified Home Health Aide.

## VN 2204 units

## Transition to Vocational Nursing

54 hours lecture, 54 hours laboratory
Prerequisite: BIO 60 and VN 225 or ADN 225.
Recommended Preparation: MATH 815 or higher or met the Math college proficiency and READ 82 or READ 83 or met the Reading college proficiency.
Grading: letter grade.
This combined lecture/campus lab course is designed to prepare students for success in the vocational nursing program. Content includes critical thinking \& problem solving, communication, cultural competency, professional roles and responsibilities, and developmental levels across the lifespan. Additional topics include learning styles, nursing terminology, nutrition, basic documentation, dosage calculation, and health and safety policies. Students are required to complete 2 additional hours of Supplemental Instruction in a designated Success Center.

## VN 2221.5 units

Intravenous Therapy \& Blood Withdrawal
27 hours lecture, 9 hours laboratory
Prerequisite: VN 255 or VN 265, or licensed as a vocational nurse (LVN). Grading: pass/no pass.
This course is designed for instruction and supervised practice of the concepts and techniques of intravenous therapy and blood withdrawal procedures. The course is designed to meet the California Board of Vocational Nursing and Psychiatric Technicians (BVNPT) Intravenous \& Blood Withdrawal Certification. This course is designed for students currently in the last semester of the Vocational Nursing Program, or those preparing for licensure.
VN 2253 units
Pharmacology
54 hours lecture
Recommended Preparation: BIO 60 or ANAT 1 and PHYSI 1 and READ 82 or completion of Reading proficiency.
Grading: letter grade.
This is an introductory course into the study and management of commonly prescribed drugs. Drug classifications and prototypes are discussed rather than individual medication. The principles of medication administration including common side-effects and nursing responsibilities is included. Dosage calculation is not included. This course is not open for credit to students who have completed ADN 225. ADN 225 and VN 225 are equivalent courses.

VN 2303 units

## Common Health Deviations 1

## 54 hours lecture

Prerequisite: VN 220, VN 225, and BIO 60.
Corequisite: VN 230L.
Grading: letter grade.
Admission to the program is required prior to enrolling in this first clinical course of the vocational nursing program. The course includes the nursing concepts of the nursing process, Orem's self-care theory, disuse syndrome, skin integrity/wound care, activity and rest, altered nutrition, and risk for injury and fluid and electrolytes. Other topics include pathophysiology and nursing care for patients with diabetes, sensory(eye and ear), cardiovascular problems and respiratory disorders. Students are required to complete 2 hours of Supplemental Learning Assistance activities in designated Success Centers.

## VN 230L 3.5 units

Common Health Deviations 1 Lab
189 hours laboratory
Corequisite: VN 230.
Grading: pass/no pass.
This course provides opportunity for nursing students to practice the concepts learned in VN230 in a variety of healthcare settings. The campus lab content includes basic data collection and health assessment, preparation of nursing care plans, documentation, oxygen therapy, medication administration, and a college level writing assignment based on individual case studies. Compliance with all clinical agency policies is required the first day of the course. Students are required to complete 189 hours: 32 hours on campus and 157 at offcampus clinical sites.

## VN 2353 units

## Common Health Deviations 2

## 54 hours lecture

Prerequisite: VN 230 and VN 230L.
Corequisite: VN 235L.
Grading: letter grade.
This course provides the theoretical basis for the provision of nursing care for patients with various medical and/or surgical health care deviations in a variety of healthcare settings. This course continues to develop the concepts of nursing process and Orem's self-care theory that were introduced in previous courses. This course covers the nursing concepts of pain management and nutritional support, and the pathophysiology and nursing care for patients with health deviations that include the musculoskeletal system, gastrointestinal system, immune system, urinary-renal system, hepato-biliary system, and infectious diseases.

## VN 235L 3.5 units

Common Health Deviations 2 Lab
189 hours laboratory
Prerequisite: VN 230 and VN 230L.
Corequisite: VN 235.
Grading: pass/no pass.
This course provides opportunity for nursing students to practice the concepts of medical-surgical nursing in a variety of health care settings, including perioperative nursing care, as learned in VN 235. Topics presented in the campus nursing lab include skills required for care of surgical and medical patients. Compliance with all clinical agency policies is required the first day of the course. Students are required to complete 189 hours: 32 hours on campus and 157 hours at off-campus clinical sites.

## VN 2403 units

Mental Health Nursing
54 hours lecture
Grading: letter grade.
This course is designed to assist vocational nursing students with self-development and with acquisition of behaviors needed to provide a helping relationship with their patients. Topics include principles of personality development, psychosocial development, psychopharmacology, common mental health deviations, and major psychiatric illnesses.

## VN 2452 units

## Maternal-Infant Nursing

36 hours lecture
Prerequisite: VN 230 and VN 230L.
Grading: letter grade.
This course provides instruction in the normal developmental phases of the child-bearing family and the most common related problems. Orem's self-care theory and the nursing process are continued in the study of prenatal, perinatal, and postpartum nursing care.

## VN 245L 1 units <br> Maternal-Infant Nursing Lab <br> 54 hours laboratory

Grading: pass/no pass.
This course provides opportunity for nursing students to provide prenatal, perinatal, and postnatal nursing care in both hospital and ambulatory care facilities. Campus lab content includes data collection and routine care of the postpartum mother and her newborn. Compliance with all clinical agency policies is required the first day of this course.

## VN 2502 units

Nursing Care of Children
36 hours lecture
Prerequisite: VN 230 and VN 230L.
Grading: letter grade.
This course provides instruction in the growth and development of normal children along with the most common health problems of childhood and adolescence. Orem's self-care theory and the nursing process are applied to the study of health promotion and disease prevention for children and adolescents.

## VN 250P 1 units

## Nursing Care of Children Practicum

## 54 hours laboratory

Corequisite: VN 250.
Grading: pass/no pass.
This course provides opportunity for nursing student to provide nursing care for child-rearing families in ambulatory care clinics. Campus lab content includes application of the principles of growth and development. Compliance with all clinical agency health and safety policies is required the first day of the course.

## VN 2553 units

Common Health Deviations 3

## 54 hours lecture

Prerequisite: VN 235 and VN 235L.
Corequisite: VN 255L.
Grading: letter grade.
This course is the third medical surgical nursing course in the program. Orem's theory of self-care and the nursing process is continued in the study of vocational nursing concepts. Pathophysiology and nursing care of the following health deviations are studied: female reproductive, male Prostrate \& reproductive, sexually transmitted diseases, basic emergent and cardiac deviations, advanced fluid and electrolyte balance, oncological, hematologic, neurological, thyroid \& endocrine disorders.

VN 255L 3.5 units
Common Health Deviations 3 Lab
189 hours laboratory
Prerequisite: VN 230 and VN 230L.
Corequisite: VN 255.
Grading: pass/no pass.
This course provides opportunity for nursing students to become more proficient in the nursing care of patients with medical surgical problems. Students practice with staff vocational and registered nurses to develop competency in the role of the vocational nurse in a variety of health care settings. Compliance with all clinical agency health and safety policies is required the first day of the course.Students are required to complete 189 hours: 32 hours on campus and 157 at off-campus clinical sites.

## VN $260 \quad 1.5$ units

Roles and Responsibilities

## 27 hours lecture

Prerequisite: VN 240.
Grading: pass/no pass.
This course is designed to assist the vocational nursing student in the transition to the responsibilities of the graduate vocational nurse. Topics include the ethical, legal, regulatory, leadership, and policy issues that control the practice of vocational nursing in California. Opportunity is provided for career planning, including job skills and application for licensure.

## VN 2653 units

Common Health Deviation-4

## 54 hours lecture

Prerequisite: VN 255 and VN 255L.
Corequisite: VN 265L.
Grading: letter grade.
This is normally the last clinical course of the vocational nursing program. Orem's theory of self-care and the nursing process is continued. Geriatric and Adult health deviations commonly requiring chronic health care are studied. Other topics include disaster preparation, leadership and supervisory roles of vocational nurses in a variety of health care settings including long term, sub-acute and rehabilitative/restorative care.

## VN 265L 3 units

Common Health Deviation-4 Lab
162 hours laboratory
Prerequisite: VN 255 and VN 255L.
Corequisite: VN 265.
Grading: pass/no pass.
This course provides opportunity for students to apply nursing theory regarding chronic illnesses in the care of the older adult/geriatric population. A variety of health care settings is utilized including long term, sub-acute, rehabilitative and restorative. Students are required to complete 162 hours at off-campus clinical sites. Compliance with all clinical agency health and safety policies is required the first day of the course.

# Nursing, Associate Degree NursingRN (ADN) 

ADN $10 \quad 1.5$ units

Nursing Track - Pharmacology 1
18 hours lecture, 27 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
This course introduces the student to pharmacologic nursing practice using a conceptual approach. Emphasis is placed on drug classifications, prototypes, actions, interactions, adverse effects, and nursing implications. Curricular concepts related to pharmacological modalities are applied in lecture and laboratory settings. The nursing process and clinical judgment are the basis for understanding the role of the nurse in administering medications. Upon completion of the course, students will apply pharmacological principles and interventions to provide safe and effective nursing care.
Transferable to CSU Only
ADN 11A 2.5 units
Introduction to Nursing
45 hours lecture
Prerequisite: ANAT 1, PHYSI 1, BIO 2, and ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Corequisite: ADN 11AL, PSYCH 1 or SOCIO 1 (may be taken as a prerequisite).
Grading: letter grade.
The course is an introduction to the basic concepts of the Self-Care Theory of Nursing by Dorothea Orem. Included are the basic knowledge, skills and attitudes necessary to meet or to assist in meeting the universal self-care requisites of the hospitalized adult. Also included are the fundamental concepts upon which subsequent courses in the nursing program are built.
Transferable to CSU Only
ADN $11 \mathrm{AL} \quad 1.5$ units
Introduction to Nursing Lab
81 hours laboratory
Prerequisite: ANAT 1, PHYSI 1, BIO 2, and ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S, and compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 11A.
Grading: letter grade or pass/no pass.
The course includes on-campus lab practice and application of the course content in clinical nursing situations. This lab course aligns with the course content presented in ADN 11A.
Transferable to CSU Only

## ADN 11B 2.5 units

## Health Deviations 1

45 hours lecture
Prerequisite: ADN 11A and ADN 11AL.
Corequisite: ADN 11BL
Grading: letter grade.
This course is an introduction to deviations in health of the adult client. It emphasizes the health deviation self-care requisites of intake of air, intake of water, balance of activity and rest. Collaborative problems are added to previously learned information about the nursing process; as well as medication administration, oral and injected. The course places an emphasis on teaching safety and communication for the hospitalized patient.
Transferable to CSU Only

## ADN 11BL 1.5 units

## Health Deviations 1 Lab

## 81 hours laboratory

Prerequisite: ADN 11A and ADN 11AL, and compliance with all clinical agency health and safety policies is required the first day of the course. Corequisite: ADN 11B.
Grading: letter grade or pass/no pass.
This course includes on-campus lab practice and application of the course content in clinical nursing situations. Skill activities include oral and injected drug administration, respiratory, abdominal and lower leg assessment and related skills.
Transferable to CSU Only

## ADN 12A 2.5 units

## Health Deviations 2

45 hours lecture
Prerequisite: ADN 11B and 11BL.
Corequisite: ADN 12AL
Grading: letter grade.
This course is the second medical-surgical nursing course in the nursing program. The effects and results of specific pathological conditions and treatment modalities upon the perioperative patient will be studied. Emphasis is placed on the nursing care needs of the middle adulthood. Students must be enrolled in this course before attempting to enroll in ADN 12AL.
Transferable to CSU Only
ADN 12AL 1.5 units
Health Deviations 2: Lab

## 81 hours laboratory

Prerequisite: ADN 11B and 11BL, and compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 12A.
Grading: letter grade or pass/no pass.
This laboratory course includes both on-campus laboratory practice and application of course content in the live nursing situation. Skills include intravenous therapy, medical and surgical aseptic practices and selected physical assessments. Students will provide nursing care for a two patient perioperative assignment in the acute care setting. Experiences off the unit may include a day in the operating room or outpatient services.
Transferable to CSU Only

## ADN 12B 2.5 units

## Health Deviations 3

45 hours lecture
Prerequisite: ADN 12A and ADN 12AL
Grading: letter grade.
This course continues to explore the professional role of the nurse and patient demands for increased care necessitated by health deviations in the hospitalized adult. The content emphasizes the nursing process using Orem's Self-Care Theory, specifically the requisites of sufficient intake of water and food, elimination, and excretion. Focus is placed on collaborative management of care, communication, safety, and critical thinking in assuming the expanding role of the registered nurse. Additionally, the effects of specific pathological health deviations and medical treatment modalities for the medical patient are studied with attention to teaching and learning. Students must be enrolled in this course before attempting to enroll in ADN 12BL. Students will be required to attend 1 hour of the supplemental learning activity in a designated Success Center.
Transferable to CSU Only
ADN 12BL 1.5 units
Health Deviations 3: Lab
81 hours laboratory
Prerequisite: ADN 12A and 12AL, and compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 12B.
Grading: letter grade or pass/no pass.
This course provides on-campus lab practice and application of course content utilizing Orem's Self-Care Theory and the nursing process in the live nursing situation. Skill activities include intravenous therapy, physical assessments, and medical and surgical aseptic practice with related skills. Students assume the professional role of the registered nurse while collaborating and managing the safe care of a multiple patient assignment in the medical areas of the acute care facilities. Communication, teaching and learning, and critical thinking skills are emphasized.
Transferable to CSU Only

## ADN 14A 3.5 units

## Foundational Concepts of Nursing

## 36 hours lecture, 81 hours laboratory

Prerequisite: ANAT 1, BIO 2 and PHYSI 1.
Grading: letter grade.
This course introduces the nursing student to foundational concepts across the lifespan. Principles of safety, care competencies, health care infrastructure, attributes and roles are included. The application of concepts through clinical skills are experienced through seminar, lab and clinical settings. Upon completion, students will provide safe nursing care incorporating identified concepts.
Transferable to CSU Only

## ADN 14B 4 units

## Nursing - Health Care Participant

36 hours lecture, 108 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
This course introduces the nursing student to the attributes of the health care participant as an individual, a family, and a community. Curricular concepts are applied in seminar, lab, and clinical settings. Upon completion, students will provide safe nursing care incorporating the concepts of elimination, nutrition, mobility, perfusion, oxygenation, comfort, cognition, glucose regulation, infection, and tissue integrity. Transferable to CSU Only

## ADN 15A 4 units

Health and Illness Nursing Concepts 1
36 hours lecture, 108 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
This course focuses on health and illness concepts for care of individuals with common acute or chronic conditions. Emphasis is placed on concepts including homeostasis and regulation, protection and movement, oxygenation and hemostasis. Professional nursing concepts include professional attributes and care competencies.
Curricular concepts are applied in seminar, lab and clinical settings. Upon completion, students will provide safe nursing care incorporating the identified concepts.
Transferable to CSU Only

## ADN 15B 4.5 units

Health and Illness Nursing Concepts 2
36 hours lecture, 135 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
The course focuses on health and illness concepts for care of individuals with complex acute or chronic health conditions. Emphasis is placed on concepts including oxygenation, homeostasis and regulation, protection and movement, and coping. Professional nursing concepts include selected professional attributes and care competencies. Curricular concepts are applied in seminar, lab and clinical settings. The laboratory portion includes both on-campus laboratory practice and application of course concepts in the live nursing situation.
Transferable to CSU Only
ADN $20 \quad 1.5$ units
Nursing Track - Pharmacology 2

## 27 hours lecture

Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
This course continues the study of pharmacology from a conceptual approach as it relates to nursing management of drug therapy. Emphasis is placed on the drug classifications, prototypes, actions, interactions, adverse effects, and nursing implications. Complex curricular concepts, related to pharmacological modalities, are applied in seminar settings. Students are encouraged to utilize the nursing process and clinical reasoning while engaging with these curricular concepts. Upon completion of the course, students will apply pharmacological principles and interventions to provide safe and effective nursing care.
Transferable to CSU Only

## ADN 20A 1 units

## Transition to Second Level Nursing

## 18 hours lecture

Prerequisite: ANAT 1, PHYSI 1, BIO 2, and ENGL 105, ESL 34X, ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S, and CPR Certification for health care providers.
Corequisite: ADN 202.
Grading: letter grade or pass/no pass.
This course is designed to prepare advanced placement licensed vocational nursing students for second level Registered Nursing content. The major foci are Orem's Self Care Theory of Nursing and the application of the nursing process as a second level practitioner.
Transferable to CSU Only

## ADN 21B 2.5 units

Mental Health

## 45 hours lecture

Prerequisite: ADN 12B and 12BL or ADN 20A.
Corequisite: ADN 21BL.
Grading: letter grade.
This course is a study of Orem's Self-Care Theory and the nursing process as they relate to mental health and/or mental health deviations in the client with acute/chronic debilitating diseases. Emphasis is placed on therapeutic communication skills.
Transferable to CSU Only

## ADN 21BL 3 units

Mental Health Lab

## 162 hours laboratory

Prerequisite: ADN 12B and ADN 12BL or ADN 20A, and compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 21B.
Grading: letter grade or pass/no pass.
This laboratory course includes both on and off campus labs that provide an opportunity to practice and apply the theory content in simulated and live nursing situations. The primary emphasis is placed on the application of theory and integrating communication skills into interactions with patients in both the psychiatric and medical-surgical acute care settings. Skill activities include intravenous venipuncture, group participation and various communication techniques.
Transferable to CSU Only

## ADN 22B 2.5 units

Advanced Nursing II/Role Transition
45 hours lecture
Prerequisite: ADN 45A and ADN 45AL.
Corequisite: ADN 22BL.
Grading: letter grade.
This course provides the opportunity to integrate all previously learned theories and skills. Advanced geriatric content and leadership theory is utilized in a primary or team nursing setting on various hospital shifts,and in the home health settings. The major emphasis is placed on the role transition from student to graduate nurse.
Transferable to CSU Only

## ADN 22BL 3 units

## Adv Nursing II-Role Transition Lab

162 hours laboratory
Prerequisite: ADN 45A and ADN 45AL.
Corequisite: ADN 22B.
Grading: letter grade.
This laboratory course provides the opportunity to integrate all previously learned theories and skills in the clinical setting. It incorporates advanced geriatric content and leadership theory in a primary or team nursing setting on various hospital shifts and in the home health setting. The major emphasis is on the role transition from student to graduate novice nurse.

Transferable to CSU Only

## ADN 24A 2.5 units

Maternal Newborn Nursing Concepts
18 hours lecture, 81 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment
Grading: letter grade.
This course focuses on maternal and newborn health concepts
Emphasis is placed on reproduction and sexuality, emotion, homeostasis
and regulation. Curricular concepts are applied in seminar, lab and clinical
settings. Upon completion, students will provide safe nursing care incorporating the concepts identified in this course.
Transferable to CSU Only

## ADN 24B 2.5 units

Pediatric Nursing Concepts

## 18 hours lecture, 81 hours laboratory

Prerequisite: Application and acceptance to the ADN program are required for enrollment
Grading: letter grade.
This course focuses on pediatrics health concepts. Emphasis is placed on attributes and resources; homeostasis and regulation. Curricular concepts are applied in the seminar, lab, and clinical setting. Upon completion, students will provide safe nursing care incorporating the concepts identified in the course.
Transferable to CSU Only

## ADN 24C 3 units

## Mental Health Nursing Concepts

27 hours lecture, 81 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
This course focuses on mental health concepts across the lifespan. Concepts emphasized include coping and stress tolerance, emotion, cognitive function, and maladaptive behavior. Curricular concepts are applied in lecture, lab and clinical settings. Upon completion, students will provide safe nursing care incorporating the concepts identified. Transferable to CSU Only

## ADN 25A 4 units

Health and Illness Nursing Concepts 3
36 hours lecture, 108 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade
This course focuses on health and illness concepts for care of individuals with multisystem and emergent health conditions. Emphasis is placed on concepts including acid-base balance, infection, intracranial regulation, perfusion, oxygenation, tissue integrity, clinical judgement, and evidencebased practice. Professional nursing concepts include selected professional attributes such as clinical judgment, communication, collaboration, health promotion, safety, technology and informatics. Curricular concepts are applied in seminar, lab and clinical settings. Transferable to CSU Only

## ADN 25B 5 units

Health and IIlness Nursing Concepts 4
36 hours lecture, 162 hours laboratory
Prerequisite: Application and acceptance to the ADN program are required for enrollment.
Grading: letter grade.
This course focuses on the theory and clinical application of the Nursing Process and Clinical Judgment model when providing care for patients across the lifespan. This course facilitates the transition from student nurse to graduate nurse. The student participates as a preceptee or mentee/member of the healthcare team and assumes responsibility for a group of patients under the supervision of a clinical teaching assistant and faculty. Course content includes professional nursing and healthcare concepts. By the end of this course, the student is expected to function satisfactorily within the Nurse of the Future Competencies.
Transferable to CSU Only
ADN 31A 1 units
Trends in Nursing A
18 hours lecture
Corequisite: ADN 21A, 21AL, 21B and 21BL.
Grading: letter grade or pass/no pass.
This course is designed for students to study the trends and issues which affect current nursing practice. The major foci include the evolution of nursing, professional opportunities for the practice of nursing, the legal and ethical relationships in nursing, the economics of health care, the interpersonal relationships among health care professionals and current issues.
Transferable to CSU Only
ADN 31B 1 units
Trends in Nursing B
18 hours lecture
Prerequisite: ADN 31A
Corequisite: ADN 45A and ADN 22B and ADN 22BL
Grading: pass/no pass.
This course is designed to continue the study of the trends and issues in nursing. The major foci includes: Preparation for licensure, communication, development of a personal philosophy of nursing, the professional role of the nurse, professional employment, educational and volunteer opportunities. It also includes critical thinking, safety and collaboration.
Transferable to CSU Only

## ADN 35A 1.5 units

## Maternal/Newborn Nursing

27 hours lecture
Prerequisite: ADN 12B and ADN 12BL or ADN 20A and CPR certification for health care providers.
Grading: letter grade.
Formerly ADN 235A. This course emphasizes Orem's Self-Care Theory of developmental self-care requisites, health deviations and universal self-care requisites as it relates to women and newborns. The content involves the study of gynecological problems, deviations from normal pregnancy, care during prenatal, intrapartal, and postpartal periods, of normal and high-risk pregnancy. In addition, the assessment and care of the normal newborn is included.
Transferable to CSU Only

## ADN 35AL 1.5 units

## Maternal/Newborn Nursing Lab

## 81 hours laboratory

Prerequisite: ADN 20A and CPR certification.
Corequisite: ADN 35A.
Grading: letter grade.
Formerly ADN 235AL. This course applies the course content in a live nursing situation. It includes on-campus/clinical lab practice and testing of required skills in perinatal units, newborn nursery, GYN, and community setting.
Transferable to CSU Only

## ADN 35B 1.5 units

Pediatric Nursing

## 27 hours lecture

Prerequisite: ADN 12B and ADN 12BL or ADN 20A and CPR certification for health care providers.
Grading: letter grade.
Formerly ADN 235B. This course emphasizes Orem's Self-Care Theory of developmental self-care requisites, health deviations, and universal selfcare requisites as it relates to ill children. The content involves the study of illness in children.
Transferable to CSU Only

## ADN 35BL 1.5 units

Pediatric Nursing Lab

## 81 hours laboratory

Prerequisite: ADN 20A and CPR Certification.
Corequisite: ADN 35B.
Grading: letter grade.
Formerly ADN 235BL. The activities for this laboratory course include oncampus practice and application, in acute care hospitals and outpatient settings, of course content in pediatric nursing taught in ADN 235B. The course emphasizes the educative/supportive role of the nurse.
Transferable to CSU Only

## ADN 45A 1.5-2.5 units

Advanced Medical/Surgical Nursing

## 45 hours lecture

Prerequisite: ADN 35A and ADN 35AL and ADN 35B and ADN 35BL and ADN 21B and ADN 21BL and CPR certification for health care providers. Grading: letter grade.
Formerly ADN 245A. This course emphasizes Orem's Self-Care Theory, in particular health deviations as it pertains to the nursing care of acutely ill and critically ill adults. The content involves the study of critical illness in the adult patient. This course unit value can range from 1.5 to 2.5 .
Transferable to CSU Only

## ADN 45AL 1.5-3 units

## Advanced Medical/Surgical Nursing Lab

## 162 hours laboratory

Prerequisite: ADN 35A and ADN 35AL and ADN 35B and ADN 35BL
and ADN 21B and ADN 21BL and a CPR certification for health care providers.
Corequisite: ADN 45A.
Grading: letter grade.
Formerly ADN 245AL. The course emphasizes the educative/supportive role of the nurse, collaboration and communication among the health care team, safe nursing care, and the utilization of all previously learned skills. The activities for this laboratory course include: 1. On-campus lab practice and application 2. Clinical practice in an acute hospital setting and critical care units. This course unit value can range from 1.5 to 3 . Transferable to CSU Only

## ADN 2000.5 units

Nursing Skills Refresher
27 hours laboratory
Grading: pass/no pass.
This course allows self-paced, individualized instruction in basic bedside nursing skills and advanced nursing skills with supervised practice to improve performance and is designed for students in the Associate Degree Nursing program, students approved for re-entry, individuals who are currently licensed as LVNs and foreign graduate nurses.

## ADN 2010.5 units

Nursing Skills Adjunct Laboratory
27 hours laboratory
Grading: pass/no pass.
Formerly ADN 201AD. This course allows self-paced, individualized instruction in first semester basic bedside nursing skills with supervised practice to improve performance.

## ADN 2020.5 units

Nursing Skills Adjunct Laboratory
27 hours laboratory
Grading: pass/no pass.
Formerly ADN 202AD. This course allows self-paced, individualized instruction in second semester medical and surgical nursing skills with supervised practice to improve performance. This course builds on skills practiced in ADN 201AD.

## ADN 2030.5 units

## Nursing Skills Adjunct Laboratory

## 27 hours laboratory

Grading: pass/no pass.
This laboratory course allows self-paced, individualized instruction in maternal-child and mental health nursing skills with supervised practice to improve performance. This laboratory builds on skills practiced in ADN 202. It is designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/ or foreign graduate nurses.

## ADN 2040.5 units

Nursing Skills Adjunct Laboratory

## 27 hours laboratory

Grading: pass/no pass.
This course allows self-paced, individualized instruction in advanced medical-surgical, critical care and pediatric nursing skills with supervised practice to improve performance. This course is designed for students in the RN program, students approved for re-entry, individuals who are currently licensed as LVNs and/or foreign graduate nurses.

## ADN 2122 units

## Clinical Practicum I

## 108 hours laboratory

Prerequisite: ADN 11A and 11B, and compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 12A or ADN 12B.
Grading: pass/no pass.
Formerly ADN 212AD. This course will provide student nurse experiences in approved health care agencies using a Board of Registered Nursing approved curriculum. The purpose of this course is to apply theory and principles taught in the classroom to the clinical setting.

## ADN 2212 units

Clinical Practicum II

## 108 hours laboratory

Prerequisite: ADN 12A and ADN 12B, and compliance with all clinical agency health and safety policies is required the first day of the course. Corequisite: ADN 21A or ADN 21B.
Grading: pass/no pass.
Formerly ADN 221AD. This course will provide student nurse experiences in approved health care agencies using a Board of Registered Nursing approved curriculum. The purpose of this course is to apply theory and principles taught in the classroom to the clinical setting.

## ADN 2222 units

Clinical Practicum III
108 hours laboratory
Prerequisite: ADN 21A and ADN 21B, and compliance with all clinical agency health and safety policies is required the first day of the course. Corequisite: ADN 22A or ADN 22B.
Grading: pass/no pass.
Formerly ADN 222AD. This course will provide student nurse experiences in approved health care agencies using a Board of Registered Nursing approved curriculum. The purpose of this course is to apply theory and principles taught in the classroom to the clinical setting.

## ADN 2253 units

Pharmacology

## 54 hours lecture

Recommended Preparation: BIO 60 or ANAT 1 and PHYSI 1 and READ 82 or completion of Reading proficiency.
Grading: letter grade.
This is an introductory course into the study and management of commonly prescribed drugs. Drug classifications and prototypes are discussed rather than individual medication. The principles of medication administration including common side-effects and nursing responsibilities is included. Dosage calculation is not included. This course is not open for credit to students who have completed VN 225. ADN 225 and VN225 are equivalent courses.

## ADN $430 \quad 2.5$ units

NCLEX-RN Preparation Course
45 hours lecture
Prerequisite: Letter of Eligibility to take NCLEX-RN or Authorization to test (ATI) letter from BRN.
Grading: letter grade.
This course is designed to prepare the graduate nurse to pass the NCLEXRN. The content includes medical, surgical, pediatrics, nursing of the child-bearing family, mental health, pharmacology, critical thinking, community health and leadership refresher course.

## ADN $600 \quad 0$ units

## Health Care Learning Center

270 hours laboratory
Corequisite: Current enrollment in a health care program course.

## Grading: non graded.

This is a noncredit course designed for enhanced assistance for skill attainment in health care programs.
ADN 6100 units
Nursing Skills Refresher Laboratory
13 hours laboratory
Grading: non graded.
This course is designed to provide students with individual and smallgroup instruction in basic bedside nursing skills and advanced bedside nursing skills. Supervised practice is available on a recurring, as needed, and/or drop-in basis to improve performance levels.

## ADN $810 \quad 0.5$ units

Preparation for Nursing
9 hours lecture
Grading: pass/no pass.
This course is designed for a pre-nursing student. The course supports the pre-nursing student in: the development of effective study habits, test-taking strategies, nursing terms, abbreviations and symbols used in health care, and knowledge of the nursing profession.

## Nutrition \& Dietetics (NUTR)

NUTR 20 (C-ID NUTR 110) 3 units

Nutrition and Life

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly F_N 20. This course is an introduction to the fundamental physiological, anatomical, psychological, social, and biochemical principles related to human nutrition. It will also include a study of the human diet in the context of disease prevention, world food supply, and ecological factors.
Transferable to both UC and CSU; see counselor for limitations

## NUTR 21 (C-ID NUTR 120) 4 units

## Food Selection and Meal Preparation

54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly F_N 21. This course introduces the knowledge and skills related to food selection and preparation, food product standards and factors contributing to the quality of prepared food.
Transferable to CSU Only

## NUTR 243 units

Sanitation, Safety and Equipment

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly NUTR 224 and F_N 224. This course covers the application of basic safety and sanitation principles for a food service operation, the criteria used to evaluate equipment design and how to write equipment specifications. Students will be prepared to take the ServSafe Food Protection Management Certification Examination upon completion of the course. This certificate is required for those working in the food service and healthcare industries and meets the California State Health Code.
Transferable to CSU Only

## NUTR 253 units

## Intro to Food Service/Work Organizations

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly NUTR 225 and F_N 225. This course covers the scope, organization, management and administration of a food service system operating within a health care, community or school feeding program.
Topics include facility layout and design, motion economy, task analysis and method improvement, and the education and experience necessary for employment.
Transferable to CSU Only

## NUTR 261 units

## Nutrition for the Active Person

## 18 hours lecture

Grading: letter grade or pass/no pass.
Formerly F_N 26. This course is designed to assist the athlete and those who are physically active in examining his or her special nutritional needs based upon current research. Topics that are emphasized in the course include the nutritional needs of the athlete versus the non-athlete, improving athletic performance through nutrition and how to evaluate athletic diets such as high protein diets, carbohydrate loading and pregame meals.
Transferable to CSU Only

## NUTR 283 units

Food Production Management

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly NUTR 228 and F_N 228. This course introduces management techniques related to food service operations. Menu planning, production scheduling, equipment utilization, staffing and service systems are presented in this course. Students are required to participate in 3 additional hours at the Multidisciplinary Success Center in a review of basic math concepts required for the course.
Transferable to CSU Only

## NUTR 313 units

Menu Planning and Food Purchasing
54 hours lecture
Grading: letter grade.
Formerly NUTR 231 and F_N 231. This course covers the planning and design of health care institutional menus. Topics include: nutritional adequacy, psychological needs, types of operation, equipment and skill of personnel. Purchasing and costing of food, analysis of food quality, writing specifications, ordering, receiving and storing of food and supplies are also covered.
Transferable to CSU Only

## NUTR 323 units

Therapeutic Diets
54 hours lecture
Recommended Preparation: NUTR 20.
Grading: letter grade.
Formerly NUTR 232 and F_N 232. This course presents the principles of and indication for therapeutic diets in the treatment of diseases and disorders. Course content applies to dietetics programs in hospitals, convalescent and extended care facilities.
Transferable to CSU Only

## NUTR 343 units

## Advanced Nutrition Care

54 hours lecture
Recommended Preparation: NUTR 32.
Grading: letter grade or pass/no pass.
Formerly NUTR 234 and F_N 234. This course presents nutrition education principles and techniques for the individual, family and small groups in normal, modified and preventive nutrition care throughout the lifecycle. Computer applications and cultural implications will be covered in this course.
Transferable to CSU Only

## NUTR 353 units

## Advanced Medical Nutrition Therapy

## 54 hours lecture

Recommended Preparation: NUTR 32.
Grading: letter grade.
Formerly NUTR 235 and F_N 235. This course presents an advanced study of medical nutrition therapy with applications in diet counseling, menu modification, communication, documentation, education and appropriate food service delivery.
Transferable to CSU Only

## NUTR 2273 units

Supervision and Training Techniques

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly F_N 227. This course trains students for supervisory positions in food service operations related to health care facilities. Emphasis will include staff selection, training, presentation techniques, communication and staff development.

## NUTR 230A 2.5 units

Clinical Field Experience I
18 hours lecture, 90 hours laboratory
Grading: pass/no pass.
Formerly F_N 230A, F_N 230AC and F_N 230. This course provides supervised clinical field experience in health care facilities for dietetic service supervisor and nutrition assistant program students. Students learn and practice the skills necessary to coordinate a health care food service facility.

## NUTR 230B 2.5 units

Clinical Field Experience I
18 hours lecture, 90 hours laboratory
Recommended Preparation: NUTR 230A.
Grading: pass/no pass.
Formerly F_N 230B and F_N 230AC. This course provides supervised clinical field experience in health care facilities for dietetic service supervisor and nutrition assistant program students. Students learn and practice the skills necessary to coordinate a health care food service facility.
NUTR 2331 units
Special Topics in Health Care Dietetics
18 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 233. This course covers a variety of topics of interest to professionals in the field of health care dietetics/food and nutrition as well as nutrition/dietetics students. The latest developments and trends in the field will be addressed, such as medical nutrition therapies, nutrition care, and new products and resources. Course subject matter varies by semester; see the schedule of classes.

## NUTR 2361 units

## Dietetic Professional Development Seminar

18 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 236. This course serves as an introduction to the development of professionalism and a team concept in the nutrition and dietetic health care system. The course examines financing, planning and regulating health care services related to dietetics, as well as the standards of professional responsibility and the code of ethics for the profession of nutrition and dietetics.

## NUTR 240A 3 units

Clinical Field Experience II
180 hours laboratory
Recommended Preparation: NUTR 230B.
Grading: pass/no pass
Formerly F_N 240A, F_N 240AC and F_N 240. This course provides supervised clinical experience in health care facilities for students in the Nutrition Assistant Program. Students will learn and practice skills necessary to provide nutritional care services to clients in health care settings.

## NUTR 240B 3 units

Clinical Field Experience II
180 hours laboratory
Recommended Preparation: NUTR 240A.
Grading: pass/no pass.
Formerly F_N 240B and F_N 240AC. This course provides supervised clinical experience in health care facilities for students in the Nutrition Assistant Program. Students will learn and practice skills necessary to provide nutritional care services to clients in health care settings.

## NUTR 2502 units

## Nutrition in Healthy Cooking

36 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 250. This course provides a practical approach to the application of sound nutritional practices in the food service setting Nutrition and Dietetics students, Culinary arts students and professionals will be able to incorporate healthful nutrition knowledge in their personal and professional lives. This course includes nutrition as it relates to health throughout the life cycle, menu/recipe design and modification, food product selection, and current trends in consumer preference.

## NUTR $251 \quad 1.5$ units

## Cake Decorating Techniques

18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly F_N 252A and F_N 252AD. Topics in this course include cake decorating techniques, recipes, tools and skill development. A variety of
icings, designs, and shaping techniques will be covered. This course is an elective for the Dietetic's program certificates.

## NUTR 2521.5 units

Cake Decorating for Special Occasions
18 hours lecture, 36 hours laboratory
Grading: letter grade.
Formerly F_N 252B. Topics in this course covers cake decorating techniques for special occasions. Included will be creating cakes with special effects, candy molds, novelties, international styles, delivery, set up techniques and business practices.

## NUTR 2531 units

## ServSafe Certification Exam Prep

18 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 253. This course will address the required standards of sanitation and safety in the handling, preparation, and serving of food to protect the public's health. Students will be prepared to take the ServSafe Food Protection Manager Certification Examination at the conclusion of the course. This Certificate required for those working in a food service and healthcare industries and meets the California State Health Code.

## NUTR 2541 units

## Nutrition for Adults and Aging

18 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 255C. This course provides the most recent information in the specific area of nutrition. Facts and fallacies and life cycle nutrition focusing on seniors are emphasized.

## NUTR 2551 units

Vegetarian Lifestyle
18 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 225D. This course provides the knowledge to plan and practice a vegetarian lifestyle and maintain optimum nutrition. Topics will include the benefits and cautions of the vegetarian diet, variations of the diet and how to combine non-meat proteins.

## NUTR 2562 units

Weight Control \& Energy Balance
36 hours lecture
Grading: letter grade or pass/no pass.
Formerly F_N 256. This course presents techniques of long-term weight control. The following areas are addressed in this course: assessment of ideal body weight, techniques of diet/behavior modification, emotional eating triggers, and principles of energy balance through the modification of diet.

## NUTR $260 \quad 1$ units

Cultural Foods
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly F_N 260 and F_N 260AD. This course explores the origins of foods, customs, nutrition and preparation methods common to a variety of cultures. Food patterns and relationship to social customs and rituals are covered in addition to the nutrition assessment and the effects of changes of food habits. This course is an elective for the Dietetic's program certificates.

## NUTR 2611 units

Cooking for Wellness
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly F_N 261 and F_N 261AD. This course provides the knowledge and skills required to plan, prepare and serve nutritious, varied, palatable, attractive meals within the limitations of time, energy, equipment and budget. This course is an elective for the Dietetic's program certificates.

## NUTR 2621 units

Cooking for Singles
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
Formerly F_N 262 and F_N 262AD. This course is designed to teach meal planning and food preparation for the single person. This course will emphasize the preparation of nutritious, convenient, economical and attractive meals.

## NUTR 6010 units

CDM Board Exam Preparation 1
18 hours lecture
Grading: non graded.
The NUTR 601 provides students with information, resources, and insights to facilitate their preparation for the national credentialing examination for dietary managers in health care institutions. The CDM Board Exam is based on the five competency areas included Nutrition, Foodservice Management, Personnel and Communications, Sanitation and Food Safety, and Business Operations. The NUTR 601 course is designed based on two of the competency areas including in the Certified Dietary Manager (CDM) Board Exam. The NUTR 601 course will cover the Nutrition component and Foodservice Management component of the CDM Board Exam.

## NUTR 6020 units

## CDM Board Exam Preparation 2

## 18 hours lecture

Grading: non graded.
The NUTR 602 provides students with information, resources, and insights to facilitate their preparation for the national credentialing examination for Certified Dietary Managers (CDM) in health care institutions. The CDM Board exam topics cover the five competency areas including, Nutrition, Foodservice Management, Personnel, and Communications, Sanitation, and Food Safety and Business Operations. The NUTR 602 course is designed based on three of the competency areas. The NUTR 602 course will cover Personnel and Communications, Sanitation and Food Safety, and Business Operations component of the CDM Board Exam.

## NUTR 6530 units

## ServSafe Certification Exam Prep

18 hours lecture
Grading: non graded.
This course will address the required standards of sanitation and safety in the handling, preparation, and serving of food to protect the public's health. Students will be prepared to take the ServSafe Food Protection Manager Certification Examination at the conclusion of the course. This Certificate required for those working in a food service and healthcare industries and meets the California State Health Code.

# Occupational Safety Health Administration (OSHA) 

OSHA 2542 units<br>OSHA Standards for General Industry<br>36 hours lecture<br>Grading: pass/no pass.<br>Materials Fee: \$8. Training Completion Card.<br>\section*{Philosophy (PHIL)}

Formerly ELECT 254. This course covers OSHA (Occupational Safety and Health Administration) policies, procedures, and standards, as well as industrial safety and health principles. Topics include scope and application of the OSHA General Industry safety standards. Special emphasis is placed on those areas that are the most hazardous, using OSHA standards as a guide. Upon successful course completion, the student will receive an OSHA 30 Hour General Industry Safety Outreach

PHIL 1 (C-ID SJS 130) 3 units

Philosophy of LGBTQIA+ Studies

## 54 hours lecture

Grading: letter grade or pass/no pass.
This introductory course examines a broad range of contemporary gay, lesbian, bisexual, transgender, and queer issues in various contexts including bio-medical (ethics), sociological, philosophical (ontology, metaphysics, epistemology), political (political philosophy), racial and sexual (feminist philosophy).
Transferable to both UC and CSU; see counselor for limitations

## PHIL 1H (C-ID SJS 130) 3 units

Honors Philosophy of LGBTQIA+ Studies

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This introductory course examines a broad range of contemporary gay, lesbian, bisexual, transgender, and queer issues in various contexts including bio-medical (ethics), sociological, philosophical (ontology, metaphysics, epistemology), political (political philosophy), racial and sexual (feminist philosophy).
Transferable to both UC and CSU; see counselor for limitations

## PHIL 3 units

Intro to Issues/Phil, Psych \& Religion
54 hours lecture
Grading: letter grade or pass/no pass.
The course compares and integrates insights from three interrelated disciplines - philosophy, psychology, and religion that correspond to the intellectual, emotional, and spiritual dimensions of human existence. Students learn the four basic foundations of knowledge: reason, authority, the senses, and experience that are used by each of the three disciplines in their search for truth. Following this framework, the course surveys a wide variety of theories and beliefs and offers a critical analysis comparing their similarities and differences. Students explore, discuss, and evaluate the basic positions of most of the world's great philosophers, psychologists, and theologians - from Socrates and Descartes to Sartre, from Freud and Skinner to Maslow, and from Buddha and Jesus to Buber.
Transferable to both UC and CSU; see counselor for limitations

PHIL 4 (C-ID PHIL 130) 3 units
History of Ancient Philosophy

## 54 hours lecture

Grading: letter grade.
This course addresses ancient western philosophy with emphasis on the development of Greek philosophy from the Pre-Socratics through
Aristotle and may also include Stoic, Hellenistic, Roman, medieval or nonwestern thinkers. An emphasis will be placed on reading ancient primary texts critically.
Transferable to both UC and CSU; see counselor for limitations
PHIL 5 (C-ID PHIL 140) 3 units
History of Modern Philosophy

## 54 hours lecture

Grading: letter grade.
This course surveys 16th through 18th century European philosophical perspectives with an emphasis on the metaphysical, and epistemological developments of the period. Emphasis will also be placed on critically reading the primary texts from this period.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 6 (C-ID PHIL 100) 3 units

Introduction to Philosophy

## 54 hours lecture

Grading: letter grade or pass/no pass.
A general introduction to some of the fundamental questions, texts, and methods of philosophy. Topics may include the nature of reality, the existence of God, free will, morality, race and gender, personal identity, social justice, knowledge and skepticism.
Transferable to both UC and CSU; see counselor for limitations
PHIL 6H (C-ID PHIL 100) 3 units
Honors Introduction to Philosophy

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
A general introduction to some of the fundamental questions, texts, and methods of philosophy. Topics may include the nature of reality, the existence of God, free will, morality, race and gender, personal identity, social justice, knowledge and skepticism.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 7 (C-ID PHIL 120) 3 units <br> Introduction to Ethics <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines moral theories and the application of moral theories, arguments, and principles to contemporary moral issues. Topics covered include: Can moral claims be objectively true? How do major moral theories attempt to provide an objective basis for morality? How should we resolve contemporary moral issues such as (but not limited
to) abortion, animal rights, censorship, economic justice, global warming, immigration, mass incarceration, racism, and terrorism?
Transferable to both UC and CSU; see counselor for limitations

## PHIL 7H (C-ID PHIL 120) 3 units

## Honors Introduction to Ethics

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course examines moral theories and the application of moral theories, arguments, and principles to contemporary moral issues. Topics covered include: Can moral claims be objectively true? How do major moral theories attempt to provide an objective basis for morality? How should we resolve contemporary moral issues such as (but not limited to) abortion, animal rights, censorship, economic justice, global warming, immigration, mass incarceration, racism, and terrorism?
Transferable to both UC and CSU; see counselor for limitations

## PHIL 8 units

Philosophies of Global East and South

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides a broad introduction to some of the main philosophical traditions from around the world, such as Buddhism, Taoism, Confucianism, Islam, Jainism, Sikhism, Shinto, and American Indian Philosophy. The major themes to be examined include the metaphysical nature of reality, humanity and divinity; the meaning of life; the role of the individual and society; and the effects of history, geography, religion and culture on belief systems.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 93 units

## Introduction to Existentialism

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course will examine the philosophical thought of existentialist writers such as Kierkegaard, Nietzsche, Sartre, Husserl, Tillich, Heidegger, Camus, and Dostoevsky. Emphasis will be placed on the analysis of recurring themes such as freedom, individuality, meaning and value, and the existence of God.
Transferable to both UC and CSU; see counselor for limitations
PHIL 10 (C-ID SJS 120) 3 units
Introduction to Feminist Philosophy

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course will examine feminist thought on philosophical issues in the history of feminist philosophy, metaphysics and epistemology, feminist philosophy of language and science, intersectionality, and ethics, politics, and aesthetics.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 10H (C-ID SJS 120) 3 units

## Honors Intro to Feminist Philosophy

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course will examine feminist thought on philosophical issues in the history of feminist philosophy, metaphysics and epistemology, feminist philosophy of language and science, intersectionality, and ethics, politics, and aesthetics.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 113 units

## Critical Thinking

## 54 hours lecture

Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This class focuses on the improvement of practical reasoning skills.
Students will learn to detect and avoid common argument fallacies.
Students will develop the knowledge and habits needed to make
decisions between conflicting ideas and beliefs. Applications are made to both contemporary and perennial issues, such as current political events, marketing and advertising, and the news media. Students will also learn the difference between deductive and inductive reasoning, and will learn some basic deductive argument forms.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 12 (C-ID PHIL 110) 3 units

## Introduction to Logic

## 54 hours lecture

Grading: letter grade or pass/no pass.
Introduction to logic introduces some principles of valid reasoning with an emphasis on deductive logic. Ordinary language will be translated into sentential logic, and syntax versus semantics will be discussed. Methods of determining validity will be explored including truth tables and the proof method in sentential logic.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 143 units

Philosophy of Religion

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines the philosophical themes within the world"s religions. Central questions include: Does God exist? How can God be known? What is the nature of God/Ultimate Reality? Why is there evil? Can conflicting religions still be true? The course will focus on understanding and critically analyzing the claims of the world's religions. Transferable to both UC and CSU; see counselor for limitations

PHIL 153 units
Introduction to Political Philosophy

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course examines some of the main issues within political
philosophy. Topics include the justification of political authority, property and the state, the individual and the state, as well as special topics. This course examines various perspectives including those of marginalized groups and special populations.
Transferable to both UC and CSU; see counselor for limitations

## PHIL 163 units

Introduction to Business Ethics

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course will examine ethical issues in business. Topics will include environmental concerns, the distribution of wealth, informational ethics, privacy and autonomy, and affirmative action. These will be discussed in the context of moral theories such as utilitarianism, deontology, virtue ethics, and care ethics. This course is not open for credit to students who have completed Management 16.
Transferable to both UC and CSU; see counselor for limitations

PHIL 22 (C-ID PHIL 210) 3 units
Symbolic Logic
54 hours lecture
Grading: letter grade.
This course is an introduction to the formal techniques of evaluating arguments. These formal techniques include propositional logic, truth trees, natural deduction, and quantificational logic.
Transferable to both UC and CSU; see counselor for limitations

## Photography (PHOT)

## PHOT 103 units

## History of Photography

## 54 hours lecture

Recommended Preparation: READ 82 and Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process. Grading: letter grade or pass/no pass.
This course surveys the history of photography from its inception to the present digital age. It explores photography as a form of visual communication in historical, socio-political, cultural and aesthetic contexts. Students will develop visual literacy through verbal and written analysis. Museum and gallery field trips are required. This course is appropriate for art majors and non-art majors.
Transferable to both UC and CSU; see counselor for limitations

## PHOT 314 units

Intro to B\&W Photography Darkroom
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
This course is an introduction to the use of traditional film and darkroom photographic practice. Through the development of critical thinking and technical skills, students will learn how to visualize, create, and evaluate photographic images. Techniques covered will include all aspects of camera functions from depth of field to shutter speed, film exposure, film development, and black and white printing; alternative darkroom techniques; and introduction to digital resources; darkroom safety, and final presentation options. Through critical readings, class discussions, presentations of artists' work, films, gallery visits, and critiques, students will learn how to evaluate, interpret, and critique photographs and ideas. Transferable to CSU Only

## PHOT 324 units <br> Introduction to Digital Photography

36 hours lecture, 108 hours laboratory
Recommended Preparation: ART 81.
Grading: letter grade or pass/no pass.
This is an introductory course that develops a technical proficiency and an aesthetic awareness of the creative uses of digital photography, including color design theory, composition, perceptual and psychological aspects of color. Through an integration of historical references, critical examination of images and their associated aesthetics, practical experiences, and personal ambition, the student is encouraged to develop a more insightful and sophisticated comprehension of color photography and its contributions to the communicative processes of the visual vocabulary.
Transferable to CSU Only

## PHOT 334 units

Professional Studio Lighting
36 hours lecture, 108 hours laboratory
Prerequisite: PHOT 32 or ART 81.
Grading: letter grade or pass/no pass.
This is a comprehensive course in studio photography with major emphasis on high quality capture, studio composition and lighting techniques. Students will work with a wide range of types of artificial lights, learn advanced digital editing and output methods. It is part of the general fine arts curriculum and is a requirement for the Digital Media:
Advanced Production certificate.
Transferable to CSU Only

## PHOT 344 units

Advanced Photography and Digital Media
36 hours lecture, 108 hours laboratory
Prerequisite: PHOT 33.
Grading: letter grade or pass/no pass.
Formerly PHOT 34AD. This is a comprehensive portfolio development course for the advanced student of photography. The major emphasis is centered around continuing to build complex problem solving in photography for professional uses. Technical aspects will include: digital, alternative and traditional photographic materials, lighting in-studio and on location, animation through motion graphics, and development of complex visual styles.
Transferable to CSU Only

## PHOT 353 units

Photography for Publication
36 hours lecture, 72 hours laboratory
Prerequisite: PHOT 32 or ART 81.
Grading: letter grade or pass/no pass.
Formerly PHOT 35AD. This is a comprehensive course in basic and advanced photojournalism techniques. Students will gain practical experience in photography for publication in newspapers and magazines. This class is not open to students registered in or with credit in JOURN 35.
Transferable to CSU Only
PHOT 374 units
Portrait Photography

## 36 hours lecture, 108 hours laboratory

Prerequisite: PHOT 31 or PHOT 32 or ART 81.
Grading: letter grade or pass/no pass.
This is a comprehensive course for the beginning and advanced student of portraiture with a special emphasis on the use of portrait photography as a career or creative path.
Transferable to CSU Only
PHOT 383 units
Marketing Professional Photo Skills
54 hours lecture
Grading: letter grade or pass/no pass.
This course is a study of the application of current practices utilized in marketing professional photographic skills. Topics includes freelance marketing, design and use of a portfolio, and professional photographic business practices.
Transferable to CSU Only

## PHOT 393 units

Photography on Location
36 hours lecture, 72 hours laboratory
Prerequisite: ART 81 or PHOT 32.
Grading: letter grade or pass/no pass.
This is a comprehensive occupational course in location photography The subjects covered will include: people, documentary, landscape, environmental and product photography for annual reports, client-direct markets, stock photography, public relations, advertising and editorial publications.
Transferable to CSU Only

## PHOT 414 units

Professional Photographic Portfolio
36 hours lecture, 108 hours laboratory
Prerequisite: PHOT 31 or PHOT 32 or ART 81.
Recommended Preparation: PHOT 33.
Grading: letter grade or pass/no pass.
This course presents students with the opportunity to develop professional portfolio and portfolio presentation of work through an intense schedule of lectures, critiques, class discussions, museum and gallery visits - all centering on current issues in photography. This course will also consider professional written materials: resume, exhibition proposals, cover letter, artist's statements. The goal of this course is to help prepare student not only in the presentation of their portfolio, but also for life after college by the experience of preparing their show in a professional exhibition, job application, and photography business.
Transferable to CSU Only

## PHOT 424 units

Experimental \& New Media Photography

## 36 hours lecture, 108 hours laboratory

Prerequisite: PHOT 32 or ART 81.
Grading: letter grade or pass/no pass.
This course emphasizes experimental solutions to conceptual visual problems in photography. The class is a comprehensive advanced lab course for students enrolled in the photography program or persons who have a background in photography and wish to improve their skills. This class includes both traditional and digital mediums.
Transferable to CSU Only

## PHOT 433 units

Photoshop and Lightroom Management

## 36 hours lecture, 72 hours laboratory

Prerequisite: PHOT 32 or ART 81.
Grading: letter grade or pass/no pass.
This is a comprehensive digital photography course for students who already have basic camera skills and want to learn how to archive, edit and manipulate their imagery. This course is designed to train students in the application of electronic media and its use in manipulating and creating photographic images. The course includes digital capture, editing and output. Topics include: the fundamentals of Color Management, development of a successful digital workflow, image editing and the basics of image-bank management.
Transferable to CSU Only
PHOT 2811 units
Photography Laboratory

## 54 hours laboratory

Grading: letter grade or pass/no pass.
This class is designed for students enrolled in the photography program or students who have a background in photography and wish to improve their skills. The course emphasizes practical applications in traditional and digital photographic techniques.

## PHOT $291 \quad 1$ units

## Advanced Photography Laboratory

## 54 hours laboratory

Grading: letter grade or pass/no pass.
The course is for advanced students enrolled in the photography program or students who have an extensive background in photography and wish to improve their skills through use of the lab. The course emphasizes practical applications in digital and traditional photographic techniques.
PHOT 6810 units
Fundamentals of Photography Laboratory
108 hours laboratory
Grading: non graded.
This class is a lab for the beginning photo student or persons who have a background in photography and wish to improve their skills. The emphasis is on practical applications of image processing, including digital and traditional technologies. This class is intended for senior citizens.

## Physics (PHYS)

## PHYS 2A (C-ID PHYS 105) 4.5 units

General Physics

## 72 hours lecture, 36 hours laboratory

Prerequisite: MATH 40.
Grading: letter grade or pass/no pass.
This course is an algebra and trigonometry based general physics course for students not majoring in physics or engineering. It covers kinematics, dynamics, work and energy, momentum, rotational motion, properties of fluids, simple harmonic motion, waves, temperature and ideal gases, heat and thermodynamics.
Transferable to both UC and CSU; see counselor for limitations
PHYS 2B (C-ID PHYS 110) 4.5 units
General Physics

## 72 hours lecture, 36 hours laboratory

Prerequisite: PHYS 2A.
Grading: letter grade or pass/no pass.
This course is an algebra and trigonometry based general physics course for students not majoring in physics or engineering. The course covers electric charge, Coulomb"s Law, electric field, electric potential, capacitance, electric current, D.C. circuits, magnetism, electromagnetic induction, A.C. circuits, electromagnetic waves, geometric optics, the wave nature of light, the Special Theory of Relativity and introduction to Quantum Theory and models of the atom.
Transferable to both UC and CSU; see counselor for limitations
PHYS 3A (C-ID PHYS 205) 5.5 units
Physics for Sci. \& Eng. - Mechanics
90 hours lecture, $\mathbf{3 6}$ hours laboratory
Prerequisite: MATH 60.
Recommended Preparation: PHYS 2A.
Grading: letter grade or pass/no pass.
This course is the first course of a calculus-based sequence for majors in physics, chemistry, mathematics, engineering, astronomy and certain other fields. This course covers kinematics, vectors, forces, energy, translational and rotational motion, momentum, static fluids, simple harmonic oscillations and mechanical waves. Transferable to both UC and CSU; see counselor for limitations

PHYS 3B (C-ID PHYS 210) 4.5 units
Physics for Sci. \& Eng. - E \& M
72 hours lecture, 36 hours laboratory
Prerequisite: PHYS 3A.
Corequisite: MATH 70.
Grading: letter grade or pass/no pass.
This course is the second course of a calculus-based sequence for majors in physics, chemistry, mathematics, engineering, astronomy and certain other fields. The course covers electric charge, Coulomb"s Law, electric field, Gauss"s law, electric potential, capacitance, electric current, D.C circuits, magnetic fields, electromagnetic induction, A.C circuits, Maxwell"s equations and electromagnetic waves.
Transferable to both UC and CSU; see counselor for limitations
PHYS 3C (C-ID PHYS 215) 4.5 units
Physics for Sci. \& Eng. - Modern Physics
72 hours lecture, $\mathbf{3 6}$ hours laboratory
Prerequisite: PHYS 3A.
Corequisite: MATH 70.
Recommended Preparation: PHYS 3B.
Grading: letter grade or pass/no pass.
This course is part of a calculus-based sequence for majors in physics, chemistry, mathematics, engineering, astronomy and certain other fields.
Physics 3C includes thermodynamics, electromagnetic waves, ray optics, wave optics, special relativity, basic quantum theory, wave mechanics, properties of atoms, nuclear structure and nuclear reactions.
Transferable to both UC and CSU; see counselor for limitations

## PHYS 4 (C-ID PHYS 140) 4 units

## Survey of Chemistry and Physics

## 54 hours lecture, 54 hours laboratory

Prerequisite: Elementary algebra or qualifying through the LBCC math placement process.
Grading: letter grade.
This is a one semester, inquiry-based physical science course suitable for satisfying the general education requirements of non-science majors and especially of students who aspire to become elementary school teachers. Students construct a meaningful understanding of physics and chemistry concepts through lecture and laboratory activities. The course covers: matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The interdependence of chemistry and physics, their applications in everyday life, and the power and limitations of scientific inquiry will be emphasized. Not open to students who already have credit in CHEM 4.
Transferable to both UC and CSU; see counselor for limitations

## Physiology (PHYSI)

PHYSI 1 (C-ID BIOL 120B) 5 units

Human Physiology
72 hours lecture, 54 hours laboratory
Prerequisite: ANAT 1 or ANAT 41 or BIO 60.
Recommended Preparation: CHEM 2 or one year of high school chemistry.
Grading: letter grade or pass/no pass.
This course is the study of the functioning of the human body at the molecular, cellular, organ and organ system level. Laboratory experiments reinforce the concepts and allow students to gain experience with standard physiology equipment. This course is designed for pre-nursing, physical therapy, occupational therapy, physical education and other allied health majors. Students are required to complete 3 hours of activities in a Multidisciplinary Success Center to complete activities and assignments that relate specifically to this course"s content.
Transferable to both UC and CSU; see counselor for limitations

## Political Science (POLSC)

POLSC 1 (C-ID POLS 110) 3 units

## Introduction to Government

54 hours lecture
Grading: letter grade.
This course is an introduction to the principles and issues of government and the political process in a diverse society, emphasizing the government of the United States, as well as California state and local governments.
Transferable to both UC and CSU; see counselor for limitations

## POLSC 1H (C-ID POLS 110) 3 units

Honors Introduction to Government

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade.
This course is an introduction to the principles and issues of government and the political process in a diverse society, emphasizing the U.S. government and California state and local governments.
Transferable to both UC and CSU; see counselor for limitations
POLSC 2 (C-ID POLS 130) 3 units
Comparative Government

## 54 hours lecture

Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S. Grading: letter grade or pass/no pass.
This course introduces students to analytical methods used to compare political systems and governments. It examines the politics of selected states from among industrial and post-industrial democracies, developing countries, and communist and post-communist systems. Issues given particular attention include democratization, economic development, ideologies, political culture, trans-state organizations, globalization, and political change.
Transferable to both UC and CSU; see counselor for limitations

POLSC 2H (C-ID POLS 130) 3 units

## Honors Comparative Government <br> 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S. Grading: letter grade.
This course introduces students to analytical methods used to compare political systems and governments. It examines the politics of selected states from among industrial and post-industrial democracies, developing countries, and communist and post-communist systems. Issues given particular attention include democratization, economic development, ideologies, political culture, trans-state organizations, globalization, and political change.
Transferable to both UC and CSU; see counselor for limitations

## POLSC 3 units

## Issues of American Government

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is an intensive study of current issues involving the basic concepts of American democracy, public policy, federalism, government finance, pressure groups, legislative, executive and judicial powers, civil rights and liberties, and international politics. This course is highly recommended for political science majors at CSU Long Beach.
Transferable to both UC and CSU; see counselor for limitations

## POLSC 4 (C-ID POLS 140) 3 units

## World Politics

## 54 hours lecture

Grading: letter grade or pass/no pass.
An introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions, interactions and processes as they relate to global issues. This class satisfies one lower division social science requirement for majors in political science, history, sociology, humanities, physical sciences and life sciences at UCLA.
Transferable to both UC and CSU; see counselor for limitations

## POLSC 4H (C-ID POLS 140) 3 units

## Honors World Politics

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is an introduction to recent and contemporary international relations, foreign policy-making institutions, and the politics of selected foreign states. This class satisfies one lower division social science requirement for majors in political science, history, sociology, humanities, physical sciences and life sciences at UCLA.
Transferable to both UC and CSU; see counselor for limitations

## POLSC 93 units

The Constitution, Law and Society

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is a general survey of the United States Constitution and the United States legal system. Included is the study of the origins, judicial interpretations, and societal effects of the Constitution. The course emphasizes the legal system with specific focus on the role of the United States Supreme Court in issuing decisions of a societally relevant and interdisciplinary nature. The controversial role of law in political and social issues is examined with regard to all areas of United States Supreme Court jurisdiction. Law is analyzed as an integral part of the political process and its effects on society.
Transferable to both UC and CSU; see counselor for limitations

POLSC 10 (C-ID POLS 150) 3 units
Introduction to Political Science

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course introduces basic concepts and approaches in the discipline of political science. Theories of political institutions, systems and subsystems are examined. Methods and approaches of political analysis are developed in the study of classical and modern political problems.
Transferable to both UC and CSU; see counselor for limitations
POLSC 11 (C-ID POLS 120) 3 units
Introduction to Political Theory

## 54 hours lecture

Grading: letter grade.
This course is an introduction to Western political thought. It examines perennial issues of politics concerning justice, power, and the nature of the state. The course surveys the central political thinkers associated with the ancient, medieval, modern, and postmodern eras of Western political theory.
Transferable to both UC and CSU; see counselor for limitations

## POLSC 48M1 1 units

California State/Local Government

## 18 hours lecture

Grading: letter grade.
This is a credit by examination course to satisfy the requirement for a course in the principles of California state and local government as required by Title 5 of the California Administrative Code (and as part of the CSU's graduation requirement in American Institutions). The course will provide a survey of the forces shaping the governmental institutions and processes of the State of California and its cities, counties and special districts. Students will prepare for the examination by guiding themselves through course content based on required learning outcomes, objectives, and materials. This course is available during both the Fall and Spring Semesters.
Transferable to CSU Only

## Psychology (PSYCH)

## PSYCH 1 (C-ID PSY 110) 3 units

## Introduction to Psychology

## 54 hours lecture

Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S. Grading: letter grade or pass/no pass.
This course is an introduction to the scientific study of behavior and mental processes. It will cover critical thinking and the scientific method, biopsychology, sensation and perception, consciousness and thinking, lifespan development, learning and memory, emotion and stress, psychological disorders and therapy, personality, and social psychology. Transferable to both UC and CSU; see counselor for limitations

## PSYCH 1H (C-ID PSY 110) 3 units

## Honors Introduction to Psychology

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1 S. Grading: letter grade or pass/no pass.
This course is an introduction to the scientific study of behavior and mental processes. It will cover critical thinking and the scientific method, biopsychology, sensation and perception, consciousness and thinking, lifespan development, learning and memory, emotion and stress, psychological disorders and therapy, personality, and social psychology. Transferable to both UC and CSU; see counselor for limitations

PSYCH 2 (C-ID PSY 205B) 4 units

## Research Methods for Psychology

## 54 hours lecture, 54 hours laboratory

Prerequisite: PSYCH 1 and STAT 1 or STAT 1H or MATH 21B.
Grading: letter grade or pass/no pass.
The course provides a basic understanding of the scientific method, research designs, and statistical tests used in psychological investigation. Students perform a literature review, design an original research study, collect and analyze data, and write an APA-style research report.
Transferable to both UC and CSU; see counselor for limitations

## PSYCH 43 units

## Psychology of Adjustment

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course will focus on the application of psychological principles to everyday life, emphasizing how to cope with life's challenges and demands. It will take a broad approach to understanding how clinicians, scientists, and practitioners study and apply psychology. We will consider many different topics including stress, work, family, friends, the self, disorders, and therapy.
Transferable to CSU Only
PSYCH 6 (C-ID PSY 150) 3 units
Physiological Foundations of Psychology

## 54 hours lecture

Prerequisite: PSYCH 1.
Grading: letter grade.
This course is an introduction to physiological aspects of human behavior including the central and peripheral nervous system and the endocrine system. It explores the physiological basis for cognition, consciousness, movement, motivation, learning, sensation, perception, memory, sex drive, addiction and psychopathology. This is an essential course for psychology majors, and health professionals would find this course very useful.
Transferable to both UC and CSU; see counselor for limitations

## PSYCH 103 units

Human Sexuality

## 54 hours lecture

Recommended Preparation: Qualification for ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S through the LBCC placement process.
Grading: letter grade or pass/no pass.
This course provides a comprehensive overview to human sexuality from multiple perspectives including psychological, sociological, cultural, biological, and historical perspectives. Students will examine knowledge, sexual attitudes, values and behaviors within the context of society and their own personal lives. Individual value systems, sexual development and interpersonal relationships will be evaluated. Current sexual norms and various aspects of interpersonal and individual sexual adjustment will be explored. This course is not open for credit to students registered in or with credit in HLED 10.
Transferable to both UC and CSU; see counselor for limitations

## PSYCH 11 (C-ID PSY 170) <br> 3 units

## Social Psychology

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course is designed to explore how an individual's behavior, thoughts and feelings are influenced by the presence, characteristics and actions of others. A variety of topics will be addressed, including attitudes, persuasion, stereotypes, group processes, conformity and interpersonal attraction.
Transferable to both UC and CSU; see counselor for limitations

## PSYCH 11H 3 units

Honors Social Psychology

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is designed to explore how an individual's behavior, thoughts and feelings are influenced by the presence, characteristics and actions of others. A variety of topics will be addressed, including attitudes, persuasion, stereotypes, group processes, conformity and interpersonal attraction.
Transferable to both UC and CSU; see counselor for limitations
PSYCH 143 units
Abnormal Psychology

## 54 hours lecture

Recommended Preparation: PSYCH 1.
Grading: letter grade or pass/no pass.
This class surveys abnormal behaviors, including anxiety disorders, trauma and stressor related disorders, depressive and bipolar related disorders, schizophrenia spectrum and other psychotic disorders, substance-related and addictive disorders, gender dysphoria and sexual dysfunctions, feeding and eating disorders, sleep disorders, neurodevelopmental disorders and disorders that begin in childhood, neurocognitive disorders and disorders related to aging, personality disorders, ways of determining abnormality, causes and treatment of disorders.
Transferable to both UC and CSU; see counselor for limitations

## PSYCH 333 units

## Psychology of Personality

54 hours lecture
Prerequisite: PSYCH 1.
Grading: letter grade or pass/no pass.
This course focuses on historical and contemporary approaches to assessing and understanding personality similarities and differences among people. How the scientific method is used to study personality will be discussed. Social and cultural influences on personality development will be considered. The extent to which personality factors predict the behaviors, feelings, and thoughts of individuals will be examined. Transferable to both UC and CSU; see counselor for limitations

## Public Administration (PUBAD)

## PUBAD 13 units

Introduction to Public Administration

## 54 hours lecture

Grading: letter grade or pass/no pass.
This is an introductory level course which addresses the principles and practices of public administration in national, state and local government agencies. The course outlines basic organizational patterns, internal management, administrative functions and responsibilities.
Transferable to CSU Only

# Radio and Television (R_TV) 

R_TV 1 (C-ID FTVE 100) 3 units<br>Introduction to Broadcasting<br>54 hours lecture<br>Grading: letter grade.<br>Introduction to Broadcasting explores the evolution of the mass media and its impact on society focusing on the technological changes in broadcast and digital media. The course analyzes methods used by the media to persuade consumers and evaluates these tactics so that students become educated viewers of media content.<br>Transferable to CSU Only

## R_TV 22 units

Intro to Careers in Radio \& Television

## 36 hours lecture

Grading: letter grade.
This course explores the various occupations in the radio and television field, including broadcast, cable, industrial and multimedia production. Students will investigate employment opportunities, as well as the required skills and personal qualifications necessary for employment in this element of the entertainment industry. Guest speakers will discuss current industry issues and standards.
Transferable to CSU Only

## R_TV 4 (C-ID FTVE 110) 3 units

Writing and Production Planning

## 54 hours lecture

Grading: letter grade.
This course examines pre-production principles and procedures common to all productions, emphasizing scripting and other writing skills unique to the radio, television, and film industry. It also explores budgeting, union, and legal issues.
Transferable to CSU Only

## R_TV 8 units

Introduction to Media Production
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This course introduces students to the basic principles of production, including operation of equipment and the process of developing a
program from the original idea to final editing.
Transferable to CSU Only

## R_TV 103 units

Non-Fiction/Reality Show Production
36 hours lecture, 54 hours laboratory
Grading: letter grade.
This course will provide a comprehensive overview of all digital production aspects of non-fiction / reality shows from concept to finished project. Emphasizes the use of digital equipment for location realitybased productions.
Transferable to both UC and CSU; see counselor for limitations

## R_TV 122.5 units

Television Lighting
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Students will study the practical application of the theories of television lighting. This course includes the following: 1) using lighting materials and equipment, 2) the aesthetics of light, 3) experimenting with light and color, 4) lighting for effects, 5) lighting for studio production, 6) lighting for field production, 7) lighting for single and multiple cameras.
Transferable to CSU Only

## R_TV 13 (C-ID FTVE 135) 3 units <br> Television Production

36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly R_TV 13AD. This course allows the student the opportunity to participate in the creation and production of television program material. Students will produce, direct and crew a variety of projects, such as news, interviews, commercials, dramas, comedies and instructional programs. Transferable to CSU Only

## R_TV 14 (C-ID FTVE 130) 3 units

Electronic Field Production
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly R_TV 14AD. This course is a study and application of the technical aspects of video, film and multimedia production in the field. Special attention will be dedicated to successful production strategies necessary for the unique problems associated with shooting in the field, such as equipment selection, lighting, audio and the environment. Issues related to acquisition format, such as film versus tape and analog versus digital, will be explored. Students will shoot projects in the field as "standalone" productions and as elements for edited productions. Editing will be covered as it relates to field production.
Transferable to CSU Only

## R_TV 153 units

## Sports Production

36 hours lecture, 54 hours laboratory
Recommended Preparation: Audition.
Grading: letter grade.
Formerly R_TV 15AC. This course involves Live Multiple Camera Remote TV Production of LBCC Sports and Special Events Programs.
Transferable to CSU Only

## R_TV 163 units

Non-Linear Video \& Film Editing
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Formerly R_TV 216AC and R_TV 216. This course explores the process of non-linear video and film editing using Adobe Premiere and associated software.
Transferable to CSU Only

## R_TV 21 (C-ID FTVE 125) 3 units <br> \section*{Radio Production}

54 hours lecture, 18 hours laboratory
Grading: letter grade.
This course features the creation and production of radio program material. Projects include: disc jockey shows, news programs, interviews, commercials, editing, microphone set-up and audio board operation. Other aspects of radio station operation will be covered, such as management, sales, audience analysis and ratings.
Transferable to CSU Only

## R_TV $25 \quad 2.5$ units

## Radio Activity

## 36 hours lecture, 36 hours laboratory

Grading: letter grade or pass/no pass.
Formerly R_TV 25AD. This course provides the opportunity and responsibility to work in a variety of jobs involved in the operation of one of the college's two internet radio stations. Students will work "on air" and behind the scenes. Hours outside of the class time are arranged in consultation with the instructor.
Transferable to CSU Only

## R_TV $30 \quad 2.5$ units

## Broadcast Newswriting

## 36 hours lecture, 36 hours laboratory

## Grading: letter grade.

Formerly R_TV 30AD. Students will learn to write, re-write and edit stories for radio, TV, or Internet distribution. Students will gain experience in discovering and researching news. Topics covered will include use of sound tracks, visuals, interviews, and the "local angle" or "human interest element." Some stories may be incorporated into the weekly student TV news show.
Transferable to CSU Only

## R_TV $34 \quad 2.5$ units

## Music Video Production

36 hours lecture, 36 hours laboratory
Recommended Preparation: R_TV 14.
Grading: letter grade or pass/no pass.
Formerly R_TV 34AD. This course provides an in-depth exam of the components necessary to produce a music video, including completion of a camera-ready production proposal and a script of selected projects. Selected projects may be produced.
Transferable to CSU Only

## R_TV $35 \quad 2.5$ units

Television Activity
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly R_TV 35AD. This course provides an opportunity and
responsibility to work in a variety of jobs involved in the video taping of various college events and/or projects or student selected projects in the television studio. Projects may be broadcast on the college cable channel and/or used in the student news show.
Transferable to CSU Only

## R_TV $36 \quad 2.5$ units

Broadcast News Production
36 hours lecture, $\mathbf{3 6}$ hours laboratory
Grading: letter grade or pass/no pass.
Formerly R_TV 36AD. In this course students will learn various aspects of producing a television newscast. Students will participate in gathering information, writing, editing and producing news, sports, editorials, and weather segments. Students will work as managing editors, operate equipment, and edit video packages.
Transferable to CSU Only

## R_TV 373 units

Radio/Television Management and Sales

## 54 hours lecture

Grading: letter grade.
This course provides an overview of the basic elements of broadcast and cablecast management. Topics covered include: advertising and sales techniques, ratings, station promotion, budgets, FCC policies, franchise agreements and negotiations, scheduling, contest considerations, liability elements and people skills.
Transferable to CSU Only

## R_TV $40 \quad 3$ units

## On-Camera Performance

36 hours lecture, 54 hours laboratory
Grading: letter grade.
Formerly R_TV 40AD. This course involves the practical application of performance techniques as applied to working in front of a camera.
Performances are video-taped and analyzed which will help the student understand what is necessary in the preparation of audition material. Students will gain knowledge about each area responsible for a TV production.
Transferable to CSU Only
R_TV 60 (C-ID FTVE 120) 3 units
Pro Tools (Digital Audio Recording/Edit)
36 hours lecture, 54 hours laboratory
Grading: letter grade.
Formerly MUSIC 60. This course provides instruction on the functions and operations of Pro Tools software and a general overview of Pro Tools related hardware. The class instruction provides a hands-on experience through "real-world" related assignments for students to record, edit and mix digital audio in a computer environment. Although the Pro Tools systems vary in specifications, features and price, the user interface for all systems is consistent and enables the student to translate learned skills to any high-end professional Digital Audio Workstation. Transferable to CSU Only

## R_TV 70WE 1-4 units

Work Experience-Radio,TV

## 72 hours laboratory

Grading: letter grade.
Formerly R_TV 270WE. Students learn and gain on-the-job experience in the Radio Television field. Learning objectives are established collaboratively by the student, supervisor, and instructor. A minimum of sixty (60) hours of non-paid work or seventy-five (75) hours of paid work during the semester are required for each unit of credit. Students may earn from 1 to 4 units credit. Prior approval by R_TV Department faculty and compliance with Work Experience regulations as designated in the College Catalog. Qualification for enrollment. Instructor will verify prerequisites and qualifications: 1) completed work experience orientation; 2) submitted work experience application.
Transferable to CSU Only

## Reading (READ)

READ 824 units

## Proficient Reading

72 hours lecture
Prerequisite: Completion of READ 883AX or qualification through LBCC placement process for Reading
Grading: letter grade or pass/no pass.
This course provides instruction in the strategies necessary for college reading with an emphasis on the application of comprehension, vocabulary and critical reading skills to academic and technical reading assignments. Students are required to complete 3 hours of Supplemental Learning Assistance activities in designated Success Centers.
Transferable to CSU Only

## READ 83 units

Power Reading

## 54 hours lecture

Prerequisite: Completion of READ 883AX or qualification through LBCC placement process for Reading.
Grading: letter grade or pass/no pass.
This course focuses on power reading through the application of efficient and flexible reading techniques to professional and academic reading. It is designed for students with strong comprehension skills. Students are required to complete 3 hours of Supplemental Learning Assistance activities in designated Success Centers.
Transferable to CSU Only
READ 843 units
Analytical Reading
54 hours lecture
Prerequisite: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S.
Grading: letter grade or pass/no pass.
This course provides instruction in the strategies needed for logical thinking, critical reading and analysis of argumentative writing. Emphasis is placed on the ability to analyze and evaluate written material by establishing claim and support, identifying patterns of logic and reason, and determining point of view and authority. READ 84 enables students to gain efficiency with the challenges of critical reading and analytical thinking in all academic disciplines.
Transferable to both UC and CSU; see counselor for limitations

## READ 853 units <br> Vocabulary Building <br> \section*{54 hours lecture}

Grading: letter grade or pass/no pass.
This course provides a study of methods to expand general word knowledge and build academic vocabulary across the disciplines, emphasizing conceptual development and effective communication. The course is specifically designed to develop a comprehensive academic vocabulary for general education courses or a specific discipline. Transferable to CSU Only

## READ 6020 units

Reading for Health Career Sciences
27 hours lecture
Grading: non graded.
This course provides literacy instruction in preparation for prerequisite courses such as Human Anatomy, Physiology, and Microbiology, and prepares students to use reading skills within their careers.

## READ 6800 units

Reading Foundations
36 hours lecture
Grading: non graded.
This course focuses on fundamental reading skills and strategies with an emphasis on reading, writing, listening, and speaking. Students will be able to comprehend and respond to text with scaffolding as needed.

## READ 6810 units

Reading Essentials

## 54 hours lecture

Recommended Preparation: READ 680: Reading Essentials.
Grading: non graded.
This course focuses on essential literacy skills and strategies with an emphasis on comprehending and analyzing texts. Students will be able to comprehend and respond to text through writing with instructor's scaffolding as needed.

## READ 8813 units

## Reading Essentials

## 54 hours lecture

Recommended Preparation: READ 680: Reading Essentials.
Grading: pass/no pass.
This course focuses on essential literacy skills and strategies with an emphasis on comprehending and analyzing texts. Students will be able to comprehend and respond to text through writing with instructor's scaffolding as needed.

## READ 8824 units

Reading Development

## 72 hours lecture

Grading: pass/no pass.
This course develops essential reading concepts and strategies to comprehend and analyze literary and informational texts independently and proficiently.

## READ 883AX 4 units

Accelerated Reading Improvement

## 72 hours lecture

Grading: pass/no pass.
This course develops foundational reading concepts and strategies to comprehend and analyze complex literary and informational texts independently and proficiently with scaffolding as needed through a highly intensive, accelerated format. Students are required to complete 3 hours of Supplemental Learning Assistance activities in designated Success Centers.

## Real Estate (REAL)

REAL 783 units

## Real Estate Economics

## 54 hours lecture

Grading: letter grade.
This course covers trends and factors affecting the value of real estate, the nature and classification of real estate economics, the development of property, construction and subdivision, economic values and real estate evaluation, real estate cycles and business fluctuations, residential market trends, and real property trends. This course may be used as an elective course for persons seeking a California Real Estate Salesperson license and is a required course for persons seeking a California Real Estate Broker license.
Transferable to CSU Only
REAL 803 units
Real Estate Principles

## 54 hours lecture

Grading: letter grade.
This course covers the basic laws and principles of California real estate. This class also provides background and terminology for homeowners, landlords, tenants, persons preparing for advanced study in specialized real estate courses, and those preparing for real estate license exams.
This course is one of three courses required for persons seeking a Real
Estate Salesperson license and is an elective course for persons seeking a Real Estate Broker license.
Transferable to CSU Only

## REAL 813 units

Real Estate Practice

## 54 hours lecture

Grading: letter grade.
Formerly REAL 81A. This course covers practices in real estate sales and brokerage, including prospecting, listing, advertising, financing, sales techniques, escrow, and ethics. This course is one of the required courses for those seeking a Real Estate Salesperson license or a Real Estate Broker license.
Transferable to CSU Only
REAL 843 units
Mortgage Brokering/Lending in California

## 54 hours lecture

Recommended Preparation: REAL 80.
Grading: letter grade.
This course covers an introduction to mortgage brokering operations and orients students toward a career in the field. Topics covered include types of loans, loan processing, lending regulations, underwriting, loan submission, quality control, understanding credit information, loan packaging, and loan documents.
Transferable to CSU Only
REAL 853 units
Real Estate Appraisal
54 hours lecture
Grading: letter grade.
This course covers principles and procedures of single-family, residential appraisal and report-writing. Successful completion is required for a California Real Estate Broker"s license, satisfies up to 54 hours of the 150 hours required for a California Trainee or Residential Appraisal license, and can be used as an elective for a California Real Estate Salesperson"s license. The course also provides 51 hours of continuing education credit for the California Appraisal license renewal.
Transferable to CSU Only

## REAL 863 units

Advanced Real Estate Appraisal
54 hours lecture, 18 hours laboratory
Recommended Preparation: REAL 80 and REAL 85.
Grading: letter grade.
This course covers residential market analysis, highest and best use, site valuation, cost/sales comparison, income approaches to valuation, and appraisal report-writing for residential properties. It is part of the education requirement for the California OREA Trainee and Residential license and can be used as an elective for the California Real Estate Broker"s license.
Transferable to CSU Only
REAL 873 units
Real Estate Finance

## 54 hours lecture

Grading: letter grade.
This course is an introduction and analysis of real estate financing and lending policies. The course also introduces students to problems that may arise in the areas of financing residential, apartment, commercial and special purpose properties. The methods of financing properties are emphasized.
Transferable to CSU Only

REAL 923 units
Escrows and Land Titles

## 54 hours lecture

Grading: letter grade.
Formerly REAL 92A. This competency-based course prepares students with skills for entry-level positions in an escrow office or to improve their knowledge in real estate. Focus is on understanding the escrow process and accurately completing necessary documents. This course may be used an elective course for persons applying for the California Real Estate Salesperson or Real Estate Broker license.
Transferable to CSU Only
REAL 2533 units

## Property Management

54 hours lecture
Grading: letter grade.
This course is a practical approach to the principles and practices of managing apartments and other income properties. Topics include leasing, owner and manager objectives, management plans, landlordtenant law, evictions, prohibited discrimination, property maintenance; management office administration, and human relations. This course can be used as an elective course by persons applying for the Real Estate Salesperson's and Broker's licenses with the California Department of Real Estate.

## REAL $600 \quad 0$ units

DRE Exam Preparation

## 54 hours lecture

Recommended Preparation: REAL 80 and REAL 81.
Grading: non graded.
This course reviews all the material necessary to take the CA Department of Real Estate Salesperson's or Broker's Examination. Students learn the financial, economic, and political aspects of real estate practice in California. Regulations of the real estate business and licensing of real estate brokers and salespersons are discussed in detail. In addition, the license law, the subdivision law administered by the Real Estate Commissioner, the Regulations of the Commissioner, and extracts from other pertinent California codes, are presented.

## Show Business (SHOWB)

## SHOWB $201 \quad 1.5$ units

Show Business Careers-How to Start 18 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass. Formerly TART 201. This course will examine primary and secondary show business career options available in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: On \& off camera behavior, agenting, producing, unions, broadcasting and production trades.

## SHOWB 2041.5 units

## Marketing Yourself for Show Business

18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly TART 204. This course examines aspects of show business career self marketing. This course content will explain all avenues of options in a hands-on style. This course will include, but not be limited to: Photographs, websites, professional publications, Union programs and guest lecturers.

SHOWB 208A 1.5 units
Breaking into Commercials - Beginning
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly TART 208A. This course examines fundamental aspects of television commercials in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: national, regional, local and wild spots as well as auditioning, product copy, sponsors, pay tables, residuals, and headshots.

## SHOWB 208B 1.5 units

Breaking Into Commercials - Advanced
18 hours lecture, $\mathbf{3 6}$ hours laboratory
Prerequisite: SHOWB 208A.
Grading: letter grade or pass/no pass.
Formerly TART 208B. This course explores further aspects of television commercials in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Advanced audition techniques, product copy, sponsors, pay tables, residuals and headshots.

SHOWB 210A 1.5 units
Voice-Over Techniques - Beginning
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly TART 210A. This course is an examination of preliminary techniques for commercial and theatrical voice-overs. Course topics will include but not be limited to feature film additional dialogue recording, animation, looping techniques and network promotionals as well as Video games.

SHOWB 210B 1.5 units

## Voice-Over Techniques-Advanced

18 hours lecture, 36 hours laboratory
Prerequisite: SHOWB 210A.
Grading: letter grade or pass/no pass.
Formerly TART 210B. This course will examine the advanced techniques of theatrical and commercial voice-overs. Course topics will include but not be limited to, feature film additional dialogue recording, animation, looping, character and network promotionals.
SHOWB 212A 1.5 units
Acting in Film - Beginning
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
Formerly TART 212A. This course is an examination of beginning techniques for acting in film. Course topics will include but not be limited to, studio format, on location, tracking, steady-cam, and multiple camera and digital aspects.

SHOWB 212B 1.5 units
Acting in Film - Advanced
18 hours lecture, $\mathbf{3 6}$ hours laboratory
Prerequisite: SHOWB 212A.
Grading: letter grade or pass/no pass.
Formerly TART 212B. This course is an examination of multiple aspects and advanced techniques for acting in film. Topics will include but not be limited to, studio, on location, multi-camera, steady-cam and digital aspects.

# Social Science (SOCSC) 

## SOCSC 13 units <br> Comparative World Cultures <br> 54 hours lecture

Grading: letter grade or pass/no pass.
This course compares and contrasts major civilizations using interdisciplinary approach or team teaching drawn from the Humanities and the Social Sciences. It covers the study of two or more major cultures to determine how these human communities met their basic biological, material, religious and intellectual needs, and experienced both continuity and change through time. This course is not open for credit to students who have completed Humanities 1H, Humanities 1, or Social Science 1H. Transferable to both UC and CSU; see counselor for limitations

## SOCSC 1H 3 units

Honors Comparative World Cultures

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course compares and contrasts major civilizations using an interdisciplinary approach or team teaching drawn from the Humanities and the Social Sciences. It covers the study of two or more major cultures to determine how these human communities met their basic biological, material, religious and intellectual needs, and experienced both continuity and change through time. This course is not open for credit to students who have completed Humanities 1, Humanities 1H, or Social Science 1. Transferable to both UC and CSU; see counselor for limitations

## SOCSC 73 units

## Intro to Ethnic Histories and Identity

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course explores the intersection of ethnicity, race and identities in American society from the humanities and social science perspectives. The course examines social justice movements in relation to ethnic and racial groups in the United States to provide a basis for a better understanding of the socioeconomic, cultural and political conditions among key social groups and an enhanced appreciation of the complexity of the processes effecting the interaction of the American people. Not open to students registered in or with credit in HUMAN 7.
Transferable to both UC and CSU; see counselor for limitations

## Sociology (SOCIO)

## SOCIO 1 (C-ID SOCI 110) 3 units

## Introduction to Sociology

54 hours lecture
Grading: letter grade or pass/no pass.
This course introduces students to the study of human behavior through an understanding of social organization. Topics include the role of culture, the development of personality, the function of group life and social institutions, the social processes and social interaction, and factors in social change and collective behavior.
Transferable to both UC and CSU; see counselor for limitations

SOCIO 1H (C-ID SOCI 110) 3 units

## Honors Introduction to Sociology

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course introduces students to the study of human behavior through an understanding of social organization. Topics include the role of culture, the development of personality, the function of group life and social institutions, the social processes and social interaction, and factors in social change and collective behavior.
Transferable to both UC and CSU; see counselor for limitations
SOCIO 2 (C-ID SOCI 115)
3 units
Modern Social Problems

## 54 hours lecture

Recommended Preparation: SOCIO 1.
Grading: letter grade or pass/no pass.
The scope of the course will include identification and analysis of contemporary social problems in the U.S., using the theories and methodology of sociology. Among the topics considered are the environment, war, crime, poverty, gender inequality and patriarchy, racism, heterosexism, social change, addiction, abuse, and alienation. Solutions to social problems, including social justice movements, will be explored and analyzed. The role of social institutions will also be considered. Transferable to both UC and CSU; see counselor for limitations
SOCIO 11 (C-ID SOCI 150) 3 units
Race \& Ethnic Relations in the U.S.

## 54 hours lecture

Recommended Preparation: SOCIO 1.
Grading: letter grade.
The sociological study of diverse racial and ethnic groups in the U.S., including Latino, Asian American, African American and Native American sub-groups is covered. The course also includes an analysis of migration patterns, stratification, gender, social movements and inter- and intragroup relations. An examination of how social, political, economic and historical forces affect contemporary race and ethnic relations will be included.
Transferable to both UC and CSU; see counselor for limitations

## SOCIO 11H (C-ID SOCI 150) 3 units

## Honors Race \& Ethnic Relations in the US

## 54 hours lecture

Prerequisite: Qualification for the Honors Program.
Recommended Preparation: SOCIO 1.
Grading: letter grade.
The sociological study of diverse racial and ethnic groups in the U.S., including Latino, Asian American, African American and Native American sub-groups is covered. The course also includes an analysis of migration patterns, stratification, gender, social movements and inter- and intragroup relations. An examination of how social, political, economic and historical forces affect contemporary race and ethnic relations will be included.
Transferable to both UC and CSU; see counselor for limitations

## SOCIO $13 \quad 3$ units

## Sociology of Latinos and Latinas

## 54 hours lecture

Grading: letter grade.
Through different sociological perspectives, this course focuses on the contemporary experiences of various Latino/Latina/Latinx groups in the United States, including global processes, structural forces, group interactions, and individual identity formation. It examines the extent to which Latino/Latina/Latinx groups have been incorporated into (and contributed to) the economic, political, cultural, educational, and social fabric of the U.S. It also examines how intersecting social categories such as race, social class, gender, sexuality, age and national origin impact their lives and their responses to individual and structural discrimination.
Transferable to both UC and CSU; see counselor for limitations
SOCIO 17 (C-ID SOCI 140) 3 units

## Introduction to Sociology of Gender

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course takes a sociological approach to understanding the impact of gender and gender roles on social institutions and interactions in American society.
Transferable to both UC and CSU; see counselor for limitations
SOCIO 40 (C-ID SOCI 130) 3 units
Sociology of the Family
54 hours lecture
Recommended Preparation: SOCIO 1.
Grading: letter grade or pass/no pass.
This course will examine the micro and macro sociological forces that impact and shape contemporary family life, especially in the U.S. Considering options, problems and challenges of each, the following will be covered: mate selection, relationships, love, marriage, parenting, divorce, diversity, gender. and sexuality.
Transferable to both UC and CSU; see counselor for limitations

## Social Work (SW)

## SW 13 units

Introduction to Social Work
54 hours lecture
Recommended Preparation: ENGL 1, ENGL 1H, ENGL 1S, or ESL 1S
Grading: letter grade or pass/no pass.
Formerly HS 1. This course is designed to identify and analyze the history and development of the social welfare and the societal institutions in urban and rural communities in the U.S. Working in the social work field is explored as a helping process with a wide range of systems and social work knowledge. Ethics, values, principles, professional relationships, interviewing and policies and procedures are also examined. Special attention is given to the tasks of culturally responsive social workers and human services workers in current service delivery settings
Transferable to CSU Only

SW 73 units
Introduction to Victimology
54 hours lecture
Grading: letter grade.
Formerly HS 7. The course examines the cost of victimization to society. The existing resources will be examined. Suggestions for ways that resources can be expanded will be suggested. Career opportunities for working in this field will be presented. Classwork is supplemented by field site visits to several primary providers of service to victims and their families.
Transferable to CSU Only
SW 153 units
Social Welfare: People with Disabilities
54 hours lecture
Grading: letter grade.
Formerly HS 15. This course is an overview of various disabilities and their etiology. It includes the study of methods and the processes involved in the adjustments of people and their families to various disabilities. It includes an in-depth analysis of stereotypes, prejudices and discrimination and the psychological factors involved with limiting persons with disabilities. An overview of the various social services available to persons with disabilities needed to allow them to return to as close to a normal life as possible is given.
Transferable to CSU Only
SW 263 units
Introduction to Gerontology
54 hours lecture
Grading: letter grade or pass/no pass.
Formerly HS 26. This course provides an overview of the social, psychological and biological effects of aging, emphasizing individual differences among older adults, including ethnic differences. Students will examine several theoretical perspectives, research methods, cognitive and developmental studies and how individuals are molded under these influences that change over time. Students will develop an overall understanding of key psychological and developmental terms, concepts, theories and important influences of human behavior over a lifespan.
Transferable to CSU Only
SW 453 units
Stress, Change \& Managing Roles
54 hours lecture
Grading: letter grade.
Formerly HS 45. This course examines the many psychological, social and environmental stresses commonly experienced by persons living in a modern world with multiple responsibilities to manage. Specific ways to cope or more effectively manage these stressors will be presented. Material will include techniques to deal with individual, social \& interpersonal issues including meditation, self-hypnosis and progressive muscle relaxation. Students will demonstrate their learning by creating a lesson plan for a training to be delivered in a group setting. Transferable to CSU Only

## SW 2073 units

## Development of Helping/Listening Skills

## 54 hours lecture

Grading: letter grade or pass/no pass.
Formerly HS 207. This course is designed for persons who are interested in working in counseling/case manager roles in the human services field. Topics covered include developing techniques for volunteer, peer and para-professionals working in the people-helping fields. Students will develop skills in initiating, attending to, responding to, and personalizing assistance to clients. Small groups will be used to guide students through a learning sequence of listening and helping skills.

## SW 2423 units

## Conflict Resolution/Mediation

## 54 hours lecture

Grading: letter grade.
This course examines the background, development and methodology of non-violent, non-litigious conflict resolution skills with emphasis on theory and the practice of mediation. This course is designed for students and those working with individuals, groups or staff who deal with interpersonal conflicts in the alcohol \& drug treatment community.

## SW 2603 units

Domestic/Intimate Partner Violence
54 hours lecture
Grading: letter grade.
Formerly HS 260. This course is designed to provide the required academic training needed to qualify as a Certified Domestic Violence Counselor Training per Section 1037.1 of the California Evidence Code. Training shall include, but will not be limited to, the following topics: history of domestic violence, civil and criminal law as it is related to domestic violence societal attitudes towards domestic violence, peer counseling techniques, housing, public assistance and other financial resources available to meet the financial needs of domestic violence/ intimate partner violence victims.

## Statistics (STAT)

## STAT 1 (C-ID MATH 110) 4 units

## Elementary Statistics

## 72 hours lecture

Prerequisite: MATH 130, 130B or high school intermediate algebra with a grade of $B$ or better as reflected by the second semester grade.
Grading: letter grade.
This course will introduce students to the major concepts and tools for collecting and describing data (descriptive statistics), and drawing conclusions from data (inferential statistics).
Transferable to both UC and CSU; see counselor for limitations
STAT 1H (C-ID MATH 110) 4 units
Honors Elementary Statistics

## 72 hours lecture

Prerequisite: MATH 130, 130B or high school intermediate algebra with a grade of $B$ or better as reflected by the second semester grade, and qualification for the Honors Program.
Grading: letter grade.
This course will introduce students to the major concepts and tools for collecting and describing data (descriptive statistics), and drawing conclusions from data (inferential statistics).
Transferable to both UC and CSU; see counselor for limitations

STAT 801X 1 units
Statistics Skills Support
18 hours lecture
Corequisite: STAT 1.
Grading: pass/no pass.
This course provides review of the core pre-requisite skills, competencies, and concepts required to be successful in the co-requisite STAT 1 Elementary Statistics course. By utilizing the "just-in-time" approach, students improve the necessary technical skills. With improved skills students are empowered to successfully solve problems and apply concepts utilized in statistics. The course introduces study skills specific to statistics with a strong emphasis on fostering a positive academic growth mindset.

## TEAS Preparation (TEAS)

## TEAS $600 \quad 0$ units

TEAS Preparation English and Reading

## 18 hours lecture

Recommended Preparation: Intermediate Reading Level in English. Grading: non graded.
This course helps students prepare for the Test of Essential Academic Skills (TEAS) by developing and strengthening essential English and reading skills.

## TEAS 6050 units

TEAS Preparation Math and Science
18 hours lecture
Recommended Preparation: Intermediate Reading Level in English. Grading: non graded.
This course helps students prepare for the Test of Essential Academic Skills (TEAS) by developing and strengthening essential math and science skills.

## Theatre Arts (TART)

TART 1 (C-ID THTR 151) 3.5 units
Acting 1-Introduction to Acting
54 hours lecture, 36 hours laboratory
Corequisite: TART 51.
Grading: letter grade or pass/no pass.
This course introduces the student to the fundamental elements and techniques of acting. The student actor will explore the theory and practice of acting through acting exercises, improvisation, theatre games, solo and two-person or group scenes. The course also explores the concepts of acting through relaxation, concentration, sensory awareness and imagination as the student develops both an understanding and appreciation of acting for the theatre.
Transferable to both UC and CSU; see counselor for limitations

## TART 2 (C-ID THTR 152) 3.5 units

## Acting 2-Technique \& Characterization

54 hours lecture, 36 hours laboratory
Prerequisite: TART 1.
Recommended Preparation: TART 5A, TART 4A, or TART 6, and TART 25 or TART 30.
Grading: letter grade or pass/no pass.
This course is an investigation and development of a character by students that further strengthens techniques of personalization, role analysis and character motivation while including such disciplines as sense and emotional memory and improvisation. Additionally, investigation of the physical life of a character is emphasized, together with the technical and imaginative development of voice and body skills as a means of achieving fully realized characterizations (continued scene study, utilizing the works of major playwrights within the last hundred years).
Transferable to both UC and CSU; see counselor for limitations
TART 3A 3.5 units
Acting 3-Scene Study
54 hours lecture, 36 hours laboratory
Prerequisite: TART 1.
Recommended Preparation: TART 2 and TART 25
Grading: letter grade or pass/no pass.
This course emphasizes specific performance skills and acting techniques utilizing classical scene selections, emphasizing Western playwrights of the 16 th and 17th century, to heighten the intensity of the acting experience for the serious theatre student
Transferable to both UC and CSU; see counselor for limitations
TART 3B 3.5 units
Acting 3-Scene Study
54 hours lecture, 36 hours laboratory
Prerequisite: TART 3A.
Grading: letter grade or pass/no pass.
While utilizing classical scene selections, this course emphasizes
Western playwrights of the 18th and 19th centuries. The focus is on the development of specific performance skills and acting techniques for the purpose of heightening the intensity of the acting experience for the serious theatre student.
Transferable to both UC and CSU; see counselor for limitations
TART 3C 3.5 units
Acting Workshop-Style
54 hours lecture, 36 hours laboratory
Prerequisite: TART 3A or TART 3B.
Grading: letter grade or pass/no pass.
Formerly TART 4. This course focuses on individual studies and exercises to develop freedom and imagination in the preparation and performance of classical and contemporary dramatic material; scenes, cuttings and short plays.
Transferable to both UC and CSU; see counselor for limitations
TART 4A 2 units
Acting 1 - Voice
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1.
Recommended Preparation: TART 5A.
Grading: letter grade or pass/no pass.
Formerly TART 1C. The course provides a lucid view of the voice as an instrument of human communication. Through a series of exercises the student will free, develop and strengthen their voice. The student will practically realize an actor's sensibilities through vocal expression Transferable to both UC and CSU; see counselor for limitations

TART 4B 2 units
Acting 2-The Spoken Text
27 hours lecture, 27 hours laboratory
Prerequisite: TART 4A.
Grading: letter grade or pass/no pass.
Formerly TART 2A. This course prepares and presents a varied range of spoken texts to free, develop and strengthen the student actor's voice so that the actor's unique sensibilities may be fully expressed through specific techniques.
Transferable to both UC and CSU; see counselor for limitations
TART 4C 2 units
Acting 2-The Spoken Text
27 hours lecture, 27 hours laboratory
Prerequisite: TART 2B.
Grading: letter grade or pass/no pass.
Formerly TART 2B. Students will engage in the preparation and presentation of a wide range of spoken texts. The goal is to free, develop and strengthen the student actor's voice so that the actor's unique
sensibilities may be fully expressed through proper vocal use.
Transferable to both UC and CSU; see counselor for limitations
TART 5A 2 units
Acting 1 - Movement
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1.
Grading: letter grade or pass/no pass.
Formerly TART 1B. This course is an introduction to the use of the human body as an instrument of expression. The course provides for the study and application of the basic theories and principles of stage movement through the use of lecture and class exercise.
Transferable to both UC and CSU; see counselor for limitations

## TART 5B 2 units

Acting 2-Movement, Mime and Mask
27 hours lecture, 27 hours laboratory
Prerequisite: TART 5A.
Grading: letter grade or pass/no pass.
Formerly TART 2C. This course is an advanced application of the theory and principles of stage movement within specialized areas, such as mime, mask, theatrical sword fighting, characterization, juggling and period movement styles. This course includes class exercises and lectures.
Transferable to both UC and CSU; see counselor for limitations

## TART 5C 2 units

Acting 2-Movement, Mime and Mask
27 hours lecture, 27 hours laboratory
Prerequisite: TART 5B.
Grading: letter grade or pass/no pass.
Formerly TART 2D. This course is an advanced application of the theory and principles of stage movement within specialized areas, such as mask characterization, period movement styles and stage combat.
Transferable to both UC and CSU; see counselor for limitations

## TART 62 units

Acting 1 - Improvisation
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1.
Grading: letter grade or pass/no pass.
Formerly TART 1D. The course will consist of an exploration of the various applications of theatrical improvisation. Drawing from both playwrights, published routines and imaginations, the actor will create fully realized characters, develop and analyze scenes. Mental agility, spontaneity, thinking on your feet and stage confidence will be emphasized.
Transferable to both UC and CSU; see counselor for limitations
TART 143 units
Beginning Acting - Deploy the Arts
54 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course is the first in a series of three courses for the student Veteran and Non-Veteran. This course begins the focus on the application of acting in theatre through the exploration in all aspects of behavioral exercises, short scenes, narratives, and monologues to address posttraumatic stress disorder (PTSD). The course develops acting techniques, rehearsal disciplines and public performances through therapeutic regressive narrative.
Transferable to both UC and CSU; see counselor for limitations

## TART 153 units

Intermediate Acting - Deploy the Arts
54 hours lecture, 18 hours laboratory
Prerequisite: TART 14.
Grading: letter grade or pass/no pass.
This course is the second in a series of three courses for the student Veteran and Non-Veteran. This intermediate course is a further development of specific performance skills and acting techniques to heighten the intensity of the acting experience to address post-traumatic stress disorder (PTSD) with and through the implementation of regressive narrative material. Exercises to develop freedom and imagination are also emphasized while utilizing contemporary and classical scene selections and international playwrights.
Transferable to both UC and CSU; see counselor for limitations

## TART 163 units

Advanced Acting - Deploy the Arts
54 hours lecture, 18 hours laboratory
Prerequisite: TART 15.
Grading: letter grade or pass/no pass.
This course is the third in a series of three courses for the student Veteran and Non-Veteran. This advanced course is a further development of specific performance skills and acting techniques to heighten the intensity of the acting experience to address post-traumatic stress disorder (PTSD) with and through the implementation of regressive narrative material. Exercises to develop freedom and imagination are also emphasized while utilizing contemporary and classical scene selections and international playwrights. Further emphasis will be implemented through personal monologues and spoken word.
Transferable to both UC and CSU; see counselor for limitations

TART 25 (C-ID THTR 111) 3 units
Introduction to Theatre

## 54 hours lecture

Grading: letter grade or pass/no pass.
This course provides a critical analysis of theater from an audience perspective. The elements of play production from dramatic structure, to the final presentation will be explored. Topics include reading, lectures, discussions on the theory and practice of acting, directing, producing, styles, design spectacle, and cultural background. Field trips and performance attendance is required for this course.
Transferable to both UC and CSU; see counselor for limitations

## TART 303 units

Introduction to Dramatic Literature

## 54 hours lecture

Grading: letter grade or pass/no pass.
This introduction to the dramatic literature of the Western world, including American drama from early beginnings to present day, examines dramatic structures, concepts, styles and themes of a selection of representative plays. The influence of the theatre and dramatic literature as a social and cultural force of change through the ages is also explored.
Transferable to both UC and CSU; see counselor for limitations
TART 39AD (C-ID THTR 192) 1 units

## Theatre Practicum

## 72 hours laboratory

Grading: letter grade or pass/no pass.
This course is a hands-on, practical introduction to the function of stage, costume/wardrobe and make-up technicians and their contribution to dramatic productions. This course includes organization of the stage, lighting and properties departments, costume and make-up departments in the running of a theatre production, including equipment use and maintenance, and the function of technical stage personnel in production work.
Transferable to both UC and CSU; see counselor for limitations
TART 40 (C-ID THTR 171) 3 units
Stage Craft
36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD.
Grading: letter grade or pass/no pass.
Formerly TART 40AD. This course is a study of the theory, techniques and application of scenic design for the stage including the use of painting, construction and manipulation of stage scenery. Students will gain practical experience in construction of scenery for Theatre Arts Department productions.
Transferable to both UC and CSU; see counselor for limitations
TART 42 (C-ID THTR 173) 3 units
Introduction to Stage Lighting
36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD.
Grading: letter grade or pass/no pass.
This course is a study of the theory, techniques and application of stage lighting. It includes the use of lighting materials and equipment, experimenting with light and color, and lighting a stage for department productions.
Transferable to both UC and CSU; see counselor for limitations

TART 43 (C-ID THTR 174) 3 units
Introduction to Stage Costume
36 hours lecture, $\mathbf{5 4}$ hours laboratory
Corequisite: TART 39AD.
Grading: letter grade or pass/no pass.
Formerly TART 43AD. Students will study costume history, design, and
basic construction techniques as an introduction to basic theatrical
costuming. Fabrics and their various uses will be investigated.
Transferable to both UC and CSU; see counselor for limitations
TART 443 units
Costume Design
36 hours lecture, 54 hours laboratory
Prerequisite: TART 43.
Corequisite: TART 39AD.
Grading: letter grade or pass/no pass.
Formerly TART 44AB. This course presents techniques and theories of designing costumes for the stage. Topics include design elements, execution of costume plates and costume plots, research and organization, clothing and theatrical costume history, patterns, budgets and development of costume portfolio. Field trips (when possible) will be taken to augment this process, ie: museums, garment district, costume rental houses, etc.
Transferable to both UC and CSU; see counselor for limitations

## TART 473 units

Stage Management

## 54 hours lecture

Grading: letter grade or pass/no pass.
This class will introduce the principles, practices and skills of required for the professional theatrical stage manager and production manager. It will examine the responsibilities and functions of these roles in relation to the director, designers, and performers. With emphasis is placed on the duties, responsibilities and procedures from pre production to post production.
Transferable to CSU Only
TART 49AD (C-ID THTR 191) 2.5 units
Rehearsal and Performance
144 hours laboratory
Prerequisite: TART 1.
Grading: letter grade or pass/no pass.
This course focuses on the application of acting and technical theatre through lab exploration in all aspects of one act play productions. It develops acting and crew capabilities, skills and disciplines through auditions, rehearsals and public performances. Students will participate in at least play production.
Transferable to both UC and CSU; see counselor for limitations

## TART $50 \quad 2.5$ units

Major Production Performance

## 144 hours laboratory

Recommended Preparation: Audition.
Grading: letter grade or pass/no pass.
Formerly TART 50AD. This course is the study of live theatre through lab exploration of all aspects of play production involving the performer. It develops acting capabilities, skills and disciplines through the audition, preparation and presentational phases of a staged public production. Transferable to both UC and CSU; see counselor for limitations

## TART 50/1 0.5 units

## Major Production Performance

36 hours laboratory
Recommended Preparation: Audition.
Grading: letter grade or pass/no pass.
This course is the study of live theatre through lab exploration of all aspects of play production involving the performer. It develops acting capabilities, skills and disciplines through the audition, preparation and presentational phases of a staged public production.
Transferable to both UC and CSU; see counselor for limitations

## TART 50/2 1 units <br> Major Production Performance <br> 72 hours laboratory

Recommended Preparation: Audition.
Grading: letter grade or pass/no pass.
This course is the study of live theatre through lab exploration of all aspects of play production involving the performer. It develops acting capabilities, skills and disciplines through the audition, preparation and presentational phases of a staged public production.
Transferable to both UC and CSU; see counselor for limitations

## TART 50/3 2 units <br> Major Production Performance <br> 108 hours laboratory

Recommended Preparation: Audition.
Grading: letter grade or pass/no pass.
This course is the study of live theatre through lab exploration of all aspects of a classic comedic play production involving the performer. It develops acting capabilities, skills and disciplines through the audition, preparation and presentational phases of a staged public production. Transferable to both UC and CSU; see counselor for limitations
TART $51 \quad 1$ units
Theatre Forum
18 hours lecture
Grading: letter grade or pass/no pass.
Formerly TART 51AD. This course affords the student participation as an audience member in weekly programs dealing with the art of theatre, including scene work, one-act plays, special presentations and fully staged productions. It provides live performance experience for the student to experience the work collaboration by various theatre artists such as the playwright, producer, director, choreographer, designer, performer, stage manager, technician.
Transferable to CSU Only
TART 55 (C-ID THTR 175) 3 units

## Stage Makeup

36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD.
Grading: letter grade or pass/no pass.
Formerly TART 55AB. This course serves as a study of the basic theory and application of stage makeup. It includes the design and application of stage makeup to oneself, others and especially actors for various theatre productions.
Transferable to both UC and CSU; see counselor for limitations

## TART 563 units

Intermediate Stage Makeup
36 hours lecture, 54 hours laboratory
Prerequisite: TART 55.
Corequisite: TART 39AD.
Grading: letter grade or pass/no pass.
In this course students will explore three-dimensional makeup such as prosthetics, bald caps and wig-making. In addition, students will be exposed to experimentation with new products developed for theatrical make-up,and the design/rendering processes.
Transferable to both UC and CSU; see counselor for limitations
TART 75AD 2 units
Summer Repertory Theatre: Performance
126 hours laboratory
Corequisite: TART 76AD.
Recommended Preparation: Audition.
Grading: letter grade or pass/no pass.
Summer Repertory Theatre/Performance is the participation in an organized summer theatre program based on the procedures of the professional repertory theatre. Extensive experience in training, rehearsal and performance is explored through required live play productions. Transferable to both UC and CSU; see counselor for limitations

TART 76AD 2 units

## Summer Repertory Theatre: Production

126 hours laboratory
Grading: letter grade or pass/no pass.
This course is a hands-on practical introduction to the function of stage, costume/wardrobe and make-up technicians and their contribution to dramatic productions. Course topics include organization of the stage, lighting and properties departments, costume and make-up departments in the running of a theatre production, including equipment use and maintenance, and the function of technical stage personnel in production work.
Transferable to both UC and CSU; see counselor for limitations

## TART $205 \quad 3.5$ units

Auditions for Theatre and Film

## 54 hours lecture, 36 hours laboratory

Prerequisite: TART 1.
Recommended Preparation: TART 5A and TART 4A and TART 2.
Grading: letter grade or pass/no pass.
This course prepares performers for the practical application of the professional audition process. Course exercises assist in developing an actors professional manner, concentration and awareness. Selection of material, analyzing the text, presenting the material, preparation of a resume with pictures and the presentation of self for maximum effect are covered in the course. Various types of auditions will be explored, including but not limited to; stage, film \& television auditions, commercial auditions and cold-reading technique. Guest lecturers may be part of the class and simulated auditions plus filming students in simulated auditions will aid in the learning process.

## TART 206A 1.5 units

Audition and Interview Skills-Beginning
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass.
This course will examine the beginning techniques for show business professional auditioning and interviewing. Course specifics will include but not be limited to: Live theatre, television, commercials and elements of broadcasting.

## TART 206B 1.5 units

## Audition and Interview Skills - Advanced

18 hours lecture, 36 hours laboratory
Prerequisite: TART 206A.
Grading: letter grade or pass/no pass.
This course explores further aspects of television commercials in the greater Los Angeles area, as well as other geographic regions. The course specifics will include, but not be limited to: Advanced audition techniques, product copy, sponsors, pay tables, residuals and headshots.

## Welding (WELD)

## WELD 504 units

Introduction to Welding
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
This course is an introduction to the safe practices, setup, and operation of Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Flux-Cored Arc Welding, and Gas Metal Arc Welding. Topics will include machine settings, basic electricity, welding symbols, and basic metallurgy.
This course is designed for students that are seeking basic welding knowledge and skills. This course must be taken prior to any other welding courses at LBCC.
Transferable to CSU Only

## WELD 2112 units

Oxy-fuel Welding and Cutting Technology
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
Materials Fee: \$25
This course is an introduction to welding and cutting processes, emphasizing oxy-acetylene welding, oxy-fuel cutting braze welding, plasma arc and carbon arc cutting. It is suitable for students majoring in other occupational areas, such as auto body repair, auto mechanics, machine tool or aircraft maintenance. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employable in the welding industry.

## WELD 2124 units

Introduction to Shielded Metal Arc Welding
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
This course is an introduction to the safe practices, setup, and operation of Shielded Metal Arc Welding. Topics will include machine settings, basic electricity, welding symbols, and basic metallurgy. This course is designed for students that are seeking beginning Shielded Metal Arc Welding knowledge and skills.

## WELD 2134 units

Introduction to Semi-Automatic Welding
36 hours lecture, 108 hours laboratory
Prerequisite: WELD 212.
Recommended Preparation: WELD 50.
Grading: letter grade or pass/no pass.
This course is an introduction to the safe practices, setup, and operation of Flux-Cored Arc Welding (FCAW), and Gas Metal Arc Welding (GMAW). Topics will include machine settings, basic electricity, welding symbols, electrode selection, and Gas Metal Arc Welding transfer modes. This course is designed to prepare students for entry into an occupation using semi-automatic welding processes.

## WELD 2144 units

Introduction to Gas Tungsten Arc Welding
36 hours lecture, 108 hours laboratory
Grading: letter grade or pass/no pass.
This course is an introduction to the safe practices, setup, and operation of Gas Tungsten Arc Welding. Topics will include machine settings, basic electricity, welding symbols, and basic metallurgy. This course is designed for students that are seeking basic Gas Tungsten Arc Welding knowledge and skills.

## WELD 2213 units <br> Arc Welding Structural Certification <br> 54 hours lecture

Recommended Preparation: WELD 212.
Grading: letter grade or pass/no pass.
This course reviews the practical applications and fundamental concepts to prepare students for the Los Angeles City Department of Building and Safety written structural welding certification test.

## WELD 4002 units

Welding (General)
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass.
This course is designed for students seeking welding qualifications and certifications. This course is for students with professional skills in welding processes. This course will allow the student to take the skills portion of the Los Angeles City Structural Steel Certification exam.

WELD 4102 units
Welding (ARC)
108 hours laboratory
Prerequisite: WELD 50 or WELD 212.
Grading: letter grade or pass/no pass.
This course covers the techniques of arc welding of steels, cast iron, aluminum, hard facing, cutting, safety practices and related information.

WELD $411 \quad 1$ units
Welding (ARC)
54 hours laboratory
Prerequisite: WELD 50 or WELD 212 or WELD 400 or WELD 600.
Grading: letter grade or pass/no pass.
This course provides practice in arc welding procedures on various types of metal and the opportunity to learn safety practices.

## WELD 4132 units

SMAW Flat/Horz Groove Welds with Backing
108 hours laboratory
Prerequisite: WELD 50 or WELD 212.
Grading: letter grade or pass/no pass.
This is an intermediate course in SMAW (Shielded Metal Arc Welding) fundamentals with emphasis on structural welds in the flat and horizontal positions. This class prepares students to take the AWS certification test in structural steel and to advance their knowledge and skills in the SMAW process. It also includes correct equipment setup, safety practices, general related information, introduction to code specifications, blueprint reading, inspection procedures, and basic welding metallurgy. Good health, manual dexterity and corrected or uncorrected $20 / 20$ vision are necessary to be employed in the welding industry.

WELD 4142 units
SMAW Vert \& OV/HD Grv Welds w/ Backing
108 hours laboratory
Prerequisite: WELD 50 or WELD 212.
Grading: letter grade or pass/no pass.
This is an advanced course in SMAW (Shielded Metal Arc Welding) fundamentals with emphasis on structural welds in the vertical and overhead positions. This class prepares students to take the AWS certification test in structural steel and to advance thier knowledge and skills in the SMAW process. It also includes correct equipment setup, safety practices, general related information, introduction to code specifications, blueprint reading, inspection procedures, and basic welding metallurgy. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be employed in the welding industry.

WELD 4152 units
SMAW Flat/Horz Open Root Groove Welds

## 108 hours laboratory

Prerequisite: WELD 50 or WELD 212.
Grading: letter grade or pass/no pass.
This is an advance course in SMAW (Shielded Metal Arc Welding) fundamentals with emphasis on open root groove welds in the flat and horizontal positions. This class prepares students to take the AWS certification test in structural steel and to advance their knowledge and skills in the SMAW process. It also includes correct equipment setup, safety practices, general related information, introduction to code specifications, blueprint reading, inspection procedures, and basic welding metallurgy. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be sucessful in the program.

## WELD 4162 units

SMAW Vert \& O/H Open Root Groove Welds

## 108 hours laboratory

Prerequisite: WELD 50 or WELD 212.
Grading: letter grade or pass/no pass.
This is an advance course in SMAW (Shielded Metal Arc Welding) fundamentals with emphasis on open root groove welds in the vertical and overhead positions. This class prepares students to take the AWS certification test in structural steel and to advance their knowledge and skills in the SMAW process. It also includes correct equipment setup, safety practices, general related information, introduction to code specifications, blueprint reading, inspection procedures, and basic welding metallurgy. Good health, manual dexterity and corrected or uncorrected 20/20 vision are necessary to be sucessful in the program.

## WELD $461 \quad 1$ units

Oxygen Acetylene Welding

## 54 hours laboratory

Prerequisite: WELD 50 or WELD 211 or WELD 400 or WELD 600. Grading: letter grade or pass/no pass.
Formerly WELD 461AD. This course is a study of the techniques of oxyacetylene gas welding of steels and aluminum, hard facing, flame cutting brazing, oxy-hydrogen welding and safety practices.

## WELD 4711 units

Semi-Automatic Welding (GMAW and FCAW)
54 hours laboratory
Prerequisite: WELD 50 or WELD 212 or WELD 400 or WELD 600.
Grading: letter grade or pass/no pass.
This course will address the techniques of Gas Metal Arc Welding (GMAW) and Flux Core Arc Welding (FCAW) of steels, aluminum, and stainless steel. It also covers correct equipment setup and safety practices.

## WELD 4722 units

Gas Metal Arc Welding
108 hours laboratory
Prerequisite: WELD 213.
Grading: letter grade or pass/no pass.
This course is a study of the techniques of Gas Metal Arc Welding
(GMAW) of steels, aluminum and stainless steel It also covers correct equipment setup and safety practices.
Transferable to CSU Only
WELD 4802 units
Welding (Inert Gas)

## 108 hours laboratory

Prerequisite: WELD 214.
Grading: letter grade or pass/no pass.
This course provides the study and practice with inert gas welding skills, including GTAW (TIG-heliarc) welding of carbon steel, stainless steel, aluminum, and GMAW (MIG) of steel, aluminum and intershield welding(FCAW). The student can learn the skills necessary for a career as an aerospace industry worker. Course instruction also covers correct equipment setup and safety practices.

WELD $481 \quad 1$ units
Welding (Inert Gas)
54 hours laboratory
Prerequisite: WELD 50 or WELD 214 or WELD 400 or WELD 600.
Grading: letter grade or pass/no pass.
Formerly WELD 481 AD. This course provides practice in the techniques of metallic and tungsten inert gas welding, welding of steels, aluminum, magnesium, cast iron and safety practices.

## WELD 4822 units

## Gas Tungsten Arc Welding Basic Joints

108 hours laboratory
Prerequisite: WELD 214.
Grading: letter grade or pass/no pass.
This course will address the techniques of Gas Tungsten Arc Welding
(GTAW) of steels, cast iron, aluminum, hard facing, and cutting. It also
covers correct equipment setup and safety practices.

## WELD $483 \quad 2$ units

Gas Metal Arc/Flux Core Arc Welding

## 108 hours laboratory

Prerequisite: WELD 213.
Grading: letter grade or pass/no pass.
This course will address the techniques of Gas Metal Arch Welding (GMAW) and Flux Core Arc Welding (FCAW) of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices.

WELD $600 \quad 0$ units
Welding (General)
18 hours lecture, 54 hours laboratory
Grading: non graded.
This course is designed for students seeking welding qualifications and certifications. This course is for students with professional skills in welding processes. This course will allow the student to take the skills portion of the Los Angeles City Structural Steel Certification exam.

## WELD 6010 units

## Exploring Welding

4 hours lecture, 13 hours laboratory
Grading: non graded.
This course is an introduction to welding. This course will allow the student to explore the basic safety requirements and welding processes found in industry.
WELD 6110 units
Welding (ARC)

## 54 hours laboratory

Prerequisite: WELD 50 or WELD 212 or WELD 400 or WELD 600.
Grading: non graded.
This course provides practice in arc welding procedures on various types of metal and the opportunity to learn safety practices.

## WELD 6610 units

## Oxygen Acetylene Welding

## 54 hours laboratory

Prerequisite: WELD 50 or WELD 211 or WELD 400 or WELD 600. Grading: non graded.
This course is a study of the techniques of oxy-acetylene gas welding of steels, hard facing, flame cutting brazing, and safety practices.

## WELD 6710 units

Semi-Automatic Welding (GMAW and FCAW)

## 54 hours laboratory

Prerequisite: WELD 50 or WELD 212 or WELD 400 or WELD 600. Grading: non graded.
This course will address the techniques of Gas Metal Arc Welding (GMAW) and Flux Core Arc Welding (FCAW) of steels, aluminum, and stainless steel. It also covers correct equipment setup and safety practices.
WELD 6810 units
Welding (Inert Gas)

## 54 hours laboratory

Prerequisite: WELD 50 or WELD 214 or WELD 400 or WELD 600.

## Grading: non graded.

This course provides practice in the techniques of metallic and tungsten inert gas welding, welding of steels, aluminum, magnesium, cast iron and safety practices.

# World Language, Chinese (CHIN) 

CHIN 15 units
Elementary Chinese 1
90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course introduces students to the standard Chinese language (Mandarin). Students will study grammar, vocabulary, pronunciation, and culture. Students will develop competency at a medium elementary level in listening, speaking, reading, and writing. The course will present everyday situations and topics in the context of Chinese cultural traditions. This course is not recommended for native speakers. This course is comparable to two years of high school Chinese.
Transferable to both UC and CSU; see counselor for limitations

## CHIN 25 units

## Elementary Chinese 2

90 hours lecture, 18 hours laboratory
Prerequisite: CHIN 1.
Grading: letter grade or pass/no pass.
This course is the second of two beginning courses on the fundamentals of modern standard Chinese (Mandarin) and is designed to further develop students' competency in speaking, listening, reading, and writing. Topics will be placed in the contemporary context of the Chinese world.
This course is not recommended for native speakers.
Transferable to both UC and CSU; see counselor for limitations

## World Language, French (FREN)

FREN 15 units

## Elementary French

90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course provides an introduction to French vocabulary and grammar structures, emphasizing listening, speaking, reading, and writing. This course is not recommended for native speakers of French or for students who have recently completed one year of high school French with a grade of $B$ or better. NOTE: This course is comparable to two years of high school French.

Transferable to both UC and CSU; see counselor for limitations

## FREN 1C 5 units

French 1 for Spanish Speakers
90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course provides an introduction to French vocabulary and grammar structures, emphasizing listening, speaking, reading, and writing and underlying structural similarities between French and Spanish. This course is not recommended for native speakers of French or for students who have recently completed one year of high school French with a grade of B or better.

Transferable to both UC and CSU; see counselor for limitations

## FREN 2 units

Elementary French
90 hours lecture, 18 hours laboratory
Prerequisite: FREN 1.
Grading: letter grade or pass/no pass.
This course is a continuation of the study of basic French vocabulary and grammar forms, emphasizing listening and speaking, reading and writing, based on modern topical material.
Transferable to both UC and CSU; see counselor for limitations

## FREN 2C 5 units

French 2 for Spanish Speakers
90 hours lecture, 18 hours laboratory
Prerequisite: FREN 1C.
Grading: letter grade or pass/no pass.
This course is a continuation of the study of basic French vocabulary and grammar forms emphasizing listening and speaking, reading and writing and underscoring structural similarities between French and Spanish that facilitate French language-acquisition, based on modern topical material. Transferable to both UC and CSU; see counselor for limitations

## FREN 3 units

Intermediate French
90 hours lecture
Prerequisite: FREN 2.
Grading: letter grade or pass/no pass.
This course consists of French grammar presentation and review. Students will also study vocabulary and idiomatic expressions based on situational dialogues, articles, and readings which reflect various Frenchspeaking cultures. There is continued listening and speaking practice, as well as development of reading and writing skills.
Transferable to both UC and CSU; see counselor for limitations

## FREN 4 units

Intermediate French
90 hours lecture
Prerequisite: FREN 3 or recent completion of three years high school French.
Grading: letter grade or pass/no pass.
This course consists of a continuation of French grammar presentation and review, emphasizing more advanced structures. Students will also read, analyze and evaluate short stories and literary selections by famous Francophone authors. There will be extensive practice in spoken and written communication.
Transferable to both UC and CSU; see counselor for limitations

## FREN 25A 3 units

Advanced French: Culture in Literature

## 54 hours lecture

Prerequisite: FREN 4.
Grading: letter grade or pass/no pass.
Students explore Francophone culture via articles, essays, realia, short stories, fables, biographies, etc. The course includes grammar review stressing oral and written composition, as well as acquisition of topicrelated vocabulary, to improve fluency in the target language. Outside reading and reporting in the field of study are required.
Transferable to both UC and CSU; see counselor for limitations

## World Language, German (GER)

## GER 15 units <br> Elementary German

## 90 hours lecture, 18 hours laboratory

Grading: letter grade or pass/no pass.
This course is an introduction to the German language and emphasizes the four skills necessary for language acquisition: listening, speaking, reading and writing. Students will learn the sound system and elementary grammatical structures to be able to communicate at a basic level. This course exposes students to everyday situations and cultural topics of the German speaking world. It is not recommended for native speakers.
Transferable to both UC and CSU; see counselor for limitations

## GER 25 units

Elementary German

## 90 hours lecture, 18 hours laboratory

Prerequisite: GER 1.
Grading: letter grade or pass/no pass.
This course is a continuation of the study of basic grammar forms. Emphasis is placed on vocabulary expansion for meaningful communication. The four language learning skills, listening, reading, speaking and writing, are practiced and evaluated on a regular basis. Transferable to both UC and CSU; see counselor for limitations

# World Language, Italian (ITAL) 

## ITAL 15 units <br> Elementary Italian <br> 90 hours lecture, 18 hours laboratory <br> Grading: letter grade or pass/no pass.

ITAL 1 is the first course in the study of the Italian language. This course introduces students to the four skills necessary for language acquisition: listening, speaking, reading and writing. Students will learn the sound system and basic grammatical structures. This course exposes students to everyday situations and cultural topics of the Italian language, culture, and civilization. This course is not recommended for native speakers of Italian or for students who have completed one year of high school Italian with a grade of $B$ or better.
Transferable to both UC and CSU; see counselor for limitations

## ITAL 1C 5 units

## Elementary Italian for Spanish Speakers

90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This course provides an introduction to Italian vocabulary and grammar structures, emphasizing listening, speaking, reading, and writing and underlying structural similarities between Italian and Spanish. This course is not recommended for native speakers of Italian or for students who have recently completed one year of high school Italian with a grade of $B$ or better.
Transferable to both UC and CSU; see counselor for limitations

## ITAL 25 units

## Elementary Italian

90 hours lecture, 18 hours laboratory
Prerequisite: ITAL 1.
Grading: letter grade or pass/no pass.
This course is the continuation of the study of the Italian language. This course further emphasizes the four skills necessary for language acquisition: listening, speaking, reading and writing. Students will continue studying basic vocabulary and grammar forms, emphasizing listening, reading and writing based on modern topical material. This course is not recommended for native speakers of Italian or for students who have completed two years of high school Italian with a grade of $B$ or better.
Transferable to both UC and CSU; see counselor for limitations
ITAL 2C 5 units
Elementary Italian for Spanish Speakers
90 hours lecture, 18 hours laboratory
Prerequisite: ITAL 1C.
Grading: letter grade or pass/no pass.
This course is a continuation of the study of basic Italian vocabulary and grammar forms emphasizing listening and speaking, reading and writing, and underscoring structural similarities between Italian and Spanish that facilitate Italian-language acquisition, based on modern topical material. Transferable to both UC and CSU; see counselor for limitations

# World Language, Japanese (JAPAN) 

JAPAN 15 units<br>Elementary Japanese<br>90 hours lecture, 18 hours laboratory<br>Grading: letter grade or pass/no pass.

This course introduces students to the Japanese language. Students will study grammar, vocabulary, pronunciation, and culture. Students will develop competency at a medium elementary level in listening, speaking, reading, and writing. The course will present everyday situations and topics in the context of Japanese cultural traditions. This course is not recommended for native speakers. This course is comparable to two years of high school Japanese.
Transferable to both UC and CSU; see counselor for limitations

## JAPAN 25 units <br> Elementary Japanese <br> 90 hours lecture, 18 hours laboratory <br> Prerequisite: JAPAN 1.

Grading: letter grade or pass/no pass.
This course is the second of two beginning courses on the fundamentals of modern Japanese. Students will acquire further competency in the four skills necessary for language acquisition: listening, speaking, reading and writing. This course continues to teach the kanji writing system. It is not recommended for native speakers of Japanese.
Transferable to both UC and CSU; see counselor for limitations

## JAPAN 3 units

Intermediate Japanese

## 90 hours lecture

Prerequisite: JAPAN 2.
Grading: letter grade or pass/no pass.
This course is an intermediate course on the fundamentals of Japanese. Students will acquire further competency at a medium intermediate level in the four skills necessary for language acquisition: listening, speaking, reading and writing. Topics will be placed in the contemporary context of Japanese culture. This course is not recommended for native speakers of Japanese.
Transferable to both UC and CSU; see counselor for limitations

## JAPAN 45 units <br> Intermediate Japanese <br> 90 hours lecture

Prerequisite: JAPAN 3.
Grading: letter grade or pass/no pass.
This is the second of two courses offered in intermediate Japanese. It builds on the skills introduced in JAPAN 3 by focusing on more advanced grammar and structures and by introducing additional kanji characters. The course continues with the development of reading, writing, listening, and speaking skills, as well as cultural awareness through course content including collaborative assignments among students.
Transferable to both UC and CSU; see counselor for limitations

# World Language, Khmer (KHMER) 

KHMER 95 units<br>Khmer for Heritage Speakers<br>\section*{90 hours lecture}

Recommended Preparation: Heritage Learner with at least lowintermediate speaking/listening ability determined through oral interview with instructor.
Grading: letter grade or pass/no pass.
This course is the first semester of intermediate Khmer. It develops reading and writing skills of Heritage Khmer speakers. The Khmer 9 course also increases student's oral proficiency and understanding of Khmer cultural practices. Students explore Khmer colloquial usage and common spellings to gain an understanding of how to use Khmer characters in word formation. This course includes extensive analysis of the Khmer writing system, conventions in spelling, and key vocabulary delivered through a culturally rich content and community-based learning. Transferable to both UC and CSU; see counselor for limitations

## KHMER 105 units

Khmer for Heritage Speakers

## 90 hours lecture

Grading: letter grade or pass/no pass.
This course is the second semester of intermediate Khmer for native speakers of the language. It continues to develop reading and writing skills of native Khmer speakers and increases oral proficiency. Students explore Khmer history and culture in Pre-Angkorian, Angkorian, and PostAngkorian periods. This course also includes extensive analysis of the Khmer writing system, conventions in spelling, and key vocabulary. Transferable to both UC and CSU; see counselor for limitations

## World Language, Spanish (SPAN)

SPAN 1 (C-ID SPAN 100) 5 units<br>Elementary Spanish

90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass.
This is the first course in Spanish. It introduces students to the four skills necessary for language acquisition: listening, speaking, reading and writing. It is not recommended for native speakers of Spanish or for students who have completed one year of high school Spanish with a grade of B or better. Students will learn the sound system and basic grammatical structures. This course exposes students to everyday situations and cultural topics of the Hispanic world. NOTE: This course is comparable to two years of high school Spanish.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 1H (C-ID SPAN 100) 5 units

Honors Elementary Spanish
90 hours lecture, 18 hours laboratory
Prerequisite: Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This is the first course in Spanish. It introduces students to the four skills necessary for language acquisition: listening, speaking, reading and writing. It is not recommended for native speakers of Spanish or for students who have completed one year of high school Spanish with a grade of B or better. Students will learn the sound system and basic grammatical structures. This course exposes students to everyday situations and cultural topics of the Hispanic world. NOTE: This course is comparable to two years of high school Spanish.
Transferable to both UC and CSU; see counselor for limitations

SPAN 2 (C-ID SPAN 110) 5 units

## Elementary Spanish

90 hours lecture, 18 hours laboratory
Prerequisite: SPAN 1 or SPAN 1A and SPAN 1B.
Grading: letter grade or pass/no pass.
This course is a continuation of the study of basic Spanish vocabulary and grammar forms, emphasizing listening and speaking, reading and writing, based on modern topical material.
Transferable to both UC and CSU; see counselor for limitations
SPAN 2H (C-ID SPAN 110) 5 units
Honors Elementary Spanish
90 hours lecture, 18 hours laboratory
Prerequisite: SPAN 1 or SPAN 1A and SPAN 1B and Qualification for the Honors Program.
Grading: letter grade or pass/no pass.
This course is a continuation of the study of basic Spanish vocabulary and grammar forms, emphasizing listening and speaking, reading and writing, based on modern topical material.
Transferable to both UC and CSU; see counselor for limitations
SPAN 3 (C-ID SPAN 200) 5 units
Intermediate Spanish
90 hours lecture
Prerequisite: SPAN 2.
Grading: letter grade or pass/no pass.
This course is an intermediate course on the fundamentals of Spanish. Students will acquire further competency at a medium intermediate level in the four skills necessary for language acquisition: listening, speaking, reading and writing. Topics will be placed in the contemporary context of Hispanic culture. This course is not recommended for native speakers of Spanish.
Transferable to both UC and CSU; see counselor for limitations
SPAN 4 (C-ID SPAN 210) 5 units
Intermediate Spanish
90 hours lecture
Prerequisite: SPAN 3.
Grading: letter grade or pass/no pass.
This course continues the review of Spanish grammar, emphasizing more advanced structures. Topics include comparison of verb tenses, expansion of vocabulary, development of reading and speaking ability and improvement of writing skills through the writing process.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 8 units

Spoken Spanish
54 hours lecture
Prerequisite: SPAN 2.
Grading: letter grade or pass/no pass.
Formerly SPAN 8AD. This course is designed to improve comprehension, structure, oral expression and fluency in Spanish used in travel, in the home, in school and in business. This course emphasizes vocabulary, idioms and language patterns fundamental to an active use of Spanish. This course is not recommended for native speakers of Spanish. Transferable to CSU Only

## SPAN 9 (C-ID SPAN 220) 5 units

## Spanish for Spanish Speakers

## 90 hours lecture

Prerequisite: Spanish speaker with the ability equivalent of SPAN 2.
Recommended Preparation: Fluency in spoken Spanish.
Grading: letter grade or pass/no pass.
This course is the first semester of intermediate Spanish. It develops reading and writing skills of native Spanish speakers as well as perfects their oral, writing, and reading skills. Students explore the intellectual and cultural connections and variations of the Hispanic culture in Latin America, the U.S. and Spain. This course also includes extensive review of Spanish grammar, and spelling and writing conventions.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 9H (C-ID SPAN 220) 5 units

Honors Spanish for Spanish Speakers

## 90 hours lecture

Prerequisite: Spanish Speaker with the ability equivalent of SPAN 2 and Qualification for the Honors program
Recommended Preparation: Fluency in spoken Spanish.
Grading: letter grade or pass/no pass.
This course is the first semester of intermediate Spanish. It develops reading and writing skills of native Spanish speakers as well as perfects their oral, writing, and reading skills. Students explore the intellectual and cultural connections and variations of the Hispanic culture in Latin America, the U.S. and Spain. This course also includes extensive review of Spanish grammar, and spelling and writing conventions.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 10 (C-ID SPAN 230) 5 units

## Spanish for Spanish Speakers

## 90 hours lecture

Prerequisite: SPAN 9 or SPAN 9H.
Grading: letter grade or pass/no pass.
This course is the second semester of intermediate Spanish for native and heritage speakers of Spanish. The course continues developing reading writing, speaking and listening skills. Course content delves into an extensive overview of grammatical structures at a high intermediate level. The course covers accent variation, accentuation, idiomatic expressions and general concepts of Spanish phonetics. Course readings are cultural in nature and include historical pieces about politics and life in Latin America as well as short literary pieces by Latin American writers. Transferable to both UC and CSU; see counselor for limitations

SPAN 10H (C-ID SPAN 230) 5 units

## Honors Spanish for Spanish Speakers

90 hours lecture
Prerequisite: SPAN 9 or 9H and Qualification for the Honors Program. Grading: letter grade or pass/no pass.
This course is the second semester of intermediate Spanish for native and heritage speakers of Spanish. The course continues developing reading writing, speaking and listening skills. Course content delves into an extensive overview of grammatical structures at a high intermediate level. The course covers accent variation, accentuation, idiomatic expressions and general concepts of Spanish phonetics. Course readings are cultural in nature and include historical pieces about politics and life in Latin America as well as short literary pieces by Latin American writers. Transferable to both UC and CSU; see counselor for limitations

## SPAN 25A 3 units

## Advanced Spanish: Culture in Literature

## 54 hours lecture

Prerequisite: SPAN 4 or 10.
Grading: letter grade or pass/no pass.
Students explore Hispanic and Latino cultural evolution of contemporary Latin America from Spain in the 1400 s, including the Native American cultures, present day Latin America and the Hispanic communities in the United States via articles, essays, realia, short stories, fables, biographies, etc. The course includes grammar review stressing oral and written composition, as well as acquisition of topic-related vocabulary, to improve fluency in the target language.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 25B 3 units

Advanced Spanish: History

## 54 hours lecture

Prerequisite: SPAN 4 or 10.
Grading: letter grade or pass/no pass.
This course is a survey course that explores the historical and cultural evolution of contemporary Latin America from Spain in the 1400s, including the Native American cultures, present day Latin America and the Hispanic communities in the U.S.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 25C 3 units

Advanced Spanish: Politics, Current Event

## 54 hours lecture

Prerequisite: SPAN 4 or 10.
Grading: letter grade or pass/no pass.
This course focuses on current events of the Spanish-speaking world and the historical forces that have shaped the political, social and economic structures of the countries being studied. Through the study of historical and literary texts as well as expository works of art, students will engage in discussions and debates about what forces have shaped and continue to shape the modern Spanish-speaking world.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 25D 3 units

Advanced Spanish: Literature

## 54 hours lecture

Prerequisite: SPAN 4 or 10.
Grading: letter grade or pass/no pass.
This course is a literature survey course that studies major literary works from Spain and Latin America. The course will cover basic concepts of literary theory and literary criticism in Spanish.
Transferable to both UC and CSU; see counselor for limitations

## SPAN 2003 units

## Spanish for Medical Professionals

## 54 hours lecture

Prerequisite: SPAN $1 / 1 \mathrm{H}, 2 / 2 \mathrm{H}, 9 / 9 \mathrm{H}, 10 / 10 \mathrm{H}$ or instructor consent. Grading: letter grade or pass/no pass.
This Spanish course for health and medical professionals is designed for students who plan to use Spanish as a communication tool in their field of specialization. Major emphasis is placed on vocabulary and situational dialogues closely related to health and medical careers. Students will demonstrate comprehension in all skills at a medium elementary level according to the standards set forth by the American Council on the Teaching of Foreign Languages (ACTFL).

## SPAN 2013 units

## Spanish for Medical Professionals II

## 54 hours lecture

Prerequisite: SPAN 2/2H, 9/9H, 10/10H, 200 or instructor consent.
Grading: letter grade or pass/no pass.
This Spanish course for health and medical professionals is designed for students who plan to use Spanish as a communication tool in their field of specialization. Major emphasis is placed on vocabulary and situational dialogues closely related to health and medical careers. Students will demonstrate comprehension in all skills at a medium advanced level according to the standards set forth by the American Council on the Teaching of Foreign Languages (ACTFL).

## FULL-TIME EMPLOYEES

Administration (p. 466)

Full-Time Faculty (p. 467)
Classified Professionals (p. 481)

## Administration

## A

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Ed. D., Harvard

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## K

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Associate Professor, Reading and Teacher Preparation
B.A., UC Riverside
M.S., CSU Fullerton

WILLIAMS, COLIN
Professor, Library
B.A., UC Los Angeles
M.S., University of Illinois, Urbana-Champaign

Ed.D., UC Los Angeles
WILSON, WILLIAM

Associate Professor, Public Affairs \& Services
B.A., CSU Long Beach

WOERNER, CHRISTIANE R.
Professor, English as a Second Language
B.A., Cal Poly Pomona
M.A., UC Los Angeles

Ed.D., University of Southern California

WOOD, RONDA M
Professor, Registered Nursing
B.S., CSU Long Beach
M.A., UC Los Angeles

Ed.D., University of Southern California

## X

XU, MAY N.
Professor, Mathematics \& Engineering
M.S., Northeastern Illinois University

## Y

YANG, ALINA
Associate Professor, Reading and Teacher Preparation
B.S., Toccoa Falls College, Georgia
M.S., Walden University

Ed.D., University of West Georgia

## YASUTOMI, EMILY

Associate Professor, Multidisciplinary Success Center, LAC
B.S., University of Southern California
M.S., University of Southern California

YOUNG, CHRIS
Associate Professor, Culinary Arts
A.S., Long Beach City College
B.S., UC San Diego

## Z

ZUGATES, MICHAEL
Professor, Mathematics \& Engineering
B.S., CSU Long Beach
M.S., CSU Long Beach

## Adjunct Faculty

Go to the link below to view the listing for part-time faculty. https://www.lbcc.edu/academic-services (https://www.lbcc.edu/ academic-services/)

## Classified Professionals

## A

ACUNA MITCHELL, ALEXIS
Voc. Instr. Tech., Auto Technology

ADAMS, JADE
Administrative Assistant
ADAMS, STEVEN
Electrician
AGRICOURT, VICENTE

Workforce Develop Program Specialist
AGUILAR, MAYRA
Project Mgr., Education and Multimedia
AJA, MARY
Certified Athletic Trainer
ALEJANDRINO, LESCLARCE
Nursing and Allied Health Coord.
ALEJO VAZQUEZ, ANGEL
Grounds Maint Worker
ALEXANDER, RAVEN
Custodian
ALLEN, ZANETA
Academic Admin Assistant
ALVAREZ, DARA
Financial Aid Advisor
ALVAREZ, LISBETH
ESL Services Specialist
ALVIAL, LEFIA
Matriculation Aide

AMADOR, FELISHA
Senior Accountant

AMADOR, RUBEN
Lead Library Technician
AMANTE, LOURDES
Outreach and Recruitment Spec.
ANDERSON, AARON
HVAC Mechanic
ANDRADE, ANDRES
Instruct Aide-Student Success Center
ANDRADE, ANDREW
Admissions \& Records Tech I
ANDRADE, ELIZABETH
Records Specialist
ARCHILA, FABIOLA
Lead Library Technician
ARY, MICHELLE
Multimedia Services Tech
AVILA, JASON
Director
AVILA, OSCAR
Voc Instr Tech - Auto Technology
AYOUB, YESSICA
Child Dev. Center Assoc. Teacher
AZEVEDO, PAULO
Skilled Maint Worker

## B

BAKER, CHRISTOPHER
Warehouse/Logistics Mgr
BALDONADO, CHRYSALLIS
Administrative Assistant
BALDWIN, FRANCINE
Senior Accountant
BANKS, DEATRICE SHERNELL
EOPS Program Coordinator
BARADA, LAILA PUALANI
Life Science Lab Specialist
BARNETT, MICHAEL
Athletic Field Maint Worker
BARRON, JOANA
Administrative Assistant
BARTSCHI, CHRIS
Custodian
BECKMAN, MEGHANROSE
Certified Athletic Trainer
BECKMAN, RANDALL
Certified Athletic Trainer
BEJARANO, TRACY
Sr. Administrative Assistant
BERBER, JENNIFER
Performance Accompanist, Dance
BIGELOW, AMY
Child Dev. Center Manager
BIRDWELL, JILL
Academic Admin. Assistant
BIRONG, MARK
Graphics and Publishing Tech.
BIRONG, MICHAEL
Senior Network Administrator
BISSON, JESSICA
Instruct. Aide, Student Success Ctr.
BIVIAN, JOSE
Instruct. Aide, Student Success Ctr.
BLAIR, NATALIE
Administrative Assistant
BLEDSOE, MONICA L
Administrative Assistant
BLINCOE, DANIEL
Senior Locksmith
BLOUIN, JASMINE
Outreach \& Recruitment Spec

BOEDE, STEVE
Plumber
BOLANOS, ANGEL
Custodian
BONALES, STEPHANIE
Coordinator, Interpreter Services
BONNER JR., GREGORY
Custodian
BOQUIREN, ANDREW
Graphic Design Specialist
BOWEN, MICHELLE
Financial Aid Advisor
BOWERS, SARAH
Administrative Assistant
BOYD, ELSA
Sr. AA/HR Mandated Cost
BOYLE, DEBORAH
EOPS Program Spec
BRACKMAN, NICHOLAS
HVAC Mechanic
BRACKMAN, PAMELA
Sr. Administrative Assistant
BRADY, KRISTEN
Marketing Manager, SBDC
BROOKS, ARLEATHA
Enrollment Specialist
BROOKS, CAREY
Custodian
BROWN, ALLISON
TRIO Supervisor
BROWN, SHIRLEY
Administrative Assistant
BUHAIN, ALLAN
Warehouse Worker
BUI, CHAU
Technical Support Specialist
BURNS, LAUREN
Matriculation Aide
BURTON, SOLEDAD
Accounting Technician II
BUTLER, THOMAS
Custodian
C
CAO, CAMTU
Library Technician II

| CARLOS MURO, MARK | Skilled Maintenance Worker |
| :---: | :---: |
| Lead Custodian |  |
|  | COMPIAN, LAURA |
| CARMAN, ROBERT | Academic Admin. Assistant |
| Exec Dir, Info Systems Tech |  |
|  | COMPTON, SHYRA |
| CARRILLO-LOPEZ, MANUEL | Assoc. Director, Scholarship/Outreach |
| Custodian |  |
|  | CONCHADA, KATHERINE |
| CARROLL, SEAN | Sr. Office Assistant |
| Senior Multimedia Srvs. Tech. |  |
|  | CONNELL, PATRICK |
| CARSON, KENNETH | Human Resources Specialist |
| Custodian |  |
|  | COOK, DAISY |
| CASAS, MARK | Mental Health Clinician |
| Mental Health Clinician |  |
|  | COOK, RASHANDA |
| CASTRO, SARA A | Child Dev. Center Teacher |
| Sr. Office Assistant |  |
|  | COOPER, THOMAS |
| CASUGA, KIMBERLY | Custodian |
| Executive Assistant |  |
|  | COOPER, VICTORIA A |
| CEJA, JAMES | Financial Aid Specialist |
| Outreach \& Recruitment Spec |  |
|  | CORNEJO, ERIC |
| CEJA, TOMAS | Human Resources Analyst |
| Skilled Maintenance Worker |  |
|  | COVARRUBIAS, KAREN |
| CERDA, ANDREA | Instructional Lab Coordinator |
| Child Care Assistant |  |
|  | COVARRUBIAS, LETICIA |
| CHAO, JULIE | Nurse |
| Sr. Accounting Technician |  |
|  | CRIHFIELD, BRADLEE |
| CHAO, SEM | Media Producer |
| Sr. Manager, Budget Operations |  |
|  | CROSS, GABRIELLE |
| CHASE, BENJAMIN | Instructional Lab Coordinator |
| Financial Aid Specialist |  |
|  | CRUZ, GILBERT NATHEN |
| CHAVEZ, ANDREW | Instruct Aide--Std Success Ctr |
| Help Desk Support Specialist |  |
|  | CRUZ, JAIMARIE |
| CHIT UYS, ROMADA | Administrative Assistant |
| Matriculation Aide |  |
|  | CULLY, SEAN |
| CHRETIEN SHOOK, CAROLINE | Outreach Assistant |
| Exec. Director, Classified HR |  |
|  | CURTIS, DANIEL |
| CHRISTOPHER, STEPHEN J | Multimedia Services Tech. |
| Life Science Lab Specialist |  |
|  | CYR, ANTHONY |
| CLARK, TAMMY | Skilled Maintenance Worker |
| Custodian |  |
|  | D |
| CLEMONS-HARDEN, LATONYUA |  |
| Accountant | DAI, HONGYAN <br> Administrative Assistant |
| CLEVELAND, SANDRA |  |
| Student Support Services Aide | DANDIE, JARED |
|  | Electrician |
| COATS, DONNA |  |
| Administrative Assistant | DANIELS, JULIE |
|  | Academic Admin. Assistant |
| COMPIAN, JOHNNY DE SANTIAGO JR., DARIO |  |
|  |  |

Manager Multimedia Services

## DEANDA, MONICA

Health Services Tech.
DEL CASTILLO, RONIN
Performance Accompanist
DELGADO, MARIA
Intl. Student Program Admissions Tech.
DENTON JR., DERRICK
Custodian
DICKINSON, ALEXANDRA L
Instructional Assoc.- Jewelry
DIMAS, ELLEN
Child Care Assistant
DINEEN, IRIS WANG
Web Content \& Elect Media Coord
DOLES, CATHERINE
Records Specialist
DOMINGUEZ, SEAN
Tutorial \& SI Program Coordinator
DOMINGUEZ, SUNDEE
Student Tech Help Desk Mgr
DORFMAN, ANDRIUS
Sr. PeopleSoft DBA/Sys. Manager
DORSEY, CHRISTOPHER
Business Systems Analyst V
DUARTE, DARREN
HVAC Mechanic
DUARTE, DIANE L.
SBDC Financial Analyst
DUCKWORTH, LISA
DSPS Technical Assistant
DURAN, SUSANA
Enrollment Services Supervisor
DURAN JR., CONRRADO
Deputy Dir, Finance \& Acctg

## E

EACH, KATHRYN
Academic Admin. Assistant

## ELIJAH, TYNISHA

Instruct. Aide, Student Success Ctr.
ELLIOTT JR., MALCOLM
Admissions and Records Tech. II
ENSBERG, STEN
SBDC Operations Manager
ESPINOZA, JUAN

Accountant
ESTACIO, RONALD
Sr. Warehouse Worker
ESTRADA, ALLISON
Director, Admissions \& Records

## F

FACKELDEY, JAY
Administrative Assistant
FAIRFIELD, VICKI
Academic Admin Assistant

## FAJARDO, ELIZABETH

Child Care Assistant
FAMA, JAY
Business Systems Analyst II
FARRAR, CELESTE
Job Development Coordinator
FEENSTRA, DARREN
Fleet and Equipment Mechanic
FINNEY, DYEYELL J
Financial Aid Specialist
FINTLAND, SUSAN
Educational Technologist II
FISHER, DEVIN
Senior Accounting Technician
FITZGERALD, JAMES
Irrigation and Grounds Maint. Tech.
FLORES, SALOMON
Child Care Assistant
FLORES, SAMANTHA
Career Pathways Coordinator
FLORES, TANAIRI
Child Care Assistant
FLORES SANTOS, AMIE A
Child Care Assistant
FLOWERS, JIMMIE
Equipment Technician
FOOT, HAROLD
Instructional Lab Coordinator
FOWLKES, ANGELA
Financial Aid Specialist
FRANCAIS, RICHARD A
Research Analyst I
FRANCE, NEIL
Photo Lab Technician
FRANCO, JONATHAN

Custodian

FREDERICK, VERONICA
Admissions and Records Tech. II
FRIEZ, DANA
Director, Workforce Development
FUENMAYOR, ANDREW
Data Scientist

## G

GACOS, KELLY J
Child Dev Center Assoc Teacher

GALARZA, DIANA
Multimedia Services Tech

GALVEZ, GRACE
Instructional Assistant

GARBER, JASON
Custodian
GARCIA, CLAUDIA
FKCE Program Manager
GARCIA, GUADALUPE C
Human Resources Analyst

GARCIA, PEDRO
Operations Manager

GARCIA, SYLVIA
Student Conduct Specialist

GARCIA-QUINTERO, LESLEY
Matriculation Aide
GARIBAY, ALMA
DSPS Technical Assistant

GARIBAY, MARIA
Sr. Administrative Assistant

GARNER, CARL
DSPS Adaptive Computing Spec

GILPATRICK, DANIEL
Admissions and Records Tech. II

GLASSOCK, TRACI
Scholarship Specialist
GOBELI, FAITH
Instructional Associate

GOMEZ, ADRIANA
Workforce Dev. Program Spec.

GOMEZ, ALLEN
Reprographics \& Mail Assistant

GOMEZ, VALERIA
Child Care Assistant

GONZALEZ GUTIERREZ, MERCEDES

Child Care Assistant

GONZALEZ-WILSON, GLORIA
Human Resources Specialist
GOWENS, KEVIN
Enrollment Specialist
GRIMALDI, SERGIO
Dir,Std Health Srvs \& Std Life

GRIMALDO, YESENIA
Financial Aid Specialist

GUAN, KAFERMAN
Instructional Assistant, Arch

GUERRERO, FABIOLA
Curriculum Database Spec.
GUERRERO, MARTHA P
Science Lab Equipment Tech
GUIDAS, MARK
Deputy Director, Network Services
H

HAMON, KIMBERLY
Student Activities Advisor

HANN, BRANDON
Network Administrator

HARDIN, DENA
Child Dev. Center Teacher

HARRIS, JAMES
Custodian

HASTIE, BRIAN
Irigation and Grounds Maint. Tech.
HEBER, LESLIE
Multimedia Services Tech

HEFFERN, TIMOTHY
Deputy Dir., Academic Comp./Multimedia Svcs

HERNANDEZ, ALEJANDRO
Custodian

HERNANDEZ, ANGELICA
Child Dev. Center Teacher
HERNANDEZ, JULIET
Executive Assistant

HERNANDEZ, MIREILLE
Buyer

HERNDON, SAKILE
Matriculation Aide

HERRERA, BRENDA
Lab Instr. Asst., Culinary Arts

HERRERA, JUAN

Carpenter

## HIATT, TED E

Exec Director, Small Bus \& Ent
HOLMGREN, JENNIFER
Director, Planning
HONG, PAUL
Sr. Technical Support Spec.
HOOD, GEORDE
Child Care Assistant
HOYO, RENE
Instructional Assistant
HUERTA, MAGDALENA
Financial Aid Advisor
HUESMANN, EMILY
Instruct Aide--Student Success Ctr
HUESMANN, LAURIE
Academic Admin Assistant
HUM, HALLEN
Functional Lead Analyst-SSS
HUNT, JAYMEE PATRICE
Human Resources Specialist
HUYNH, LINDA
Accounting Tech II
HUYNH, TIFFANEY
Technical Support Specialist
HWANG, JAE
Technical Support Specialist

## 1

IBARRA, JOSE ALBERTO
Director, Special Projects
IGLESIA, LUBERT
Mgr, EnvironHealth/SafetySvcs
INTARATTANA, VALINDA
Disability Support Svc Spec
ISASLAZO, ROGELIO
Technology Services Manager

## J

JACKSON, CYNTHIA
Buyer
JACKSON, HAYLEY R
Child Care Assistant
JAMIAS, JILL A
Administrative Support Spec
JEFFRIES, JENNA

## Child Care Assistant

JENKINS, MEGANN
Administrative Assistant
JIMENEZ, EVA
Admissions and Records Tech. II
JIMENEZ, LAURA
Financial Aid Accounting Tech
JIMENEZ GOMEZ, ALMA Y
Human Res and Payroll Asst
JOHNSON, LAFREIDA
Enrollment Specialist
JOHNSON, PENELOPE
Administrative Assistant
JOHNSON, SHANEE
Child Care Assistant
JOHNSON, TIMOTHY
Custodian
JOHNSON JR., WALTER
Sr. Director, Facilities Plan, Constr. and Ops.
JOKANOVICH, IRIS
Student Services Technician
JORGENSEN, MARISSA
Accounting Tech II

## K

KANE, HEATHER
Academic Admin. Assistant
KEARNEY, KEVIN
Performance Accompanist
KELLY, NADIA
Child Care Assistant
KEMPF, RACHEL
Senior Accounting Technician
KHONG, NONG
Instructional Assistant
KIBLER, ADRIENNE
Sr. Grants Development Analyst
KIL, JAMES D
Grants Sr Accounting Tech, ERD
KING LOPEZ, WENDI
Distance Learning Spec. II
KIRKILIENE, VIRGINIJA
Life Science Lab Specialist
KLEIZO, PAUL
Voc Instr Tech - Auto Technology
KNOTT, MARISELA

Instructional Aide--Fash Dsgn
KODA, DEENA L
Sr Admin Asst/HR-Pers Comm
KOTTAB, FARSIO
Business Systems Analyst II
KRASNER, MARINA
Applications Dev. Analyst V
KUGELMAN, KRYSTAL
Accountant
KYLE, JEFF
Grounds Maint. Worker
$L$
LA ROSE, PAMELA
Workforce Develop Program Spec
LAM, HUE
CalWorks Program Student Advisor
LARA, EDUARDO
Administrative Assistant
LE, ARIANE
Lead Library Technician
LEDESMA, MICHELE
Child Care Assistant
LEDESMA, MICHELE M
Child Care Assistant

## LEE, KAI LAM

Instructional Lab Coordinator
LEFLORE, BROOKE
Child Care Assistant
LEGAULT, JESSICA
Academic Admin. Assistant

## LEM, MAUREEN

Student Support Services Aide
LEON, CYDNEY
Executive Assistant
LEPE DIAZ, CAROLINA
Research Analyst II
LERCH, VICKI
Executive Assistant
LESLIE, VALENTINA
Lab. Instr. Asst., Culinary Arts
LIANG, YAOYUAN
Research Analyst I
LIGGINS, JASON
Instruct Aide--Student Success Ctr
LINCOLN, TAMARA

Instruct. Aide, Student Success Ctr.
LOHAY, DIANKA
Student Life Coordinator
LOPEZ, JAY E
Manager, Events Comm Relations
LOPEZ, JENNIFER
Admissions and Records Tech. II
LOPEZ, JONAH
Director, Appl Develop \& Support
LOPEZ GONZALEZ, OSVALDO
Grounds Maint. Worker
LOPEZ-RAMOS, LIVIER
Child Dev Center Assoc Teacher
LUNA, CRISTOPHER
Science Lab Equipment Tech
LUTZ, KRISTY
Athletic Specialist
LUUGA, AUGUST
Applications Dev Manager
LY, BOUNRITH
Technical Support Specialist
LY, KHANH
Applications Dev. Analyst V
LY, THAI
Microbiology Lab Specialist
LYON, TIMOTHY
Sr. PeopleSoft DBA/Sys. Manager
M
MACE, SARAH
Instruct Aide--Student Success Ctr
MAIS, KATHLEEN
Lab Coordinator, Simulation Hospital
MALADAGA, CINDERELA
Applications Dev Analyst V
MALDONADO, BRICEYDA
Enrollment Specialist
MALDONADO, MIGUEL ANGEL
Grounds Maint Worker
MALINIS, KHANTINA
Reprographics and Mail Assistant
MARANO, MARK
Child Dev. Center Teacher
MARONEY, JOANNA LEE
Sr. Administrative Assistant
MARONEY, ROBERTA

| Administrative Assistant | MENDOZA, DAVID |
| :---: | :---: |
|  | Custodian |
| MARROQUIN, JESSE |  |
| Outreach \& Recruitment Spec | MENJIVAR, JUAN |
|  | Financial Aid Specialist |
| MARTIN, FELICIA |  |
| Admissions and Records Tech. II | MERMINGEZ, YVONNE |
|  | Contracts Technician |
| MARTIN, KEISHON |  |
| Custodian | MICHAEL, SEAN |
|  | Facilities Maintenance Manager |
| MARTINEZ, FELIX |  |
| Grounds Maint Worker | MILKES, SHARON |
|  | Records Specialist |
| MARTINEZ, JAMES |  |
| Financial Aid Advisor | MILLER, MARGARET |
|  | Admissions and Records Tech. II |
| MARTINEZ, MELISSA |  |
| Child Dev. Center Teacher | MILLER-CALVERT, DEBORAH |
|  | Interim Dean, Student Affairs |
| MARTINEZ, ROSA |  |
| Outreach \& Recruitment Spec | MIN, RATHNEY M |
|  | Child Dev Center Program Asst |
| MARTINEZ, SARAI |  |
| Child Care Assistant | MIYAO-MOORE, NANCY |
|  | Schedule Specialist |
| MARTUCCIO, LETICIA |  |
| Child Dev. Center Assoc. Teacher | MIZE-BOLTON, CAMILLE |
|  | Public Relations Coordinator |
| MAY, DORIS |  |
| Custodian | MOLINA, PAUL |
|  | Voc. Instr. Tech., Sheet Metal |
| MCANELLY, LAUREN |  |
| Buyer | MONREAL, ROSALIND |
|  | Accounting Tech II |
| MCCOY, BARBARA L |  |
| Instructional Assistant, Arch | MONTGOMERY, GREGG |
|  | Multimedia Services Tech. |
| MCGLOTHAN, APRIL |  |
| Disability Support Svc. Spec. | MONTUFAR, REGINA |
|  | Administrative Assistant |
| MCKOY, BRELYN |  |
| Child Care Assistant | MOORE, RYAN |
|  | Curriculum/Schedule Technician |
| MCMAHON, SHARON |  |
| Instr. Assistant, World Languages | MORA, MARIEJANE K |
|  | Child Care Assistant |
| MCMATH, CHRISTOPHER |  |
| Custodian | MORALES, BLANCA |
|  | Contracts Technician |
| MEAK, SAVOUN |  |
| Office Assistant | MORGAN, MICHAEL |
|  | Lead Custodian |
| MEDINA, RIO ROSARIO |  |
| Career Pathways Coordinator | MORGAN SR., MICHAEL |
|  | Custodian |
| MEDINA-QUIROZ, THOMAS |  |
| Instruct Aide--Student Success Ctr | MOTLEY, MICHELLE |
|  | Academic Scheduling Analyst |
| MELENDEZ, CHERYL |  |
| Associate Director, 10K Small Bus. | MULINIX, ANNETTE |
|  | Matriculation Aide |
| MENDEZ, SUSANA |  |
| Equipment Technician | MUNOZ, ALMA |
|  | Child Care Assistant |
| MENDOZA, BETTY |  |
| Sr. Office Assistant | MURILLO-RAMIREZ, MELISSA |

Child Care Assistant

MURILLO-RAMIREZ, SUSANA
Child Dev. Center Assoc. Teacher
MURPHY, ERIN
Director, Special Projects
MYRTLE, MATTHEW
Business Client Supervisor

## N

NAPOLILLO, ANTHONY
Custodian

NAVARRO, BLANCA
Matriculation Aide

NAVAS, SAMANTHA P
Instructional Lab Support Asst
NEAL, MARK
Locker Room Attendant
NECIOSUP, MARIA
Enrollment Specialist
NEPOMUCENO, KIMBERLY
Administrative Support Spec.
NGO, LOAN
Web Developer II

NGUYEN, CINDI
Payroll, Benefits Manager

NGUYEN, HAYDEN T
Stud Learning Outcomes Analyst
NGUYEN, TAI
Student Services Technician
NKILA, ILIANA
Risk Services Coordinator

NUGUID, ELYSE
Senior Accountant

NUNEZ, CYNTHIA
Human Resources Manager
NYE, PATRICK
Exec. Director, Small Bus. and Ent.
NYSTROM, ARNE
Sr. Network Administrator
NYSTROM, MARCIA
Administrative Assistant

## 0

O'NEIL, MEGHAN
Child Care Assistant

O'NEIL, MEGHAN A

Child Care Assistant

OBANDO, JESSICA K
Human Resources Analyst
OCHOA, ARACELI
Child Care Assistant
OCHOA, GABRIELA
Media Producer
OLSEN, SHARON
Accounting Tech. I

OLSEN BELL, MARY
Human Resources Analyst
ORIEE, DEREK
Student Activities Advisor
ORTEGA, LESLIE
Tutorial Program Coordinator
ORTIZ, ADDY
Matriculation Aide
P

PADILLA, GRISELDA
Records Specialist

PADRON, KYLE H
Construction Project Manager

PALACIOS, MARIANNE
Nurse Practitioner
PARIS, RYAN
Business Systems Analyst II
PARKER, JESSIE
Custodian

PARVIAINEN, KAREN
Cashier

PEARSON, ANTHONY
Performing Arts Prod. Tech.

PENA, JERHOME
Parking Services Coordinator
PEREZ, RUBEN
Sr. Administrative Assistant
PEREZ RODRIGUEZ, ELIZABETH
Human Resources Technician
PERLAS, LINH
Admin. Support Manager, ERD
PETERSON, SHARON
10K Small Bus. Alumni Manager

PHENG, RENA
Accountant

POLLAK, BRADLEY

Program Director, SBDC
POOT, AMY Y
Child Care Assistant
POPE, MICHELE
Enrollment Services Supervisor
PORTER-COSTE, WENDY
Upward Bound Prog Supervisor
PREUSS, CURTIS
Locksmith
PRICE, SHERRI
Cashier
PRUITT, DIAMOND
Reprographics \& Mail Assistant
PULIDO, IRIDIAN
Matriculation Aide

## Q

QUILATON, JOHN KIM IGNACIO
Matriculation Aide
QUILATON, JUDITH
Enrollment Specialist
QUILOAN, RANDY REY S
Technical Support Specialist
QUINTERO, MICHELLE
Child Care Assistant
QUIROZ, KEMBERLY
Matriculation Prog. Assistant

## R

RABY, SUSAN
Administrative Assistant
RAMIREZ, NESTOR
Irrigation \& Grounds Maint. Tech
RAMIREZ JR., ARTURO
Multimedia Services Tech.
RAMOS, BRENDA
Administrative Assistant
RAMOS, MARIA
Instructional Aide, Foods Lab
RANGEL, JACQUELINE
Child Care Assistant
RANTALA, LAURA
Manager, Online Learning Progr
RAPOZA, ROBERT
Director, Business Support Srvs.
RATHFELDER, REBECCA A

Math Lab Coordinator
RATSAMY, NANCY
Business Systems Analyst IV
RAU, MEGGAN
Lab Coordinator, Nursing/Allied Health Lab
RAYMOND, KARSTEN
Science Lab Equipment Tech.
RAZZAGHI, NOSHIN
Academic Admin Assistant
REDMOND, ALEXIS
Functional Lead Analyst, IITS
REECE, M'SHELLE
Senior Exec Asst, Gov Board
REID, ANDREA
Senior Accounting Technician
REMETA, ROBERT
Skilled Maintenance Worker
RENTERIA, DANIEL
Network Administrator

REYES, BRIANNA
Mental Health Clinician
REYNA, ANGELICA
Office Assistant
RICE, SANDRA
Senior Buyer
RIOS-SANTANA, MATEO
Disability Support Svc Spec
RIPPEON, ASHLEY
Athletic Coordinator
RISPRESS, RUDOLPH
Custodian
RIVERA, ANA
Instructional Assistant
ROA, LUIS
Payroll Technician
ROBERTSON, TEILA
Dir, Std Conduct \& Std Life
ROBINSON, STACEY
Bursar
RODRIGUES, JOY
Records Specialist
RODRIGUEZ, ALEJANDRO
Custodian
RODRIGUEZ, ERIKA
Financial Aid Advisor

RODRIGUEZ, HECTOR
Grounds Maint Worker
RODRIGUEZ, MIRIAM
Sr. Administrative Assistant
RODRIGUEZ, VANESSA
Administrative Assistant
RODRIGUEZ, VERONICA
Workforce Dev. Training Coord.
ROESSLER IV, FREDERICK
Sound Engineering Technician
ROGERS, SUMMER
Curriculum/Schedule Technician
ROMAN, ELIZA
Student Support Services Aide
ROMERO, CESAR I
Outreach \& Recruitment Spec
ROSALES, DIEGO
Network Administrator
ROSENFELD, DANIEL
Business Client Supervisor
ROSS, RACHELE
Financial Aid Specialist
RUBIO, KARINA
EOPS Program Spec
RUELAS, ISAAC
Custodian
RUIZ MEJIA, ULISES
Custodian
RUSSELL, MICHEAL
Custodian

## S

SADLER, CC
Educational Technologist II
SALAZAR, LILIANA
Custodian
SALAZAR, TRACI
Administrative Assistant
SALCEDO, JAVIER
Outreach \& Recruitment Spec
SALDANA, DANIEL
Custodian
SALDANA, RAYMOND
Custodian
SANCHEZ, THERESA
Instructional Aide

SANCHEZ ANGULO, NORMA
Child Care Assistant
SANCHEZ RUEDA, SANDRA
Nursing/Allied Health Lab Tech.

## SANDOVAL, MANUEL

Voc. Instr. Tech., Constr. Technology

## SANTIEL, RAMEL

Multimedia Services Tech.
SANTOSCOY, OSCAR
Instructional Lab Support Tech.
SAYLES, GERREL
Outreach \& Recruitment Spec
SCHOLES, MATTHEW
Accountant
SEAGRAVES, MICHELLE G
Child Care Assistant
SEANG, CHELSEA
Multimedia Services Tech.
SEGOTTA, MATTHEW L
Instruct Assoc.- Power Tools
SERRANO, CARINA
Accounting Supervisor
SETH, SOPHALL
Special Event Assistant
SEVILLA, NATHALIE
Executive Assistant
SHAHEEN, CYNTHIA
Nurse
SHANKLIN, WHITNEY
Custodian
SHEWMAKE, BECCA
Administrative Assistant
SHIELDS, BRIAN
Facilities Maintenance Manager
SIMON, SARAH
10K Small Bus. Prgm Manager

## SIMS, SANDRA D

Manager, Human Resources
B.A., UC Los Angeles
J.D., Hastings College of the Law

## SKIEFF, BRIAN

Admissions and Records Tech. II
SKILLE, STEVEN
Accounting Tech. II
SLANY, KIMBERLY
Human Resources Specialist

SMEDING, JEFFREY
Instr. Associate, Photo/Graphic Arts
SMITH, JOANNA
Administrative Assistant

## SMITH, MARC

Nursing and Allied Health Coord.
SMITH, MICHAEL
Instructional Associate

SMITH, PRESTON
Special Event Assistant
SMITH-CLARK, STACEY
Child Dev. Center Manager
SOK, LENA
Child Care Assistant
SOLIS, ESMERALDA E
Instruct Aide--Std Success Ctr
SONGCO, ANTHONY
Parking Services Coordinator
SORG, DARON
Costume Technician
SPEARMAN, STEPHANIE
Records Specialist
SPENCER, TRELTON
Financial Aid Specialist
STAFFORD, NICKALAS
Custodian

## STERBENS, LAUREN

Sports Information Specialist
STEVENS, MARLIN
Voc. Instr. Tech., Welding
STORER, KEITH
Lab Coordinator, Writing and Reading Success Ctr.
STUART, MARK
Custodial Supervisor I
STUFFEL, NATHAN
Auditorium Technical Coord.

## SUMMERVILLE, ANTIONETTE

Administrative Assistant
SUNLENG, SOTA
Functional Lead Analyst
SWAYNE, VINCENT
Instruct. Aide, Student Success Ctr.
SWEET, BENJAMIN
Technical Support Specialist
SWEET-KELLY, DEBORAH

Sr. Office Assistant

## T

TAMAYO, JANE
Administrative Assistant
TAYLOR, MARKESHA
Child Dev. Center Teacher
TEJADA, JONATHAN
Help Desk Support Specialist
THACH, KYNE
Business Systems Analyst V
THOMAS, JEROME
Media Producer
THOMAS, RYAN
Event and Stadium Maint. Tech.
THOMAS, STARLA
Career and Technical Ed Coord
THOMAS-EDDENS, ERIKA
TRIO Supervisor
THOMPSON, CHARACE L
ERD Education Program Coord.
THOMPSON, JOHN
Director, Fiscal Services
THRIFT-VIVEROS, LOURDES
Child Dev. Center Teacher
TIANPIBOONSIRI, PAUL
College Articulation Spec.
TICZON, ROLAND
Buyer
TITUS, TEDDE
Voc. Instr. Tech., Elect/Electronics
TO, STEVEN
Custodian
TODA, STACEY
Assoc. Director, Comm. and Engagement
TORRES, SANDRA
Payroll Technician
TOUCH, MICH
Instructional Associate
TOUCH, SUNLENG
Sr. Technical Support Spec.
TRAN, CHRISTINE
Admissions and Records Tech. II
TRAN, THOMAS
Instructional Assistant
TREJO, DIANA C

| Payroll Technician | WICKS, CRAIG |
| :---: | :---: |
|  | Custodian |
| TRINH, CONG |  |
| Chemistry Lab Specialist | WILHITE, ALEGRE |
|  | Child Dev. Center Assoc. Teacher |
| TROMBLEY, MONIQUE |  |
| Administrative Assistant | WILLIAMS, ASHLEY |
|  | Administrative Assistant |
| TRUESDELLE, DAWN |  |
| Health Services Technician | WILLIAMS, CHERYL |
|  | Mgr, Facilities Serv \& Grounds |
| TUALA, LEANIVA H |  |
| Instruct Aide-Std Success Ctr | WILLIAMS, RODNEY |
|  | Custodian |
| TURNER, SARAH |  |
| Custodian | WILLIAMS JR., ROLAND |
|  | Custodian |
| U |  |
|  | WILLIAMS-SLAUGHTER, MARIA |
| UMEMOTO, JANINE | Deputy Director, Operations and Maintenance |
| Functional Lead Analyst |  |
|  | WILLIS, PATRICK |
| V | Library Assistant |
| VARELA, YOLANDA Instructional Assistant | WILSON, DANITHIA |
|  | Academic Admin. Assistant |
| Compliance/Access Analyst | WISE, ANDRE |
|  | Custodian |
| VILLANUEVA, SHARON L | WOLFORD III, WILLIAM |
| Cashier | Reprographics and Mail Assistant |
| VIOLA, CHRISTOPHER | WOOD, DOUGLAS |
| Journalism Lab Technician | Equip. Tech., Music/Radio/TV |
| Vo, LEON | WOODSON, DARLENE |
| Web Developer II | Child Care Assistant |
|  | WU, CHING-MIN |
| Deputy Director, User Supp/Web Dev. | Accountant |
| W | Y |
| Admissions and Records Tech. II | YAN LAMBINICIO, SOKHA |
|  | Office Assistant |
| WARD, ANDREW | YLAGAN, DEAN |
| Custodian | Business Systems Analyst IV |
| WARREN, JAMAAL | Z |
| Custodian |  |
|  | ZALE, LAUREN |
| WATSON, GABRIEL | Executive Assistant to Supt.-Pres. |
| Sr. Technical Support Spec. |  |
|  | ZAMUDIO, RENE |
| WATTS, DEBRA | Instructional Lab Support Asst |
| Child Dev. Center Teacher |  |
|  | ZARATE, JESSICA |
| WEBB, NABILA | Payroll Technician |
| Admissions \& Records Tech I |  |
|  | ZHANG, LAURA |
| WELTON, JAMES | Outreach \& Recruitment Spec |
| Custodian |  |
|  | ZUVICH, SCOTT |
| WESTON, JOANN | Web Developer II |

## 2023-2024 FALL CATALOG ADDENDUM

The following changes were made to the online catalog effective for the 2023-2024 Academic Year as of the term specified. An academic year encompasses Fall, Winter, Spring, Summer in that order.

Faculty Approved Modifications

| Item | Description | Effective Date |
| :--- | :--- | :--- |
| AUTO 283 | Course contact hours is now "36 hours of lecture, <br> 54 hours of laboratory" | Fall 2023 |
| CULAR 10, CULAR 20, CULAR 225 | "Proof of TB clearance is required on the first <br> day of class" was removed from the course <br> description | Fall 2023 |
| ECON 1, ECON 1H, ECON 2, ECON 2H | "Based on AB 705 and AB 1705 mandates" was <br> removed from the prerequisite description | Fall 2023 |
| PSYCH 10 | Recommended Preparation was updated to <br> "Qualification for ENGL 1, ENGL 1H, ENGL 1S, or <br> ESL 1S through the LBCC placement process" | Fall 2023 |
| READ 82 | The prerequisite description was updated to <br> "Completion of READ 883AX or qualification <br> through LBCC placement process for Reading" | Fall 2023 |
| Physical Sciences - Associate in Science (p. 264) | Students may use any computer or computer <br> science course to fulfill the computer <br> requirement. | Fall 2023 |

## Catalog Corrections

| Item | Description | Effective Date |
| :--- | :--- | :--- |
| ARCHT 81 | Course is UC Transferable | Fall 2021 |
| LIB 240 and LIB 640 | These courses have no corequisite. They should <br> have a prerequisite of "LIB 200 or LIB 600, and <br> LIB 220 or LIB 620" | Fall 2023 |
| SHOWB 208B | The prerequisite should be SHOWB 208A. | Fall 2022 |
| SHOWB 210B | The prerequisite should be SHOWB 210A. | Fall 2022 |
| SHOWB 212B | The prerequisite should be SHOWB 212A. | Fall 2022 |
| EDUC 20 | Recommended Preparation should say "Eligibility <br> for READ 82 or reading proficiency met and <br> eligibility for ENGL 1, ENGL 1H, ENGL 1S, or <br> ESL 1S." | Fall 2023 |
| PHIL 11 | The prerequisite should be "ENGL 1, ENGL 1H, <br> ENGL 1S, or ESL 1S" | Fall 2023 |
| CAD 221 | Recommended Preparation should be CAD 3. | Fall 2023 |

## Catalog Updates

| Item | Description | Effective Date |
| :---: | :---: | :---: |
| AUTO 293, AUTO 294, AUTO 295, AUTO 296 | New courses added to the catalog. | Fall 2023 |
| BCOM 615, BCOM 621, BCOM 625, BCOM 662, BCOM 663 | New courses added to the catalog. | Fall 2023 |
| COSA 251, COSA 252, COSA 253, COSA 602, COSA 603, COSA 605, COSA 613, COSA 618, COSA 623, COSA 624, COSA 631, COSA 632, COSA 635, COSA 651, COSA 652, COSA 653 | New courses added to the catalog. |  |
| COSN 610 | New course added to the catalog. | Fall 2023 |
| COSK 600 | New course added to the catalog. | Fall 2023 |
| Adobe for Designers - Certificate of Completion (p. 111) | New award added to the catalog. | Fall 2023 |
| AutoCAD Essentials - Certificate of Completion (p. 111) | New award added to the catalog. | Fall 2023 |
| Design Introduction - Certificate of Completion (p. 111) | New award added to the catalog. | Fall 2023 |
| Designing with Rhinoceros - Certificate of Completion (p. 112) | New award added to the catalog. | Fall 2023 |
| REVIT Essentials - Certificate of Completion (p. 112) | New award added to the catalog. | Fall 2023 |
| SketchUp Essentials - Certificate of Completion (p. 228) | New award added to the catalog. | Fall 2023 |
| Solidworks Essentials - Certificate of Completion (p. 228) | New award added to the catalog. | Fall 2023 |
| FCC Amateur Radio Technician Preparation Certificate of Completion (p. 175) | New award added to the catalog. | Fall 2023 |
| Power Generation Technician-Electrical Certificate of Completion (p. 176) | New award added to the catalog. | Fall 2023 |
| Robotics Exploration-Certificate of Completion (p. 176) | New award added to the catalog. | Fall 2023 |
| Educator Workforce Preparation - Certificate of Competency (p. 190) | New award added to the catalog. | Fall 2023 |
| Administrative Assistant, Customer Support Associate in Science (p. 95) | New award added to the catalog. | Fall 2023 |
| Administrative Assistant, Office Support Associate in Science (p. 98) | New award added to the catalog. | Fall 2023 |
| Administrative Assistant, Human Resources Support - Associate in Science (p. 97) | New award added to the catalog. | Fall 2023 |
| Administrative Assistant, Virtual Support Associate in Science (p. 101) | New award added to the catalog. | Fall 2023 |


| Administrative Assistant, Virtual Support Certificate of Achievement (p. 101) | New award added to the catalog. | Fall 2023 |
| :---: | :---: | :---: |
| Interior Design - Certificate of Achievement (p. 229) | New award added to the catalog. | Fall 2023 |
| Family Violence Specialist - Certificate of Achievement (p. 279) | New award added to the catalog. | Fall 2023 |
| Aides, Assistants and Caregivers - Certificate of Achievement (p. 278) | New award added to the catalog. | Fall 2023 |
| Industrial Design - Associate in Science (p. 228) | New award added to the catalog. | Fall 2023 |
| Engineering Technology Advanced - Certificate of Achievement (p. 192) | New award added to the catalog. | Fall 2023 |
| Microsoft Access for Windows - Certificate of Completion (p. 99) | New award added to the catalog. | Fall 2023 |
| Microsoft Excel - Certificate of Completion (p. 99) | New award added to the catalog. | Fall 2023 |
| Microsoft Office - Certificate of Completion (p. 99) | New award added to the catalog. | Fall 2023 |
| Microsoft Outlook - Certificate of Completion (p. 99) | New award added to the catalog. | Fall 2023 |
| Microsoft PowerPoint - Certificate of Completion (p. 100) | New award added to the catalog. | Fall 2023 |
| Microsoft Word for Windows - Certificate of Completion (p. 100) | New award added to the catalog. | Fall 2023 |
| Networking Fundamentals - Certificate of Completion (p. 100) | New award added to the catalog. | Fall 2023 |
| Introduction to Computers - Certificate of Completion (p. 99) | New award added to the catalog. | Fall 2023 |
| Department Head for English (p. 14) | Department Head is now Jason Casem. | Fall 2023 |

## 2023-2024 SPRING \& SUMMER CATALOG ADDENDUM

The following changes were made to the online catalog effective for the 2023-2024 Academic Year as of the term specified. An academic year encompasses Fall, Winter, Spring, Summer in that order.

## Catalog Updates

| Item | Description | Effective Date |
| :---: | :---: | :---: |
| AUTO 611 | New courses added to the catalog. | Summer 2024 |
| AUTO 612 | New courses added to the catalog. | Summer 2024 |
| AUTO 613 | New courses added to the catalog. | Summer 2024 |
| AUTO 614 | New courses added to the catalog. | Summer 2024 |
| AUTO 615 | New courses added to the catalog. | Spring 2024 |
| AUTO 616 | New courses added to the catalog. | Summer 2024 |
| AUTO 617 | New courses added to the catalog. | Summer 2024 |
| AUTO 618 | New courses added to the catalog. | Summer 2024 |
| AUTO 619 | New courses added to the catalog. | Summer 2024 |
| COUNS 3 | New courses added to the catalog. | Summer 2024 |
| CHEM 602 | New courses added to the catalog. | Summer 2024 |
| UC Transferable Courses | The following courses are approved for UC transfer: CS 61, ENGL 15, ENGL 16, ENGL 17, GEOL 20. | Fall 2023 |

## Catalog Corrections

| Item | Description | Effective Date |
| :--- | :--- | :--- |
| AutoCAD Essentials | The correct plan code | Fall 2023 |
| - Certificate of | number should be |  |
| Completion (p. 111) | 6044. |  |

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# Li Long Beach <br> CITY COLLEGE 

Liberal Arts Campus<br>4901 East Carson St.<br>Long Beach, CA 90808

## Pacific Coast Campus

1305 E. Pacific Coast Highway
Long Beach, CA 90806

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[^0]:    ${ }^{1}$ 2021-22 CSU GE-Breadth (Plan B): Published July 2021 Long Beach City College Office of School and College Articulation.

[^1]:    ${ }^{1}$ 2021-2022 IGETC (Plan C): Published: July 2021 Long Beach City College Office of School and College Articulation.

[^2]:    - The Vice President of Academic Affairs is responsible for the establishment of appropriate standards for the acceptability of transfer credit.
    - The Executive Dean of Enrollment Services is responsible for enforcement of the standards of acceptability and for maintaining appropriate records of all transfer credit.
    - Transfer credit, if otherwise appropriate, shall only be accepted from colleges and universities that have been properly accredited by a federally authorized regional accreditor. The acceptable accrediting bodies are the Middle States Association of Colleges and Schools, North Central Association of Colleges and Schools, Southern Association of Colleges and Schools, New England Association of Schools and Colleges, Northwest Association of Schools and Colleges, the Western Association of Schools and Colleges, and the Accrediting Commission for Community and Junior Colleges.

[^3]:    Plan Code: 4061

[^4]:    Plan Code: 6000

[^5]:    Plan Code: 3523
    This program provides students with a fundamental knowledge of the engineering technology field, engineering design, principles of

[^6]:    ${ }^{1}$ Units for the major may be double-counted for IGETC; see counselor for limitations.

[^7]:    - Demonstrate the ability to program an automated robotic welding system.

[^8]:    R_TV 2
    Intro to Careers in Radio \& Television (2)

[^9]:    I Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.

[^10]:    AH 2851 units
    Health Care CPR and Vital Signs
    18 hours lecture, 9 hours laboratory
    Grading: letter grade.
    This course is designed for students entering a healthcare field. Topics covered include Health Care provider CPR, including Automatic Defibulator training, and assessment of vital signs and their significance in patient care.

[^11]:    EWRC $899 \quad 0.5$ units
    English Adjunct
    4 hours lecture, 16 hours laboratory
    Grading: pass/no pass.
    Formerly EWRC 899AD. This course offers instruction and practice in writing and research skills and is available to students enrolled in classes in any discipline. The class may provide instruction in the writing process (prewriting, planning, and editing), and in research and writing strategies. Instruction may focus on any aspect of writing from generating ideas or conducting research to organizing research notes or writing a bibliography.

