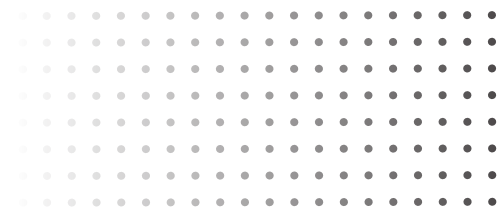LB™
LONG BEACH
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LONG BEACH
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2019–2020 CATALOG

LONG BEACH
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2019-2020
College Catalog

www.LBCC.edu

Inside this 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 AcademicServices@lbcc.edu.

Members of the 2018-19 College Catalog Work Group

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Elijah Sims

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 Superintendent-President.

While you are here, we hope that you will take full advantage of our excellent programs and courses taught by some of the best faculty members of any college, anywhere. You will also see our campus improvements in full swing. Thanks to the support of our community, through bond measures, we are transforming both campuses with state-of-the-art learning facilities to prepare our students to meet the challenges of the 21st Century economy. And we are proud of our active and vibrant Student Life that will help enrich your experience here at LBCC.

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 more than 90 years, 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. Reagan Ferragamo Romali
Superintendent-President
Long Beach Community College District

Academic Senate Message

Welcome to Long Beach City College. The faculty at LBCC is dedicated to providing you with the knowledge and skills that you will need to be successful in your chosen profession. Certificate programs provide the foundation for you to begin, change, or advance in your career. Associate degrees and transfer-level courses are available if you are seeking a degree and/or wish to transfer to a university upon completion of your studies at LBCC. Counseling and other student service programs are available to help you select your course of study and ensure you make the most of your time at the college.

The faculty is honored to share in your educational endeavors and we all look forward to meeting, talking, and working with you. We are here to support you in the pursuit of your academic and personal goals.

Jorge Ochoa
Academic Senate President

2019-2020 Academic Calendar*

Summary Sessions 2019

June 12	First five week session begins
June 19	Six and eight week sessions begin
July 17	Second five week session begins
Finals	All final exams are the last scheduled day of class

Fall Semester 2019

August 26	Fall classes begin
September 26	Flex Day – No classes
Finals	All final exams are the last scheduled day of class
December 14	Fall Semester ends
December 15 - February 5	Winter Recess

Winter Intersession 2020

January 2	Winter Intersession begins
Finals	All final exams are the last scheduled day of class
February 5	Winter Intersession ends

Spring Semester 2020

February 6	Spring classes begin
March 19	Flex Day – No classes
April 5-12	Spring Break – No classes
Finals	All final exams are the last scheduled day of class
June 3	Spring Semester ends
June 4	Commencement

Holidays (No classes are in session)

July 4, 2019	Independence Day
September 2, 2019	Labor Day
November 11, 2019	Veterans Day
November 28-29, 2019	Thanksgiving Holiday
January 20, 2020	King's Day observed
February 14, 2020	Lincoln's Day observed
February 17, 2020	Washington's Day observed
May 25, 2020	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.

2019-20 Catalog Table of Contents

General Information

College Mission and Values

Mission

Long Beach City College is committed to providing equitable student learning and achievement, academic excellence, and workforce development by delivering high quality educational programs and support services to our diverse communities.

Values

Long Beach City College is:

- **Purposeful**
  The College provides students clear pathways and support to attain their career and educational goals.

- **Focused**
  The College embraces a long-term commitment to innovative student success.

- **Nurturing**
  The College provides an environment in which students, faculty, and staff build relationships that are understanding and supportive.

- **Connected**
  The College is recognized as integral to an inclusive, vibrant, and prosperous local, regional, and global community.

- **Respectful**
  The College values and celebrates the exemplary contributions of faculty, staff, and its community partners in supporting students.

College Organization

BOARD OF TRUSTEES

Member Trustee Area 1	Uduak-Joe Ntuk
Member Trustee Area 2	Vivian Malauulu
Member Trustee Area 3	Sunny Zia
Member Trustee Area 4	Douglas Otto
Member Trustee Area 5	Dr. Virginia Baxter
Board Secretary	Jackie Hann
Superintendent-President	Dr. Reagan Romali

SUPERINTENDENT-PRESIDENT OFFICE

Superintendent-President	Dr. Reagan Romali
President's Office Director	Jeff Wood
Executive Director, Foundation	Elizabeth McCann
Director of Planning	Jennifer Holmgren

EXECUTIVE COMMITTEE

Executive Vice President, Academic Affairs	Dr. Kathleen Scott
Vice President, Student Support Services	Dr. Mike Muñoz
Vice President, Finance, Facilities & Technology	Marlene Drinkwine
Interim Vice President, Human Resources	Gene Durand
Interim Associate Vice President, PCC	Dr. Paul Creason

ACADEMIC AFFAIRS

Executive Vice President, Academic Affairs	Dr. Kathleen Scott
Dean, Academic Affairs	Michelle Grimes-Hillman
Associate Dean, Academic Affairs	Kenna Hillman
Director, Workforce Development	Melissa Infusino

Academic Services

Director	Brent Gilmore

Career Technical Education (CTE)

Dean	Gene Carbonaro
Associate Dean	Anthony Pagán

The Career Technical Education departments include:

Child Development and Educational Studies

Department Head	Dana Van Sinden

Family & Consumer Studies

Department Head	Michelle Fino

Culinary Arts

Department Head	Haley Nguyen

Public Services

Department Head	Michael Biggs

Computer and Office Studies

Department Head	Miriam Valeschini-Lynch

Trades & Industrial Technology
Department Head   Scott Fraser

Health, Kinesiology, Science & Mathematics
Dean   Vacant
Associate Dean   Moises Gutierrez

The Health, Kinesiology, Science & Mathematics departments include:

Life Sciences
Department Head   Heather Dy

Physical Sciences/Geography
Department Head   Mary Perrot

Math & Engineering
Department Heads   Ladera Barbee and Jami Emigh

Allied Health
Department Head   Jim Steele

Associate Degree Nursing
Department Head   Sigrid Sexton

Vocational Nursing
Department Head   Rhonda Alger

Kinesiology & Health Education
Department Head   Grace Pokorny

Institutional Effectiveness
Dean   Heather Van Volkinburg

Language Arts & Communication
Dean   Lee Douglas

The Language Arts and Communication departments include:

Reading
Department Head   Tiare Hotra

English
Department Head   Rodney Rodriguez

ESL, American Sign Language (ASL) and Linguistics
Department Heads   Baruch Elimelech

Foreign Language
Department Head   Cynthia Quintero

Communication Studies
Department Head   Samira Habash

Learning and Academic Resources
Department Head   Vacant

Library

Department Head   Ramchandran Sethuraman

Social Sciences and Arts

Dean   Elisabeth Orr

The Social Sciences and Arts departments include:

Visual & Media Arts

Department Head   Sarah Vure

Performing Arts

Department Head   Cathy Crane

Social Sciences

Department Head   Debra Whittaker

Business Administration & Economics

Department Head   Myke McMullen

History & Political Science

Department Head   David Lehman

FINANCE, FACILITIES, AND TECHNOLOGY SERVICES

Vice President, Business Services   Marlene Drinkwine

Fiscal Services

Director, Fiscal Services	John Thompson
Budget Officer, Fiscal Services & Payroll	Sem Chao
Deputy Director, Finance & Accounting	Cindy Baker
Payroll/Benefits Manager	Malu Miranda
Store Manager, Bookstore	Harold Taylor
General Manager, Bookstore at LAC	Dana Heathcott
Bursar	Stacey Robinson
Accounting Supervisor	Conrrado Duran

Facilities

Senior Director, District Facilities	Vacant
Interim Deputy Director, Planning and Construction	Brendan Hayes
Manager, Maintenance and Operations	Michael Burke
Manager, Facilities Maintenance	Sean Michael
Deputy Director, Facilities, Rentals and Grounds	Sean Rivell
Grounds and Transportation Supervisor	Chris Baker

Business Support Services

Deputy Director, Purchasing & Contracts	Alan Moloney
Manager, Environmental Safety and Parking Services	Vacant
Manager, Mail and Reprographic Services	Nate Jarrett
Manager, Warehouse Logistics	Ricardo Harris
Coordinator, Risk Services	Cindy Smith

Instructional and Information Technology Services (IITS)

Chief Information Systems Officer	Sylvia Lynch
Director, Applications Development & Support	Robert Carman
Associate Dean, Online Learning & Educational Technology	Hussam Kashou
Deputy Director, Network Services	Mark Guidas
Deputy Director, Academic Computing & Multimedia Services	Tim Heffern
Deputy Director, User Support & Web Development	Scott Voelker
Deputy Director, Web and Mobile Services IITS	Vacant

ECONOMIC DEVELOPMENT DIVISION

Executive Director, Small Business & Entrepreneurship Programs	Patrick Nye
Associate Director, 10,000 Small Businesses	Cheryl Melendez
Alumni Manager, 10,000 Small Businesses (10KSB)	Sharon Peterson

PUBLIC AFFAIRS AND MARKETING

Executive Director, Public Affairs and Marketing	Joshua Castellanos
Director, Community Relations and Enrollment Development	Marcia Parker
Associate Director, Communications & Community Engagement	Stacey Toda

HUMAN RESOURCES

Vice President, Human Resources	Gene Durand
Interim Associate Vice President, Human Resources	Kristin Olson
Interim Executive Director, Human Resources - Classified	Caroline Chretien-Shook

STUDENT SUPPORT SERVICES

Vice President	Dr. Mike Muñoz

Athletics

Interim Athletics Director	William Husak
Athletic Coordinator, Student Athlete Success Center	Mary Hegarty

Career Pathways Support Services

Career Pathways Manager	Lizzette Villegas

Counseling and Student Support Services

Dean	Nohel Corral
Interim Director, Categorical & Special Programs (DSPS)	Maria Ewell
EOPS Manager	Jason Avila
Assistant Director, CalWORKs	Margaret Antonio-Palomares
Intervention Coordinator, Student Success & Support Services	Elijah Sims
Associate Dean, Student Success & Support Services	Sonia de la Torre-Iniguez
Coordinator, Transfer & Career Services	Ruben Page
TRIO Project GO Supervisor	Erika Thomas-Eddens

Enrollment Services

Executive Dean	Susan Bricker
Deputy Director, Enrollment Services	Juan Franc Menjivar
Senior Director, Financial Aid	Yvonne Gutierrez
Enrollment Services Supervisor	Cherri Phillips
Enrollment Services Supervisor (Foster Youth)	Michele Pope
Veterans Resource Center Advisor	James Martinez
American Language & Culture Institute Coordinator	Katherine Murrin
Associate Director, Scholarship & Outreach	Shyra Compton
Upward Bound Supervisor	Wendy Porter-Coste
Articulation Officer	Trevor Rodriguez

Student Affairs

Interim Dean	Alisia Kirkwood
Director, Student Health Services, Psychological Services, and Student Life	Debra Miller-Calvert
Lead Nurse/Nurse Practitioner	Marianne Palacios
Director, Student Discipline & Student Life	Joshua Williams
Coordinator, Student Life and ASB Advisor	Teila Robertson

College History

For more than 90 years, Long Beach City College 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 92 state championships, more than any other community college in California.

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 21st 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.

Most 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.

Senior Studies Program

The LBCC Senior Studies Program provides fee-based programs for adults. We offer classes 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. For further information, call 562-938-3048.

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

Online Learning courses are designed to be equivalent and comparable to their on-campus courses' 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 walk-in 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 a 24/7 online reference desk, resources, and electronic databases and catalog access. For more information, visit http://www.lbcc.edu/dl, call 562-938-4818, or email dl@lbcc.edu.

LBCC offers two types of Online Learning courses:

1. **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 e-mail 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.

2. **Hybrid Courses:** Hybrid courses meet partially online and include some required on-campus meetings. The on-campus meetings may be regularly or irregularly scheduled. Students can access the online portion of 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.

Student Technology Help Desk (STHD)

The Student Technology Help Desk (STHD) supports LBCC students in accessing and successfully using LBCC technology, including support for single sign-on passwords, Learning Management System, Office 365, and more. 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, and in-person. To contact the STHD, call 562-938-4250 or email sthd@lbcc.edu. To learn more about the STHD, including policies, areas of support, and overall mission, visit www.lbcc.edu/sthd.

Admissions to Long Beach City College

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 students who qualify for dual enrollment
  OR
- International Students with a valid Visa

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 Long Beach City College. 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. 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 K-12, who have not earned high school diplomas, and who may benefit from advanced scholastic or career technical work.

High School Students

Through dual enrollment, LBCC offers high school/K-12 students the opportunity to accelerate in 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 in each Fall and Spring semester, or 5 units in Winter and Summer intersessions. A GPA of 2.0 or better at LBCC is required to continue as a dual enrollment student. Credit for a college course is awarded through a college transcript after successful completion of a course. 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 two different tracks for high school students who wish to enroll at LBCC:

Individual Dual Enrollment is for high school 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 Admissions & Records at 562-938-4485 or visit room A-1075 (LAC) or GG-102 (PCC).

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 and the Long Beach Unified School District. ECPP students participate in specially-selected courses and student support services designed for college and career preparation. For more information, contact Career Pathways Support Services at 562-938-4741 or visit room AA-109 (PCC).

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 (F-1, M-1) must have the international admission application files completed through the International Student Programs Department. No I-20 will be issued until all requirements are met. Contact the International Student Programs Department for more information at 562-938-4747 or visit 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

LBCC welcomes international students to enroll in the American Language and Culture Institute (ALCI), an intensive English program, or in the regular college academic and certificate programs.

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.

American Language and Culture Institute (ALCI) – Intensive English Program

Admission Procedures

The American Language and Culture Institute (ALCI) offers students the opportunity to acquire or improve English language skills rapidly through intensive study enhanced by small class sizes and opportunities for cultural immersions. The ALCI enrolls adults 18 years and older, of all backgrounds, and all levels of English proficiency. It combines in-class instruction with explorations of American culture and Southern California's dynamic blend of arts, sports, and entertainment.

The program is offered in eight-week sessions:

1. Two sessions in the Fall Semester
2. Two sessions in the Spring Semester
3. One Summer Session

Whether students want to master English to complete an associate degree, transfer to a U.S. university, travel in English-speaking countries, or improve English language business and professional skills, the LBCC ALCI can help them to reach their goals. The ALCI is a great first step toward bridging over to LBCC's regular college program while having the college life experience.

Applications for admission to ALCI can be submitted online at www.lbcc.edu/post/international-student-program-requirements. ALCI applicants do not need to submit proof of English proficiency.

Tuitions and Fees:

Tuition is $1,800.00

Session additional fees include the following:

1. $75.00 Cultural Enrichment Activities fee
2. $20.00 Student ID card
3. $30.00 Campus Parking Fee
4. $40.00 Health Insurance Fee

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 www.lbcc.edu/post/international students

2. Application fee of $40 can be paid online (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. LSI – (Level 6)
   h. TOEIC – (550 or higher)
   i. ELS – (Level 109)
   j. STEP Eiken – (Level 2A)

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
   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 I-20

7. Email all required documents to international@lbcc.edu

Tuition and Fees:

- International Student Tuition fee (Nonresident Enrollment fee).

- Other fees and expenses including 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.

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.

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, residence is that of the parent with whom the minor last lived. The minor may establish residence of his or her 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 Enrollment Services Office. Residency appeals must be filed no more than two weeks 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.

Matriculation, Formerly Student Success and Support Program (SSSP)

Matriculation supports the transition of students into college by facilitating completion of entry services such as placements for course orientation, counseling for educational planning, and referral to specialized student support service to assist students in making informed decisions about their educational goal or course of study.

New students are required to complete the following core services in order to receive priority registration: placement for course enrollment, orientation, and educational planning. Counselors will create an abbreviated education plan, informed by the students' chosen program of study (major). Subsequently, students should meet with a counselor to create a comprehensive educational plan that includes all requirements necessary to achieve their educational goal at LBCC. Students may complete this requirement by attending an educational planning workshop, scheduling an appointment with a counselor, or enrolling in a COUNS 1 course.

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

College's Responsibility

In accordance with the Student Equity and Achievement Program, the college provides guidance to students by evaluating basic skills, helping to place students in courses where they will experience the greatest possible success, aiding students in developing educational plans, and providing the services to assist students in achieving their goals.

Student's Responsibility

All new non-exempt students must complete matriculation core services before they enroll. Students must identify a specific educational goal or major. Students must also demonstrate diligence in class attendance, completion of assigned coursework, and maintenance of progress toward an educational goal.

Components of Matriculation

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
- Orientation to the college's programs and services
- Counseling to receive assistance with course selection and planning of an educational goal

Support Services are also available to help students achieve their educational goals (see Component Exceptions section below)

Requirements

All new non-exempt students must complete matriculation components before they enroll.

Matriculation Components

Below is the exception process and district policies as it pertains to matriculation.

All students must participate in these components; unless granted an exception.

- **Orientation, Assessment and Counseling**
  Any student who feels that they are exempt from any of these components may appeal by filing a Matriculation Component Waiver form, which is available in the Matriculation Office. These exemptions do not provide clearance for enrollment into specified English, math, reading, or ESL courses. The waiver will be reviewed by the Matriculation Office, and the student will be notified of the decision by email. Students exempted from orientation are encouraged to participate in a previously waived component.*

- **College Assessment Test**
  LBCC does not administer a formal assessment to determine course placements in English, reading, math and ESL. Rather, LBCC uses information that is gathered at the time of application, or through a high school transcript, to create placements for a student. 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.

Appeals of Initial Placement Recommendation: A student may appeal an initial placement recommendation in English, math, reading, or ESL by completing the Placement Appeal form available at the Matriculation Office, the counseling department, or the respective academic department. The student will be notified of the appeal decision by email.

*Students granted an exemption are still encouraged to complete components as they are designed to support their transition and academic success.

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 demonstrate that 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:
   - Performance or activity classes
   - Classes for advancement in their current job/career update job skills
   - Community and Contract Education classes

Student Rights and Matriculation

A student may initiate a complaint against LBCC matriculation practices by filing a complaint form, which is available at the Matriculation Office. Complaints will be directed to the Dean of Counseling and Student Support Services, who is responsible for investigation and resolution of such complaints. The dean will maintain a file on all formal complaints.

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 at LBCC by providing priority enrollment to groups of students with special needs or who are in continuing student status, as long as 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.

Student Grievance Policy

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. For specific information on both policy and process for student grievances, contact the area department chair or manager or the area dean where the grievance took place. If the complaint is one of abuse, it should be referred directly to Human Resources.

Complaints

Students with complaints, including but not limited to curriculum, class scheduling, faculty, or staff, should be referred to the area department chair or manager or the area dean and, if necessary, Human Resources.

If the complaint is one of abuse, it should be referred directly to Human Resources.

Procedures for Application to School of Health and Science Programs 2019-2020

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 and are evaluated compared with the other students applying at the same time. For information about applying to Allied Health Programs visit www.lbcc.edu/alliedhealth. For information about applying to the Vocational or Associate Degree Nursing Programs visit www.lbcc.edu/department-nursing.

Registration Procedures

Students are responsible for officially enrolling in classes. A student may not attend any class unless he or she is properly registered in that class. Registration may be done online or on a walk-in basis. 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.

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 $225.00 per unit plus the normal enrollment fee of $46 per unit and a capital outlay surcharge of $49 per unit, for a total of $320.00 per unit. This rate is subject to change without notice.

- **Books, Supplies and Course Materials Fees:**
  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 sessions.

- **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.

- **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, refuse to release transcripts, 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 filed a drop through the Admissions Office, or via 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 the student 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 Enrollment Services Management Team shall consider all appeals for refunds of tuition and enrollment fees due to extenuating circumstances. Administrative Regulations 4020.3: 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 may be completed via the online student self-service portal, or in the Admissions and Records Office. Name changes must be completed in-person with legal documentation showing the new name. 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.

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 he or she needs 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.

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 his or her 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 federal mandated requirements. The student will be notified by mail to the last address on file in the event of a subpoena. The student 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.

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. Safety and 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 Finance, Facilities, and Technology Services.

Under the auspices of the Long Beach Police Department College Unit, monthly crime reports are compiled and available for both students and employees.

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 www.lbcc.edu/safety-emergency-services.

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.

General Police Services – 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

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 30-minute counseling appointment. Additionally, Express or First Come First Serve counseling sessions are available in 10-minute segments on a walk-in basis. Career counseling services will assist students through the career exploration and decision-making process.

Students may schedule an appointment in person at A-1111 (LAC) or GG-202 (PCC), or by phone at 562-938-4561 (LAC) or 562-938-3920 (PCC), or online at www.lbcc.edu/counseling/. For counseling hours at either campus, check the LBCC website under the A-Z directory.

Online counseling services are also available as a flexible alternative to meeting with a counselor in person. Students may meet with a counselor via webcam, online, express or online chat. General questions may also be answered via email. Visit the Online Counseling website at www.lbcc.edu/online-counseling or access it directly from the LBCC website at www.lbcc.edu and click on Online Counseling.

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 or 562-938-3185 (LAC) or visit www.lbcc.edu/child-development-center.

Transfer Center

The Transfer Center serves as a welcoming home for students who have dreams of pursuing a university education after LBCC. Transfer application assistance is available for CSU, UC, private, and out-of-state universities. Other services available include university representative appointments, university tours, university transfer fairs, and special topic transfer workshops and events. The Transfer Center is located in A-1097, 562-938-4670 (LAC) and EE-105, 562-938-3916 (PCC).

Visit www.lbcc.edu/transfer-center for useful university links, regular transfer updates, valuable transfer resources, and updated hours of operation. The Transfer Center is here to motivate LBCC students to pursue and complete their university transfer goals through a community of support and a wide range of services.

Career Center

The Career Center is co-located with the Transfer Services Center at LBCC. The Career Center offers individuals with services designed to guide them with the 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 supports 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 21st century workforce. Counselors and staff are available to assist students. The Career Center is located in A-1097, 562-938-4670 (LAC) and EE-105, 562-938-3916 (PCC). Visit www.lbcc.edu/career-center for important career resources, access to an employment database, explanation of services, and current hours of operation.

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.

- **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 co-curricular programs. Students interested in participating

in student government, including the Associated Student Body Cabinet or PCC Student Council, may wish to consider one of the many elected or appointed positions. The ASB is funded by the College Services Card.

- **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.

- **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.

- **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).

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. LBCC 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 LBCC 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.

- **Building the Entrepreneurial Ecosystem:** Accelerating the development of high-growth start-up businesses with targeted education and mentoring and connecting entrepreneurs to resources and funding networks to foster job creation.

WEDD develops and maintains collaborative partnerships with regional industries to ensure the

college's business and professional development courses and training programs meet or exceed industry standards. The division is also recognized for innovative customized training for business and industry, technical assistance, and employee assessment and skills development programs. For more information, call 562-938-5020.

Workforce Development

Workforce Development actively creates partnerships with industry to develop customized training and professional development for individuals and businesses to help meet the needs of regional employers. Workforce development integrates job search activities using interest postings from Indeed as well as industry partner job postings.

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 ($20 per semester) can 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:

- Accute 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.

Social and Emotional Health Services:

- 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

Evening Safety Escorts

Safety escorts are available to students at both LAC and PCC. Students should call the City College Unit through the general service 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, H, M, P, and Veterans Stadium. Two machines are located on each level of the parking structure. The PCC machines are located in Lots 1, 2, 5, and 10.

- 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 and in Lot 7 at PCC.

- Semester parking permits must be attached to either the rear view mirror, so that they are visible from the front of the vehicle, or on the lower left corner, or driver's side, of the front windshield. One-day parking permits must be placed in plain view on the vehicle dashboard with the permit facing upward. Students who are having difficulty displaying a permit should go to the College Police for assistance. Students driving a convertible-type vehicle can obtain a special convertible permit from the LAC College Police located in Building X. This special convertible permit can only be obtained after the purchase of a semester parking permit.

- 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.

- 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 6). 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 visit 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.

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 his or her 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.

The application process for financial aid begins with completion of the Free Application for Federal Student Aid (FAFSA), which is available on October 1 for the following Fall semester. Students may apply online at www.fafsa.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

- Certify compliance with selective service registration requirements

- 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.

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. Pell Grants are limited to 6 years or 12 full-time 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* and must be given to maximum Pell Grant recipients.

The Federal Work Study Program (FWS)

This federally funded program provides employment opportunities* 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.

*FSEOG and FWS funds are limited and early application is strongly advised.

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.

California State Financial Aid Programs

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 Cal-WORKs, 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.

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 www.csac.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 on the basis of 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 on-time 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 $1,298 annually at six hundred forty-nine dollars ($649) per semester, or quarterly equivalent, for eligible students who enroll and attend 12 through 14.99 units per term.

A maximum of $4,000 annually at two thousand dollars ($2,000) per semester, or quarterly equivalent, for eligible students who enroll and attend 15 units per term.

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 www.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 to read more about these awards.

Return of Title IV Funds Policy

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, or are 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.

Withdrawals

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 does not officially withdraw from all classes but fails to earn a passing grade in at least one course, federal aid regulations require that we assume 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 him/her, the institution would owe the student a post-withdrawal disbursement 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

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

Veterans Service Office (VSO)

The VSO provides an office of support for active military, veterans, and their dependents by offering assistance with processing VA Educational Benefits, Educational Counseling, Financial Aid, and Enrollment at LBCC. Additionally, the VSO has partnered with multiple national, state, and community resources to offer additional non-educational benefits to assist student veterans with their transition and success at LBCC. (Limited Service at the PCC campus.)

Veteran Services Office	VSO Outpost
Liberal Arts Campus	Pacific Coast Campus
Room E-08L	Room GG-102
562-938-4162	

G.I. Bill

Qualification for a G.I. Bill® 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® and enrolled in appropriate courses, they must complete a Request for Certification of Benefits at 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/Foundation Financial Scholarships

LBCC 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/Foundation Office is located in A-1001 (LAC). For more information on scholarships visit www.lbcc.edu/scholarship.

Rotary Club Honors Scholarships

Each year the Long Beach Rotary Scholarship Foundation awards Rotary Honor Scholarships to Long Beach Unified High School students who will be attending LBCC. Recipients must maintain a 3.0 GPA or higher and be enrolled in the Honors Program once they attend LBCC. Scholarship applications are available in September at www.lbcc.edu/scholarship.

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, 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 or the California Dream Act financial aid application available at www.csac.ca.gov.

- **EOPS Eligibility:** Students must be California residents, not have completed more than 55 degree-applicable units, be enrolled full-time, be eligible for the California College Promise Fee waiver, and meet the educationally disadvantaged criteria.

- **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 households, participating in the county CalWORKs/GAIN program, have at least one child 13 years of age or younger, 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 a current or former California foster youth active within the system after the age of 16, be under 26 years of age and enrolled in at least nine (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 In-service training. KEPS Orientation is offered to support relative care providers with their involvement with child protective services. For more information, call 562-938-3144 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 work-study 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 CalWORKs services, office hours, and location, visit 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 programs and activities. These services include the following:

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

- Learning disabilities assessment - Diagnostic assessment services for the presence of a specific learning disability using the eligibility model 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 their 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, use of readers/scribes, or other appropriate forms of assistance.

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 562-275-7471 (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, 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 this office at 562-938-4558 (LAC) or 562-938-3921 (PCC).

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 room 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, prepares 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. These courses are offered free (except for any applicable materials fees) and do not provide credit toward a degree.

Long Beach College Promise

The Long Beach College Promise extends the promise of a college education to every student in the Long Beach Unified School District to create a more vibrant community. The Promise 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 Promise creates a culture of college expectation, increases college readiness and improves graduation rates among Long Beach students and raises the educational attainment rates of the entire Southern California region.

Fueling The Promise 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.

Beginning Fall 2019, the Long Beach College Promise 2.0 is an optional program for Long Beach Unified School District graduates who pledge to follow an admission pathway to California State University, Long

Beach (CSULB) based on their intended major.

Long Beach College Promise 2.0 participants will receive the following benefits:

- Specialized advising/counseling and programming at LBCC
- Two years of free tuition at LBCC
- Receipt of "Future Student" CSULB ID Card
- Participation in select CSULB campus events by special invitation

In order to participate in the Long Beach College Promise, students must:

- Apply for FAFSA or the CA Dream Act
- Be a first-time, full-time college student
- Enroll in LBCC for the Fall semester immediately following graduation from high school

Second year tuition is supported by generous donations from the Long Beach College Promise Scholarship raised through the LBCC Foundation.

The Long Beach College Promise Scholarship covers the following fees:

- Fall enrollment (unit) fee
- Spring enrollment (unit) fee for students who pass 9 units or more with a GPA of 2.0 or better during the previous Fall semester

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 mentoring and academic counseling, participate in a motivational conference, cultural events, UC/CSU field trips, Noche De Familia, and Puente Familia. Puente is open to all students. For more information call 562-938-3016 or 562-938-3095.

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.

Trio Program - Upward Bound

The Upward Bound Program provides fundamental support to participants in their preparation for college entrance. The goal is to prepare high school students from the Long Beach Unified School District area as they enroll in and successfully complete a post-secondary education program. The Program accomplishes this objective by enhancing participants' academic skills, personal motivation, and confidence needed to succeed in college. Upward Bound strives to develop students' strong academic skills; effective communication and leadership skills; creative and critical thinking skills; a positive self-image; a positive attitude toward learning; and respect and sensitivity for others. Participants also receive high school elective credits that count toward graduation. The program offers two components:

1. **Academic Year Session** (Sept. - June) with 22 Saturday sessions that include academic instructions in English, math, science, study skills, SAT preparation; self-building activities, college tours; and educational and multicultural activities. Yearly academic activities also include after school tutoring and academic advisement.

2. **Six Week Summer Session** (June - Aug.) that provides a real "college experience" by allowing participants to live on a local college campus and take college-style courses. This component is a rigorous academic program designed to enhance each student's abilities in the classroom and their self-confidence. Students have the opportunity to take part in a variety of academic classes such as Composition & Literature, Foreign Language, Math, and Laboratory Science.

Umoja Scholars Program

Umoja, (a Kiswahili word meaning unity) is a 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 students receive academic counseling, participate in a motivational conference, cultural events, and may 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- 3159 or email lroper@lbcc.edu.

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 race, religious creed, color, national origin, ancestry, gender, sexual orientation, age, disability, marital status, medical condition, mental or physical disability including HIV and AIDS, 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. This site contains valuable information about ways to avoid rape, what to do in a risky situation, and what to do in case of rape.

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 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 Resources

Libraries

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.

LAC & PCC Multidisciplinary Student Success Centers

Liberal Arts Campus
L-212
562-938-4699

Pacific Coast Campus
EE-206
562-938-3991

For more information, visit www.lbcc.edu/student-success-centers.

The Multidisciplinary Success Centers provide:

- Supplemental Learning Assistance
- Workshops on a variety of topics
- Tutoring
- Adult Basic Education
- Test preparation - College Assessment
- TEAS preparation
- Basic Skills Development

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.

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 in an open, inviting learning environment. Some math classes require students to complete various supplemental learning assistance activities as part of their class grades. These activities can be completed at the Math Success Center at LAC under the direct supervision of math faculty.

Additionally, the Center provides 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. Math faculty are available for supplemental instruction.

The Center houses state-of-the-art computers to provide students with a broad range of educational tools. With PC workstations, students can access a variety of software that includes word processing, graphics, spreadsheets, statistics, Geometers' Sketchpad, and Mathematica. Software is available that allows students to see filmed lectures on most math topics that are mentioned in their textbooks.

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

Writing and Reading Success Center

Liberal Arts Campus
E-09L
562-938-4520

The Writing and Reading Success Center (WRSC) is located in the lower level of the E Building. The WRSC offers supplemental learning assistance activities for English and reading classes. These activities may be accomplished in an instructor-guided, one-hour workshop format; in a tutor-facilitated, one-hour directed study group (DSG) format in which a small group of students work on the activity collaboratively with the assistance of a trained tutor; or in a directed learning activity (DLA) format in which the student first works alone on the activity and then an instructor or trained tutor reviews his or her work.

The WRSC also offers free tutoring for any subject requiring writing or reading assistance. 30-minute appointments and 15-minute drop-ins are available. Visit the WRSC website for more details.

Appointments are necessary for all workshops and DSGs, but when space is available, walk-ins are welcome. The WRSC also features a computer lab, pay-for-print services, and a wide range of written, online, and audiovisual materials for student use. For more information, visit www.lbcc.edu/writing-and-reading-success-center.

Nursing and Allied Health Learning Center and Skills Lab

Liberal Arts Campus
C-304
562-938-4299

The Nursing and Allied Health Learning Center and Skills Lab provides 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 health care scenarios in a controlled setting. Many nursing courses utilize simulation to facilitate learning.

Foreign Language Lab

Liberal Arts Campus
M-103

Pacific Coast Campus
EE-204 and EE-205

The Foreign Language Lab offers linguistic support for students enrolled in foreign 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 foreign language websites.

The Lab has open lab hours during which time students can work on their foreign language online assignments or access additional online resources. Visit the college website for more information.

A multimedia presentation practice room is available at the LAC campus by appointment for students wanting to practice, view, and record their classroom presentations.

English as a Second Language Learning Center

Pacific Coast Campus
LL-216
562-938-3255

ESL Tutoring and Support: The English as a Second Language Learning Center is available to all students enrolled in English as a second language courses. The Center provides students with tutoring assistance by ESL professors and instructors, assistance with coursework, homework, technical help with research projects, and free workshops.

The Center supports students with English grammar, speech, reading, and writing and provides assistance with class research projects. Students may enroll in ESLLC 699 at the ESL Learning Center, or register in the ESL office in room LL-211. For more information, visit www.lbcc.edu/post/esl-learning-center.

Academic Computing Centers

Liberal Arts Campus
L-251
562-938-4854

Pacific Coast Campus
LL-122
562-938-3094

Macintosh and PC computers, software, laser printers, and Internet access are available to students in large open-access computer labs at both campuses. Students wishing to use the computing centers must have a current student ID card or a current printout of their classes.

Student Technology Help Desk (STHD)

The Student Technology Help Desk (STHD) supports all LBCC 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, and in person. All assistance provided is free for LBCC students.

Please visit www.lbcc.edu/sthd for information on pop-up help desk locations throughout the semester and how-to quick guides. For more information, call 562-938-4250 or email sthd@lbcc.edu.

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 562-938-4669.

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.

Multimedia Presentation Practice Room

A multimedia 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 562-938-4972.

Academic Policies

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.

Class 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, and student learning outcomes.

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 Regulation 4020.3. 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 will be required for all 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.

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 Numbering System

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

1-599	Applicable to associate degree
1-99	Transferable for at least elective credit to any college having similar courses in its lower-division curriculum.
100-199	Courses not intended for transfer but may meet a limited number of requirements for the A.A./A.S. Degrees.
200-299	Occupational courses intended to prepare students for immediate job entry.
300-399	Short term or short unit courses which parallel other 1-400 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 credit and for which no grade is awarded.
800-899	Courses in basic skills which have credit value that is not applicable to transfer or an associate degree.

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

Course Prerequisites, Corequisites, and Recommended Preparation

Prerequisites, corequisites, and recommended preparation advice 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 higher.

If a student has completed a prerequisite at another college or in high school, the student must bring a copy of his or her 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.

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 Regulations

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; 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 G.P.A.). 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 the student to be unable to complete the academic work by the end of the course. The student is 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 Regulation 4021 regarding all requirements for incompletes.

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 instructor-initiated drop. One exception is when a student is required to leave a class for reasons of academic dishonesty; in such an instance, a grade of F may be given. Another exception is for military withdrawal, in which an MW 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, MW, P or NP. The grade assigned shall be based on the total semester requirements for the course.

2. Full semester-length classes: Drops made before the census date will not be recorded on the official transcript. 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. Petitions must be reviewed and approved by the Grade Review Committee.

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 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 for reasons beyond their control. A student may request to use an EW for only one course 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:

- Job transfer outside the geographical region.
- Illness in the family where the student is the primary caregiver.
- An incarcerated student in a California State Prison or County Jail is released from custody or involuntarily transferred before the end of the term (In the case of an incarcerated student, an excused withdrawal cannot be applied if the failure to complete the course(s) was the result of a student's behavioral violation or if the student requested and was granted a mid-semester transfer).
- The student is the subject of an immigration action.
- Death of an immediate family member.
- Chronic or acute illness.
- Verifiable accidents.
- Natural disasters directly affecting the student.

Verifiable documentation can include, but is not limited to, a note from a doctor stating the student is not currently able to complete the work due to illness, employment verification of a new job, a booking report, police report of an accident, or any other documentation that proves the student's completion of a course is impractical.

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 your degree 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 the GPA.

Include courses that are:

- Letter-graded taken at LBCC, and
- Letter graded taken at any 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, IP, RD, or I.
- Excluded 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 Value	Letter Grade	Grade Points	Course Unit Value x Grade Points
C1	3	A	4	3X4=12
C2	3	D	1	3X1=3
C3	4	C	2	4X2=8
C4	2	A	4	2X4=8
C5	3	P	0	3X0=0
Total	12			31

Your 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 can be obtained from the office of Enrollment Services. 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 completion ratio calculations. Students completing 75 percent or more of the work or time required will be assigned the grade earned, i.e., 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 can 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 grade point average regardless of whether the last grade is higher or lower than the grade earned on previous attempts. The grades for all earlier attempts and the most recent attempt shall each 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 grade point average. The grades of all earlier attempts and the most recent attempt shall each 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 courses in which the student has previously earned a grade of A, B, C, or P when 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.

- **Change of Industry Standard or Licensure:** A student may be allowed to repeat courses in which the student has previously earned a grade of A, B, C, or P when 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.

The student is responsible for ensuring that the repetition of a course is authorized by these regulations. 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 600-number 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 subsequent 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 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.

- 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 and Progress Probation

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

1a. **Academic probation:** The student's grade point average falls below 2.0 in all units graded according to the 4.0 grading scale after the student has attempted more than 12 units at LBCC.

1b. **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.

2. For the purposes of section 1b, the entries of W, EW, NP, and I are counted as incomplete work while entries of A, B, C, D, F, and P are counted as complete (listed as "Earned" on the transcript).

3. Students on academic or progress probation shall be subject to counseling intervention which includes the following provisions:

- Completion of a workshop or 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.
- Completion of the sequence of basic skills courses in the Educational Plan, if applicable.

4. Any student on probation shall be reclassified as "satisfactory" whenever the cumulative grade point average 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 in section 1 above.

Academic and Progress Dismissal

A student who remains on probation for at least two semesters who has not resolved the deficiencies in their academic record shall be dismissed unless satisfactory progress is indicated during the semester in which the dismissal would normally occur.

Satisfactory progress is defined as follows:

- In the case of academic dismissal, the student must complete at least 3 units during the semester with a semester grade point average of at least 2.0.

- In the case of progress dismissal, the student must enroll in at least 3 units during the semester. If enrolled in 3 to 5.5 units, the student must complete all units. If enrolled in 6 or more units, the student must complete 80% of the units.

- Academic and progress dismissals are recorded at the end of the Fall and Spring semester.

Readmission After Dismissal

- Dismissed students will not be allowed to enroll in the fall or spring semester immediately following their dismissal. Students desiring to return to the college after dismissal must submit an application and a readmission petition to the Enrollment Services Office by the deadline listed on the Admissions website to be considered for readmission for the upcoming semester. The Readmission Committee reviews all petitions.

- A dismissed student who is readmitted will be readmitted as a student on probation and may be subject to further enrollment restrictions and requirements.

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:

1. Scholarship with Honors: 3.500 - 3.749 GPA
2. Scholarship with Distinction: 3.750 - 3.999 GPA
3. 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* 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.

*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.

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

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.

1. **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.

2. **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.

3. **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.

4. **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 Discipline and Student Life for disciplinary action as warranted.

5. **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.

Student Conduct

A proper campus environment is of great importance to assure academic and individual success. The Board of Trustees has established campus-wide 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 have been established by students and college staff and have been approved by the Board of Trustees. The Standards of Student Conduct are listed below and are strictly enforced by the Office of Student Affairs.

Standards of Student Conduct

These standards of student conduct and disciplinary action for violation of rules were established by a student-college staff committee in compliance with section 22635 of the California Education Code and are printed and distributed for students' information and guidance. Students shall respect and obey civil and criminal law and shall be subject to the legal penalties for violation of the laws of the city, county, state, and nation. Student conduct at LBCC must conform to District policy and regulations and college procedures. Violations, for which students are subject to disciplinary action, include but are not limited to the following:

1. Willful disobedience of directions of college officials, including faculty, acting in the performance of their duties.

2. Violation of college rules and regulations, including those concerning student organizations, the use of college facilities, or the time, place, and manner of public expression or distribution of materials.

3. Dishonesty, such as cheating or knowingly furnishing false information to the college.

4. Forgery, alteration, or misuse of college documents, records, or identification.

5. Unauthorized entry to or use of college facilities.

6. Obstruction or disruption of classes, administration, disciplinary procedures, or authorized college activities.

7. Theft of or damage to property belonging to the college, a member of the college community on campus or at a campus activity, or a visitor to the campus.

8. Disorderly, lewd, indecent, or obscene conduct, including profanity.

9. Conduct which disrupts orderly operation of the

college or which disrupts educational activities of individual members of the college community, including but not limited to harassment of another member of the college community based on race, religion, national origin, gender, sexual orientation, or any other legally protected status.

10. Use, possession, distribution, or being under the influence of alcoholic beverages, illicit drugs, or other controlled substances while on campus or in connection with college activities.

11. Assault or battery, abuse, or any threat of force or violence directed toward any member of the college community or campus visitor engaged in authorized activities.

12. Possession while on the college campus or at a college-sponsored function of any weapons except by individuals given permission by the superintendent-president or members of law enforcement agencies such as police officers acting in their capacity as officers.

13. Possession of any item not usually designated as a weapon when used to threaten bodily harm.

14. Misuse of any computer technology, including equipment, software, network, or Internet access, including non-compliance with any policy, regulation, rule, or guideline developed by any segment of the college which relates to computer technology.

Campus Rules

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

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

3. Gambling on the campus is prohibited. Gaming is restricted to the PCC Student Lounge and the LAC Activities Room.

4. Animals not indigenous to the campus grounds 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.

5. Literature to be distributed must be approved by the Office of Student Life.

6. Children are not allowed on campus unless under the supervision of a parent or guardian or 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.

7. Vehicles without a parking permit must park in visitor parking, or their drivers may purchase a one-day parking permit.

8. Students are required to be fully attired, including shirts or blouses and footgear.

9. Skateboarding, skating, and bike riding are prohibited on campus grounds. Officers will cite any violators.

10. The use of electronic devices without headphones is prohibited on campus except in connection with approved campus or classroom activities.

11. Electronic recording devices may not be used in any classroom without the permission of the instructor.

Summary Suspension

When serious violations of college regulations or procedures occur as a result of inappropriate student conduct, the college shall take immediate action to resolve the problems. Such action may proceed as follows:

1. **Removal from class by instructor:** Any instructor is authorized to remove a student from his or her class for the class meeting in which the infraction occurs as well as the next scheduled class meeting. The instructor shall immediately report the removal of the student to the Vice President of Student Support Services or designee, including the reason for the removal, for appropriate action.

2. **Summary Suspension by Administration:** Summary suspension is an administrative action for the purpose of removing any immediate tension or threat to the well-being of students and staff in order to assure that an appropriate academic environment exists. It may also be

for the purposes of further investigation of reported inappropriate conduct and to determine what disciplinary action, if any, is appropriate. The Director of Student Discipline and Student Life or designee may summarily suspend a student for good cause for a period of up to 10 instructional days to ensure that the intended purpose is served.

Disciplinary Action

Violations of the above regulations and rules subject students to the following types of disciplinary action, which are to be administered by the appropriate college authorities. These disciplinary actions are listed in degree of severity but not necessarily in sequential order. Disciplinary actions may be imposed singly or in combination. A student has the right to appeal any of the actions through established procedures of due process.

1. **Warning:** Notice to the student that continuation or repetition of specified conduct may be cause for other disciplinary action.

2. **Reprimand:** Written notice to the student officially recognizing a violation of the standards of student conduct or campus rules. The reprimand admonishes the student to avoid future infractions in order to avoid additional formal action.

3. **Probation:** An official disciplinary action that returns the offender to the college community on a promise of appropriate future behavior. Any violation of this promise mandates further formal action.

4. **Social Suspension:** Social suspension limits a student's attendance on campus to scheduled classroom hours. Revoking of other privileges can be set forth in the notice of social suspension for a specified period of time. The imposition of social suspension involves notification in writing of the reason for social suspension to the student or the president of the student organization involved.

5. **Disciplinary Suspension:** Disciplinary suspension follows a hearing based on due process of law. The Superintendent-President, an appropriate administrator, or other staff members designated by the Superintendent-President may invoke such suspension upon students for misconduct when other corrective measures have failed or when the

seriousness of the situation warrants such action.

6. **Expulsion:** An expulsion is a long-term or permanent denial of all campus privileges, including class attendance. The Board of Trustees may expel a student after a hearing by a campus body or upon recommendation of the Superintendent-President. Permanent expulsion and active prosecution shall automatically result for any student found to be in possession of a gun. Board action is not necessary in this instance.

7. **Restitution:** Reimbursement may be required of a student for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damage.

Course Credit and Class Preparation

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.

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 or by completing and submitting a pass/no pass form in the Enrollment Services Office. This process must be completed prior to the thirty percent point of the course. The deadline 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: 18 units
- Maximum full-time unit load with written permission: 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 terms in a given year are as follows:

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

The maximum unit limit for winter intersession is 6 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 for fall or spring semesters but not for summer sessions or winter intersessions. Under no circumstances will a student be permitted to exceed the defined maximum unit load limitation with waiver. 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 his or her 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 college reserves the right to grant special waivers in unusual circumstances.

4. Any student enrolled in more units than are permitted for his or her classification by these regulations will have his or her program of studies reduced to the applicable allowable maximum by the Executive Dean of Enrollment Services or designated representative.

Credit by Advanced Placement

LBCC recognizes the Advanced Placement (AP) Program of the College Entrance Examination Board. Students are required to order official copies of their College Board transcripts with the appropriate Advanced Placement scores 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 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.

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 Directed Study Program

The Directed Study Program provides challenges for talented students. This program allows a student to conduct in-depth study on any approved topic within a subject area. The following are the basic elements of the program:

1. Students must have earned at least a cumulative 3.0 grade point average. Students must have completed 24 units, at least 12 of which must be earned at LBCC. Credit applied from other colleges must be supported by official transcripts on file with the Enrollment Services Office.

2. Prior approval of the faculty mentor who directs the study, the department head, and the school dean must be obtained before commencing work on the project under the mentor's direction. Failure to do so may result in denial of credit for the project.

3. Directed study may not parallel or equate with work in an approved course within the department. Directed study is expected to be of an advanced nature and should go beyond the treatment in an approved course or series of courses. Work that merely involves the production of a book report or term paper is not an appropriate project.

4. While the student's work is of an autonomous nature, the student is expected to meet at regular intervals with his or her faculty mentor to discuss progress and seek guidance and direction.

5. The product of the directed study will be a written report or an equivalent project that demonstrates an amount of work equal to an approved course of the same number of units–54 hours of work for each unit of credit earned.

6. The project will be evaluated on a standard comparable to that used in the courses within the department granting the credit. The project will be evaluated by the faculty mentor and kept on file in the department office. The completed authorization form will be forwarded through the approval process.

7. One to three units of credit will be granted upon satisfactory completion of a project.

8. Units will be indicated on the student's transcript as Directed Study 99 in the subject matter area.

9. Any student shall earn no more than six units in directed study courses.

The subject areas that currently are approved for directed studies are anthropology, art, biology, computer and business information systems, economics, English, geology, business international, journalism, political science, psychology, social science, speech, and theater arts.

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 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.

Credit by International Baccalaureate (IB)

LBCC recognizes the International Baccalaureate Assessment under the following conditions:

1. Students are required to order official copies of their IB transcripts with the appropriate IB scores and have the transcripts sent to LBCC's Enrollment Services Office.

2. Specific course credit will be granted for the IB 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, the IB scores may be applied toward General Education or elective unit requirements.

4. IB credit is granted for fulfillment of LBCC degree requirements. However, when a student transfers to any other college or university, that institution routinely reevaluates IB transcripts in accordance with its own internal policies for IB. Thus, IB units are indicated as such in official records and do not transfer as LBCC courses.

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.

- 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.

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 other regionally accredited colleges and universities can be used towards the fulfillment of General Education at LBCC for Plans B and C, as well. 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.

Foreign Institutions

Acceptance of transfer credit from foreign institutions shall be subject to the student obtaining, at his or her own expense, a transcript evaluation from a credentials evaluation service as designated by the Executive Dean of Enrollment Services.

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 our coursework.

- Credit for six units, four in physical education and two in health education, will be granted to any student who supplies proper proof of at least one year of service in the armed forces of the United States.

- 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.

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 his or her DD-214 and file number from the Veterans' Administration to request such credit. Please contact the Veterans Affairs Office at LAC in Building E for additional assistance.

If a veteran feels his or her 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 his or her 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.

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.

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.

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.

General Education, Transfer & Degree/Certificate Requirements

This section includes information on the following:

- General Information on GE, Transfer, and Degree and Certificate Requirements

- Requirements for Associate Degrees and Associate Degrees for Transfer

- Requirements for Certificates

- List of Degrees and Certificates Offered

- Catalog Rights

- Admission Requirements to a 4-year Institution

- General Education Philosophy and Patterns

- Plans A, B, and C

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 vocation, 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 for Associate in Arts and Associate in Science Degrees, Plan B for CSU transfer and Associate Degrees for Transfer, and Plan C for 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.

1. **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.

2. **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.

3. **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.

4. **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 higher 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.

5. **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 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 competence. 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.

6. **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) or 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 who are awarded an A.A.-T or A.S.-T degree are guaranteed admission with junior 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 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. After completion of a GE pattern, students must request GE certification. Interested students should consult with a counselor for more information about the GE certification process.

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

1. **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.

2. **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.

3. **Residence for the degree:** At least 12 CSU-transferable units (courses numbered 1-99) must be completed in residence at LBCC.

4. **Degree application:** Students must complete and submit the degree application form to the Admissions and Records Office during the final semester of course work. This form is available in the Admissions and Records Office or online at www.admissions.lbcc.edu. Students should refer to the schedule of classes (www.schedule.lbcc.edu) and click the "Important Dates" link to view the actual deadline for each semester.

5. **No additional local graduation requirements must be fulfilled for the transfer degree.**

Certificates

LBCC offers four types of certificates:

1. **A Certificate of Achievement*** is awarded for successful completion of a course of study that consists of at least 16 units and is indicated on a transcript.

2. **A Certificate of Accomplishment*** 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.

3. **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.

4. **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.

*Certificates of Achievement and Accomplishment are offered in specific occupational areas. All 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 higher. 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. 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.

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/Completion
Administration of Justice	AS-T	AA	ACH		
Criminal Forensics				ACC	
Public Services: Transportation Security Administration Associate				ACC	
Advanced Manufacturing Technology		AS	ACH		
Advanced Manufacturing and Design Technology			ACH		
Advanced Manufacturing Technology Core Skills			ACH		
Advanced Transportation Technology		AS	ACH		
Alternate Fuel Vehicles			ACH		
Electric & Hybrid Vehicles			ACH		
Alcohol and Drug Studies		AA	ACH		
Co-Occurring Disorders-Level One				ACC	
Alcohol & Chemical Dependency				ACC	
American Sign Language and Deaf Studies		AS			
Anthropology	AA-T				
Architectural Design		AS	ACH		
Art		AA			
Art History	AA-T				
Studio Arts	AA-T				
Fundamentals of Digital Media Arts				ACC	
Graphic Design				ACC	
Automotive Technology		AS	ACH		
Automotive Engine and Transmission Service			ACH		
Automotive Engine Performance Service			ACH		
Automotive Maintenance Service			ACH		
Automotive Quick Service				ACC	COMP
Baking and Pastry Arts		AS	ACH		
Biological Sciences		AS			
Biology	AS-T				

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/ Completion
Business					
Business Administration	AS-T				
Business: Accounting		AA	ACH	ACC	
Business: Economics				ACC	
Business: Foundations of Accounting				ACC	
Business: Foundations of Business				ACC	
Business: Foundations of International Business				ACC	
Business: Foundations of Management				ACC	
Business: Foundations of Marketing				ACC	
Business: General Business		AA	ACH		
Business: International Business		AA	ACH		
Business: Logistics				ACC	
Business: Management		AA	ACH		
Business: Marketing		AA	ACH		
Business: Money and Banking				ACC	
Foundations of Entrepreneurship				ACC	
Personal Financial Planning				ACC	
Real Estate Broker				ACC	
Real Estate Salesperson				ACC	
Social Media Application Development				ACC	
Business Information Worker		AS	ACH		
Business Digital Literacy				ACC	
Customer Relations Specialist				ACC	
Digital and Social Media				ACC	
Microsoft Essentials				ACC	
Computer Hardware Repair					COMP
Office Technologies - Microsoft Access					COMP
Office Technologies - Microsoft Excel					COMP
Office Technologies - Microsoft Outlook					COMP

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/Completion
Office Technologies - Microsoft PowerPoint					COMP
Office Technologies - Microsoft Word					COMP
Office Technologies - Job Search Skills					COMP
Child Development: Early Childhood Education	AS-T	AA	ACH		
CDECE: Assistant Teacher				ACC	
CDECE: Associate Teacher				ACC	
CDECE: Family Development				ACC	
CD: Permit Specialization Area- Child Health and Safety				ACC	
CD: Permit Specialization Area- Children with Exceptional Needs				ACC	
CD: Permit Specialization Area- Family Child Care				ACC	
CD: Permit Specialization Area- Infant/Toddler				ACC	
CD: Permit Specialization Area- Early Literacy				ACC	
CD: Permit Specialization Area- Curriculum in Early Childhood Education				ACC	
Child Development: Special Education Assistant		AA	ACH		
College and Workplace Readiness					COMP
Communication Studies	AA-T	AA			
Computer Science		AS	ACH		
Android App Developer				ACC	
Computer Security and Networking		AS	ACH		
Cloud Computing			ACH		
Computer Hardware Technician				ACC	
Computer Network Technician				ACC	
Cyber Security				ACC	
Microsoft Windows Networking Technician				ACC	
UNIX Network Administrator				ACC	
Computer Support Specialist		AS	ACH		
Customer Relations Specialist				ACC	

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/ Completion
Computer Hardware Technician				ACC	
Computer Technology		AS	ACH		
Construction Technology		AS	ACH		
Construction Pre-Apprenticeship					COMP
Forklift Fundamentals					COMP
Home Remodeling			ACH		COMP
Culinary Arts		AS	ACH		
Dance		AA			
Database Management		AS	ACH		
Database Administrator Specialist				ACC	
SQL Programmer Specialist				ACC	
Diagnostic Medical Imaging (Radiologic Technology)		AS	ACH		
Computed Tomography				ACC	
Magnetic Resonance Imaging Technologist				ACC	
Digital Design and Publication		AA	ACH		
Digital Media Arts					
Digital Media: Advanced Production			ACH		
Digital Media: Interactive Design and Animation			ACH		
Drafting: Architectural		AS			
Drafting: Architectural - Core Skills			ACH		
Drafting: Architectural - Advanced Skills			ACH		
Drafting: Mechanical Design		AS			
Drafting: Mechanical Design - Core Skills			ACH		
AutoCAD I, Fundamentals (108 Hrs)				ACC	
AutoCAD II, Advanced (108 Hrs)				ACC	
AutoCAD III, Visualization, Rendering, Animation (108 Hrs)				ACC	
CAD Professional Certificate (324 Hrs)				ACC	

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/ Completion
Economics	AA-T				
Electrical Technology		AS	ACH		
CISCO Certified Network Associate				ACC	
Electrical Apprenticeship Preparation			ACH		
Network Cabling Specialist				ACC	
Traffic Signal Systems 1				ACC	
Solar Photovoltaics Installation and Design				ACC	
Electrical Technology, Automation Technician		AS	ACH		
Electrical Technology, CISCO Certified Network Installation		AS	ACH		
Electrical Technology, General Industrial Electrician		AS	ACH		
General Industrial Electrician			ACH		
Electrical Technology, NETA High Voltage Test Technician		AS	ACH		
NETA High Voltage Test Technician				ACC	
Electrical Technology, Solar Installation and Maintenance		AS			
Elementary Teacher Education	AAT				
Engineering		AS			
Engineering Technology		AS	ACH		
Engineering Automation Technology			ACH		
English	AA-T				
English, Language & Literature		AA			
English, Creative Writing		AA			
English as a Second Language					
English for Everyday - Level 1					COMP
English for Everyday - Level 2					COMP
English for Everyday - Level 3					COMP
Reading Skills for ESL Students - Level 1					COMP
Reading Skills for ESL Students - Level 2					COMP
Reading Skills for ESL Students - Level 3					COMP

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/Completion
Workplace Language Skills for ESL, Level 1					COMP
Workplace Language Skills for ESL, Level 2					COMP
Workplace Language Skills for ESL, Level 3					COMP
Intermediate Oral Skills					COMP
Intermediate Grammar					COMP
Intermediate Reading and Writing					COMP
Family and Consumer Studies		AA	ACH		
Fashion Design		AA	ACH		
Fashion Design: Assistant Designer/Stylist		AA	ACH		
Fashion Design: Patternmaker/Technical Design			ACH		
Fashion Design: Samplemaker			ACH		
Fashion Merchandising		AA	ACH		
Film		AA			
Digital Filmmaking			ACH		
Film, Television and Electronic Media	AS-T				
Fire Science		AS	ACH		
Floral Design		AA	ACH		
Foreign Languages		AA	ACH		
Spanish	AA-T				
General Education CSUGE Breadth			ACH		
General Education IGETC			ACH		
Geography	AA-T				
Geology	AS-T				
History	AA-T				
Horticulture		AS	ACH		
Human Services		AA	ACH		
Journalism	AA-T				
Journalism - Newspaper/Magazine		AA			
Journalism - Public Relations		AA			

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/Completion
Journalism -Publications Specialist		AA			
Photojournalism			ACH		
Kinesiology	AA-T	AA			
Athletic Coaching				ACC	
Personal Trainer				ACC	
Library Technician		AS	ACH		
Linguistics		AA			
Mathematics	AS-T	AS			
Medical Assisting					
Medical Assisting: Combined Administrative/Clinical		AS	ACH		
Medical Assisting: Administrative Option			ACH		
Medical Assisting: Clinical Option			ACH		
Emergency Medical Technician				ACC	
Medical Insurance Billing				ACC	
Phlebotomy				ACC	
Metal Fabrication Technology		AS			
Metal Fabrication Technology: Core Skills			ACH		
Metal Fabrication Technology: Advanced Skills			ACH		
Robotic Welding Automation				ACC	
Music	AA-T	AA			
Nursing: LVN to RN					
LVN to RN Career Ladder		AS	ACH		
Nursing: Registered Nursing		AS			
Nursing: Vocational/Practical		AS	ACH		
Home Health Aide				ACC	
Nursing Assistant				ACC	
Nutrition and Dietetics	AS-T				
Dietetic Service Supervisor		AA	ACH		
Formula Room Technician			ACH	ACC	

Long Beach City College offers degrees and certificates in the following disciplines (majors).

Program of Study	Transfer Degree	Associate Degree	Certificate of Achievement	Certificate of Accomplishment	Certificate of Competency/Completion
Nutrition Assistant		AA			
Philosophy	AA-T				
Physical Sciences		AA/AS			
Political Science	AA-T				
Psychology	AA-T				
Public Health Science	AS-T				
Radio/Television Broadcast News		AA	ACH		
Radio/Television Performance		AA	ACH		
Radio/Television Producer		AA	ACH		
Radio/Television Multimedia Production			ACH		
Sociology	AA-T				
Theatre Arts	AA-T				
Theatre - General		AA			
Theatre - Acting Academy		AA			
Vocational Media - Commercials				ACC	
Vocational Media - Film Acting				ACC	
Vocational Media - Voice-over				ACC	
Web Development		AS	ACH		
Android App Developer				ACC	
PHP Web Programmer				ACC	
Web Developer				ACC	
Welding Technology		AS	ACH		
Advanced Arc Welding (SMAW and FCAW)				ACC	
Gas Tungsten Arc Welding (GTAW)				ACC	
Shielded Metal Arc Welding (SMAW)				ACC	

Catalog Rights

Continuous Enrollment

"Continuous enrollment" means enrollment in, and receiving a grade for, at least one class per academic year (Fall/Spring terms) at LBCC; or any other regionally accredited higher educational institution, after having initially enrolled at LBCC. Maintaining continuous enrollment secures "catalog rights" and applies to all students interested in earning an associate degree or transferring to the University of California. Maintaining catalog rights provides students with a guarantee to use the specific degree requirements of the year in which they first enrolled or any year thereafter. Acceptable grades that will satisfy continuous enrollment requirements are A-F, P, and NP. Coursework transferred from other institutions will be evaluated for satisfaction of all associate degree and certificate of completion requirements, including proficiency requirements.

Military personnel who withdraw with grades of MW have one academic year after the end of the military conflict to return to college without losing their continuous enrollment status and catalog rights.

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.

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 should follow the recommended pattern of GE-breadth requirements listed in Plan B. 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.

Lower division transfers: Undergraduate transfer applicants with fewer than 56 transferable semester units of study 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 and be in good standing at last college attended. 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.

Undergraduate transfer applicants with fewer than 56 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 higher in adult school or high school summer sessions or
- Completing appropriate courses in college with a C or higher. 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 an upper division transfer. The missing college preparatory subject requirements may be made up in the following ways:

- Complete the missing subjects 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 higher 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 higher 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 B4) 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 first-time freshman.

Courses numbered 1-99 in the LBCC Catalog are transferable as GE or elective credit to the CSU. Students with 60 transferable units are eligible to be admitted as juniors. A maximum of 70 semester transferable units earned at a California community college will be accepted by a CSU campus towards 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 a LBCC counselor to be aware of the filing deadlines and any supplemental admissions criteria for such programs.

Admission Requirements to Transfer to the University of California

Students planning to transfer to the University of California are encouraged to follow the recommended pattern of GE breadth requirements listed in Plan C. However, some high-unit majors may have other admission requirements.

A transfer student from LBCC may meet University of California admission requirements through any of three options. In all cases, transfer students who are California residents must have at least a 2.0 grade point average in all transferable coursework to be admitted to the university. Other requirements depend on whether a student was eligible for admission to the university when he or she 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 or she 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 or she 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 or she 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 transferable college credit with a grade point average of at least 2.4 and satisfy either (b) or (c) below.

    b. Complete appropriate college courses with a C grade or higher 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 higher 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 higher in their high school history and government classes.

A student who plans to transfer to the University of California system is advised to concentrate on university and college requirements and on available prerequisite and introductory courses required by his or her major.

Private Colleges and Universities Transfer Information

Private colleges and universities, often called independent institutions, offer a diversity of educational programs and opportunity. Great differences in size, educational purpose, and emphasis exist among the more than 50 independent colleges and universities in the state of California. For information on for private colleges and universities, students should contact the LBCC Counseling department.

General Education

Philosophy of General Education

GE takes its character from an extensive list of disciplines whose integration generates a broad field of common knowledge that is indispensable to students. GE concerns itself with how disciplines form and reform their basic conceptualization and how these basic conceptualizations then link with one another to create this general field of understanding. In so doing, GE justifies its course of study by the foundation of knowledge it imparts, which becomes an essential preparation for specialization as students move into their major fields of study. This ongoing process of forming, reforming, and integrating these basic conceptualizations allows students to achieve a synthesis of skills, comprehension, and information about oral and written communication, physical and natural sciences, humanities, the arts, and the social sciences, health, and wellness, and such process is contemporary with any age.

The disciplines that introduce students to the variety of courses through which people comprehend the past, present, and future world coincide with the GE courses that teach oral and written communication, the physical, natural, and social sciences, the humanities, arts, health, and wellness. These selections of classes reflect the conviction of LBCC that those who receive an associate degree should possess in common certain principles, concepts, and methodologies of the various disciplines defined by this philosophy. The GE experience should enable students to use this knowledge when evaluating and appreciating the physical environment, the arts, various cultures that make up the world, and the society in which they live. Most importantly, since education is a life-long process, GE should lead to better self- understanding and the capacity to adapt, respond, and grow in a changing world.

In its GE program, LBCC strives to create coherence and integration among its separate requirements. Furthermore, through this program, the college involves students in examining the values inherent in proposed solutions to the major social problems that surround the average adult living within our society. Accordingly, LBCC expects that those students who finish their GE requirements should have at their command the knowledge, skills, and perspectives

common to all the classes taught as representative of the disciplines named above and should be evident in LBCC's Student Learning Outcomes at the course, program, and institution levels. This means that all GE courses should also be of an introductory or survey nature. In addition, a non-survey course may qualify as a GE course only if its Student Learning Outcomes and content, as indicated by the course outline of record, is designed to substantially integrate the basic principles and methodologies of a discipline designated as introductory or survey.

Keeping these principles in mind, the faculty at LBCC prepares its GE lists by selecting courses that both prepare students for their majors and conform to a specific set of regulations that limit and shape the types of classes that can be submitted to our Curriculum Committee. Any course submitted for consideration must meet several conditions before it can receive GE credit: first, this course must comply with the requirements set in Title 5 and the Chancellor's Office of the California Community College System; second, this course must be consistent with the mission statement listed in the college catalog, which defines the educational goals of a specific community college; third, alignment with the College's GE outcomes as these define the knowledge, skills, and values acquired by students who satisfy our GE requirements; fourth, such a course should be transferable to a four-year institution so that a student can earn an associate degree and prepare for the possibility of a baccalaureate degree without having to do extra work, even though the committee does review non-transferable courses for GE credit; and fifth, if transferable, this course must meet the specific requirements for GE as outlined in the executive orders and criteria set forth by the receiving four-year institutions. These requirements, as well as the definition of GE offered above, determine what can be described as the "Philosophy of GE" as offered by LBCC.

Career Technical Education (CTE)

LBCC's GE philosophy also applies to its occupational programs, also called career technical education or CTE. Yet, the GE requirements for CTE degrees are different because of the way these courses fit into a CTE program.

CTE students need a GE program that prepares them for the workforce, transfer to a four-year institution, or both. Such preparation has to take into consideration three basic facts: CTE programs may be high-unit majors, the academic nature of GE needs to fit into a training program that prepares a student for work, and the quality and intensity of GE courses should help to build the scope of knowledge and self-confidence of a CTE student. Since a CTE certificate assures an employer that a student is prepared to take up full-time employment in a skilled occupation, the course load for a CTE student may exceed 18 units.

Many CTE students follow an educational path that demonstrates the need for academic as well as professional training. The student begins classes seeking a certificate, then shifts to seeking an associate degree, and finally develops a desire to transfer to a four-year institution after he or she has begun a new job based on his or her field of study.

General Education Outcomes (GEOs)

LBCC's commitment to excellence in student learning incorporates the following expected GE outcomes for the educational process. GEOs are statements that define the knowledge, skills, and perspectives acquired by students who satisfy the college's GE requirements.

Aesthetics and Creativity: The ability to appreciate a range of cultural expression, including art, music, dance, theater, literature, and film, as well as the ability to generate useful and original ideas.

Civic Engagement:

1. **Democracy:** Develop and promote knowledge and skills to become informed participants who play an active and effective role in our society.

2. **Cultural Sensitivity/Diversity:** Appreciate and promote respect of individual differences that embraces the complex ways people integrate into their societies, cultures, and subcultures in order to participate in both our society and in diverse group activities.

Communication: The ability to effectively interchange ideas and information with diverse audiences and to act within the framework of a society based on information and service.

Foundational Skills: The ability to effectively read, write, listen, speak, and/or sign.

1. **Teamwork and Collaboration:** Cooperate and work effectively with individuals and groups using appropriate social skills.

2. **Information Competency:** Find, use, manage, evaluate, and convey information efficiently and effectively.

Critical Thinking: The ability to analyze and evaluate a spectrum of ideas that are represented by theories, images, and concepts.

1. **Science Literacy:** Apply the scientific method to gain an evidence-based understanding of phenomena.

2. **Numeric Literacy:** Apply arithmetic and mathematical skills necessary to solve everyday problems.

Wellness: The ability to make lifestyle choices that promote physical, mental, and social health.

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 preparing student for transfer to the UC and CSU systems.

The most current A, B, and C Plans are posted online at https://www.lbcc.edu/post/general-education-patterns for your reference.

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 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. 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 GE requirements have been met, and that the receiving CSU or UC schools will not review 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**, 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.

Although an associate degree recognizes the completion of lower-division course requirements, it does not guarantee admission eligibility to a four-year college or university. Each student is encouraged to see a counselor early in his or her 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

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 (12 units), and Area E (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 upperdivision 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 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 the California State University GE requirements and replaces the University of California 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.

Programs of Study

Programs of Study

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 Certificate of Completion or Competency for each program of study. Full-time faculty are listed for each program. For information on all faculty and staff, visit: www.lbcc.edu/catalog/.

Administration of Justice

The Administration of Justice program at Long Beach City College 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.

Associate in Science in Administration of Justice for Transfer Degree (A.S.-T), (Plan Code: 5504B/C)

The Associate in Science in Administration of Justice for Transfer Degree at Long Beach City College 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 at Long Beach City College prepares students for a seamless transfer to a baccalaureate degree program in Criminal Justice/Criminology in the CSU system.

Program Student Learning Outcomes:

- 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.

REQUIRED COURSES		UNITS
ADJUS 2	Introduction to Administration of Justice	3
ADJUS 4	Criminal Law	3
Subtotal Units		6

IN ADDITION, complete SIX (6) units from LIST A:

LIST A

ADJUS 3	Introduction to Criminal Procedures	3
ADJUS 6	Introduction to Evidence	3
ADJUS 8	Introduction to Investigation	3
ADJUS 20	Introduction to Corrections	3
Subtotal Units		6

IN ADDITION, complete SIX to SEVEN (6-7) units from LIST B:

LIST B

Any Course from List A not already used.

SOCIO 1/1H	Introduction to Sociology/Honors	3
STAT 1/1H	Elementary Statistics/Honors	4
PSYCH 1/1H	Introduction to Psychology/Honors	3
Subtotal Units		6-7
Total Units in the Major		18-19

Associate in Arts (A.A.) Degree, Administration of Justice (Plan Code: 1800)

This Associate Degree 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:

- 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.

REQUIRED COURSES		UNITS
ADJUS 2	Introduction to 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 list:

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 Classification & 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 253	Understanding Domestic Violence	3
ADJUS 255	Introduction to Forensics	3
ADJUS 269	Pre-Employment Prep for Law Enforcement	3
PUBAD 1	Introduction to Public Administration	3
Subtotal Units		6
Total Units in the Major		24

Certificate of Achievement, Administration of Justice (Plan Code: 3800)

This Certificate of Achievement 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 Outcome:

- Demonstrate an understanding and ability to analyze crime, policies, procedures and the people that shape the Justice System.

REQUIRED COURSES — UNITS

ADJUS 2	Introduction to 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		15

IN ADDITION, complete NINE (9) units from the following courses:

ENGL 1	Reading & Composition	4
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
COMM 10	Elements of Public Speaking	3
COMM 30	Elements of Group Discussion	3
Subtotal Units		9
Total Units		24

Certificate of Accomplishment, Criminal Forensics (Plan Code: 4019)

Completion of the Criminal Forensics Program will give students the skills and knowledge needed to become employed as entry level crime scene investigators or evidence collection specialists.

Program Student Learning Outcome:

- 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.

REQUIRED COURSES — UNITS

ADJUS 6	Introduction to Evidence	3
ADJUS 8	Introduction to Investigation	3
ADJUS 19	Fingerprint Classification & Identification	3
ADJUS 255	Introduction to Forensics	3
Subtotal Units		12

IN ADDITION, complete ONE (1) of the following courses:

ADJUS 3	Criminal Procedures	3
ADJUS 4	Criminal Law	3
ADJUS 10	Writing for Criminal Justice	3
ADJUS 17	Computer Usage in Criminal Justice	3
Subtotal Units		3
Total Units		15

Certificate of Accomplishment, Public Services: Transportation Security Administration Associate (Plan Code: 4800)

Completion of the Transportation Security Administration Associate Certificate 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 Outcome:

- 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

REQUIRED COURSES

		UNITS
HSA 401	Introduction to Homeland Security	3
HSA 402	Intelligence Analysis / Security Mgmt.	3
HSA 403	Transportation and Border Security	3
Total Units		9

Advanced Manufacturing

Associate in Science, Advanced Manufacturing Technology (Plan Code: 2921)

The Associate in Science in Advanced Manufacturing Technology degree at Long Beach City College 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 Leaning 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

REQUIRED COURSES

		UNITS
OSHA 254	OSHA Standards for General Industry	2
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 50	Mechanical Drafting, Introduction	2

CAD 51	Mechanical Drafting, Intermediate	2
CAD 52	CAD/CAM	2
CAD 60	Geometric Dimensioning and Tolerancing	3
ETEC 10	Introduction to Engineering Technology	1
ETEC 60	Material Science for Engineering Tech	3
WELD 50	Introduction to Welding	4
Subtotal Units		31

Certificate of Achievement, Advanced Manufacturing Technology (Plan Code: 3921)

The Certificate of Achievement in Advanced Manufacturing Technology 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. Students will find jobs or apprenticeships as machine operator, CNC operator, machinist, CNC programmer, or inspector.

Program Student Leaning 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

REQUIRED COURSES

		UNITS
OSHA 254	OSHA Standards for General Industry	2
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 50	Mechanical Drafting, Introduction	2
CAD 51	Mechanical Drafting, Intermediate	2

CAD 52	CAD/CAM	2
CAD 60	Geometric Dimensioning and Tolerancing	3
ETEC 10	Introduction to Engineering Technology	1
ETEC 60	Material Science for Engineering Tech	3
WELD 50	Introduction to Welding	4
Subtotal Units		31

Certificate of Achievement, Advanced Manufacturing Technology Core Skills (Plan Code: 3922)

The Advanced Manufacturing Technology department at Long Beach City College 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 Leaning 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

REQUIRED COURSES		UNITS
OSHA 254	OSHA Standards for General Industry	2
ADMT 50	Advanced Manufacturing, Introduction	3
ADMT 200	Advanced Manufacturing Math	3
CAD 50	Mechanical Drafting, Introduction	2
ETEC 60	Material Science for Engineering Tech	3
WELD 50	Introduction to Welding	4
Total Units		17

Certificate of Achievement, Advanced Manufacturing and Design Technology (Plan Code: 3923)

The Advanced Manufacturing Technology department at Long Beach City College 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 Leaning 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

REQUIRED COURSES		UNITS
CAD 50	Mechanical Drafting, Introduction	2
CAD 51	Mechanical Drafting, Intermediate	2
CAD 52	CAD/CAM	2
CAD 60	Geometric Dimensioning and Tolerancing	3
ETEC 60	Material Science for Engineering Tech	3
CAD 202	AutoCAD Fundamentals	2
CAD 220	Introduction to CATIA	2
Total Units		16

Advanced Transportation

Associate in Science, Advanced Transportation Technology (Plan Code: 2952)

The Long Beach City College Advanced Transportation Technology Associate in Science Degree 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:

- Students will analyze and demonstrate their technical knowledge and practical skills to properly and accurately diagnose and repair advanced propulsion systems used in electric, hybrid, and Compressed Natural Gas vehicles.

- Develop the skills to assess and deduce vehicle drive ability concerns pertaining to advanced transportation technologies.

REQUIRED COURSES   UNITS

AUTO 200	Introduction to Automotive Technology	3
AUTO 216	Automotive Electrical Systems	3
AUTO 270	Intro to Hybrid and Electric Vehicles	3
AUTO 271	Intro 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		27

Certificate of Achievement, Advanced Transportation Technology (Plan Code: 3952)

The Long Beach City College Advanced Transportation Technology Certificate of Achievement 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:

- Students will analyze and demonstrate their technical knowledge and practical skills to properly and accurately diagnose and repair advanced propulsion systems used in electric, hybrid, and Compressed Natural Gas vehicles.

- Develop the skills to assess and deduce vehicle drive ability concerns pertaining to advanced transportation technologies.

REQUIRED COURSES   UNITS

AUTO 200	Introduction to Automotive Technology	3
AUTO 216	Automotive Electrical Systems	3
AUTO 270	Intro to Hybrid and Electric Vehicles	3
AUTO 271	Intro 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		27

Certificate of Achievement, Alternate Fuel Vehicles (Plan Code: 3937)

The Long Beach City College Alternate Fuel Vehicles Certificate of Achievement in Alternate Fuel Vehicles 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.

REQUIRED COURSES   UNITS

AUTO 200	Introduction to Automotive Technology	3
AUTO 271	Intro to Alternative Fuel Systems	3
AUTO 282	Light Duty Alternative Fuels	3
AUTO 292	Heavy Duty Alternative Fuels	3
Total Units		12

Certificate of Achievement, Electric & Hybrid Vehicles (Plan Code: 3938)

The Long Beach City College Electric & Hybrid Vehicles Certificate of Achievement in Electric & Hybrid Vehicles 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.

REQUIRED COURSES		UNITS
AUTO 200	Introduction to Automotive Technology	3
AUTO 216	Automotive Electrical 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		15

Alcohol and Drug Studies

The Alcohol and Drug Studies program at Long Beach City College provides students with the opportunity to fulfill state approved certification requirements of California for job placement and workforce development. The Alcohol and Drug Studies program at LBCC is accredited by the California Association of Alcohol and Drug Educators.

Associate in Arts (A.A.) Degree, Alcohol and Drug Studies (Plan Code: 1811)

This Associate Degree will prepare students for an entry-level position in the human services/alcohol and drug treatment field and for career advancement for those already employed in these occupations. Students learn the skills and knowledge necessary to transfer to upper division programs in social work or human services and be eligible to become employed at the paraprofessional entry level in serving alcohol and drug clients.

Program Student Learning Outcomes:

- Develop a psychosocial treatment plan for a client.
- Synthesize the theories and principles of drug and alcohol clinical evaluation, treatment planning, referral, service coordination, counseling, documentation, and professional/ethical responsibilities.

REQUIRED COURSES		UNITS
HS 1	Introduction to Social Work	3
HS 46	Physiology & Pharmacology of Drugs	3

HS 47	Intervention, Treatment & Recovery	3
HS 48	Group & Family Process	3
HS 72A	Field and Instruction Seminar I	3.5
HS 72B	Field and Instruction Seminar II	3.5
Subtotal Units		19

SKILLS AREA
IN ADDITION, complete NINE (9) units from the following courses:

HS 43	Case Management: Treatment & Aftercare	3
HS 45	Stress Management for Case Managers	3
HS 50	Law and Ethics	3
HS 242	Conflict Resolution/Mediation	3
HS 252	Co Occurring Disorders	3
HS 255	Alcohol & Drug Prevention & Education.	3
HS 260	Domestic Violence Intervention Strategies	3
Subtotal Units		9
Total Units in the Major		28

Certificate of Achievement, Alcohol & Drug Studies (Plan Code: 3811)

The Alcohol and Drug Studies program integrates theory and practical experience in developing skills necessary to work with the alcohol and drug abuse population, as well as with families and employers of chemically dependent persons. Completion of the Certificate in Alcohol & Drug Studies fulfills the California Association of Alcohol & Drug Studies (CAADE) academic and work experience requirements.

BEHAVIORAL/FOUNDATIONAL
REQUIRED COURSES		UNITS
Complete SIX (6) units from the following courses:		
ANTHR 2	Cultural Anthropology	3
CDECE 47	Human Development	3
HS 1	Introduction to Social Work	3
PSYCH 1	Introduction to Psychology	3
PSYCH 14	Abnormal Psychology	3
SOCIO 1	Introduction to Sociology	3
Subtotal Units		6

ENGLISH REQUIREMENT
IN ADDITION, complete the following courses:

ENGL 105	Fundamentals of Writing	4
OR		
ENGL 1	Reading and Composition	4
Subtotal Units		4

CORE COURSES

IN ADDITION, complete the following courses:

HS 43	Case Management: Treatment & Aftercare	3
HS 46	Physiology & Pharmacology of Drugs	3
HS 47	Intervention, Treatment & Recovery	3
HS 48	Group & Family Process	3
HS 50	Law & Ethics	3
HS 252	Co Occurring Disorders	3
Subtotal Units		18

SKILLS AREA

IN ADDITION, complete SIX (6) units from the following courses:

HS 40A	Introduction to Addictive Behavior	3
HS 40B	Introduction to Addictive Behavior	3
HS 41	Introduction to Chemical Dependency	3
HS 45	Stress Management for Case Managers	3
HS 207	Development of Helping/Listening Skills	3
HS 242	Conflict Resolution/Mediation	3
HS 255	Alcohol & Drug Prevention & Education	3
HS 260	Domestic Violence Intervention Strategies	3
Subtotal Units		6

FIELDWORK

IN ADDITION, complete SEVEN (7) units from the following:

HS 72A	Field Instruction and Seminar I	3.5
HS 72B	Field Instruction and Seminar II	3.5
Subtotal Units		7
Total Units		41

Certificate of Accomplishment, Co-Occurring Disorders - Level One (Plan Code: 4811)

Completing this certificate will give students the knowledge, training and skills needed to identify, assess and refer affected individuals who have both substance abuse and mental health issues to appropriate treatment. The Co-Occurring Disorders - Level One Certificate is a complement to all of the Human Services certificates.

Program Student Learning Outcome:

- Students demonstrate ability to identify symptoms of co-occurring disorders, develop appropriate treatment planning and caseload management, engage in relapse prevention and symptoms management.

REQUIRED COURSES UNITS

HS 46	Physiology & Pharmacology of Drugs	3
HS 47	Intervention, Treatment & Recovery	3
HS 252	Co Occurring Disorders	3
PSYCH 1	Introduction to Psychology	3
PSYCH 14	Abnormal Psychology	3
Total Units		15

Certificate of Accomplishment, Alcohol & Chemical Dependency (Plan Code: 4067)

Completion of this certificate will provide students with the knowledge, training and skills needed to identify, assess and refer affected individuals with substance abuse issues to appropriate treatment.

REQUIRED COURSES UNITS

HS 41	Introduction to Chemical Dependency	3
HS 43	Case Management: Treatment & Aftercare	3
HS 46	Physiology & Pharmacology of Drugs	3
HS 48	Group & Family Process	3
HS 50	Law & Ethics	3
Total Units		15

American Sign Language and Deaf Studies

Associate in Arts, American Sign Language and Deaf Studies (Plan Code: 1245)

The Associate in Arts in ASL and Deaf Studies 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:

- Interpret between spoken English and American Sign Language (ASL)

- Understand specialized vocabulary that enable the student to function effectively as an interpreter for the Deaf.

- Understand ethical practices that enable the student to function effectively as an interpreter for the Deaf.

REQUIRED COURSES

		UNITS
SIGN 1	American Sign Language 1	4
SIGN 2	American Sign Language 2	4
SIGN 3	American Sign Language 3	4
SIGN 4	American Sign Language 4	4
SIGN 24	American Deaf Studies	3
LING 1	Linguistics 1	3
Total Units		22

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.

Associate in Arts in Anthropology for Transfer Degree (A.A.-T.), (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:

- 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.

REQUIRED COURSES   **UNITS**

Complete NINE (9) units:

ANTHR 1/1H	Physical Anthropology/Honors	3
ANTHR 2/2H	Cultural Anthropology/Honors	3
ANTHR 3/3H	Intro to Archaeology/Honors	3
Subtotal Units		9

IN ADDITION, complete THREE (3) units from LIST A:

LIST A

STAT 1/1H	Elementary Statistics/Honors	4
Subtotal Units		4

IN ADDITION, complete THREE-FOUR AND A HALF (3-4.5) units from LIST B:

LIST B
SCIENCE METHODS

ANAT 1	Human Anatomy	4
GEOL 1/1H	General Physical Geology/Honors	4.5
GEOG 10	Intro to Geographic Information Systems	3
Subtotal Units		3-4.5

IN ADDITION, complete THREE (3) units minimum from LIST C:

LIST C

Any course not selected from LIST A or B	3

ANTHROPOLOGY

ANTHR 10	Magic, Witchcraft and Religion	3
ANTHR 20	Archaeological Field Survey Methods	3

PEOPLES AND CULTURES

PHIL 14	Philosophy of Religion	3

HUMAN BEHAVIORIAL DIVERSITY

GEOG 2	Elements of Cultural Geography	3
SOCIO 1/1H	Introduction to Sociology/Honors	3
SOCIO 11	Race & Ethnicity Relations in the US	3
COMM 25	Elements of Intercultural Communication	3
Subtotal Units		3
Total Units in the Major		19-20.5

PROGRAMS OF STUDY

Architectural Design

The Architectural Design program at Long Beach City College creates an educational environment where students can achieve their individual goals by providing the necessary knowledge and skills to successfully transfer to a bachelor program in Architecture or a related field. The program provides students with instruction in the latest technologies, industry standards, and significant industry trends.

Associate in Science (A.S.) Degree, Architectural Design (Plan Code: 2908)

This field of concentration 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:

- Be aware of program transfer requirements and prepared for successful transfer to a university level architectural and/or other environmental design degree program.

- Acquire the professional attitude and desire for life-long learning and stay current with advanced technologies.

- Possess the necessary technical knowledge and communication skills to identify, articulate and solve problems pertaining to the built environment and perform tasks required within the architecture and/or environmental design professions.

REQUIRED COURSES		UNITS
ARCHT 60	Architectural Design	8
OR		
ARCHT 61	Architectural Design	4
AND		
ARCHT 62	Architectural Design	4
ARCHT 64	Architectural Design	8
OR		
ARCHT 65	Architectural Design	4
AND		
ARCHT 66	Architectural Design	4
ARCHT 70A	Architectural Design	8

OR		
ARCHT 71A	Architectural Design	4
Total Units in the Major		20-24

Certificate of Achievement, Architectural Design (Plan Code: 3908)

This Certificate of Achievement will prepare students for an entry-level position in a variety of design profession settings and may serve as a foundation for specialization.

REQUIRED COURSES		UNITS
ARCHT 60	Architectural Design	8
OR		
ARCHT 61	Architectural Design	4
AND		
ARCHT 62	Architectural Design	4
ARCHT 64	Architectural Design	8
OR		
ARCHT 65	Architectural Design	4
AND		
ARCHT 66	Architectural Design	4
ARCHT 70A	Architectural Design	8
OR		
ARCHT 71A	Architectural Design	4
Subtotal Units		20-24

IN ADDITION, complete SIX (6) units from the following:

ARCHT 360M1	Basic CAD for Architecture	1.5
ARCHT 360M2	Architecture Design CAD	1.5
ART 17	Illustration I	3
ART 30	Fundamentals of Art/Volume, Plane & Form	3
ART 31	Fundamentals of Art/Composition & Color	3
DRAFT 210	3D Printing Fundamentals I (FDM)	1.5
DRAFT 211	Laser Cutting Fundamentals	1.5
TEC 60	Computer Aided Drafting & Design (CADD)	4
Subtotal Units		6

IN ADDITION, complete THREE- FIVE (3-5) units from the following:

MATH 40	Trigonometry	3
OR		
Higher Math Course (see available math courses)		3-5
MATH 50	Precalculus Math	5
MATH 55	Discrete Mathematics	4
MATH 60	First Calculus Course	5

MATH 60H	Honors First Calculus Course	5
MATH 70	Second Calculus Course	5
MATH 70H	Honors Second Calculus Course	5
MATH 80	Third Calculus Course	5
MATH 84	Intro Differential Eqns and Linear Alg	5
Subtotal Units		3-5
Total Units		29-35

Art

The Art and Photography Department at Long Beach City College 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 21st century skills to achieve academic success in all areas and employment opportunities in a wide variety of professions.

Associate in Arts in Art History for Transfer Degree (A.A.-T.), (Plan Code: 5015B/5015C)

The Associate in Arts in Art History for Transfer degree is designed to provide students the opportunity to complete the lower-division major and general education preparation for transferring to a California public university as an Art History major. The study of Art History is an interdisciplinary exploration of visual culture from the earliest human history to the present in a global context. Students learn to analyze works of art and articulate the historical, social, and aesthetic functions of art. Coursework familiarizes students with Western and non-Western art, theory,

research methodology, media and technique to build a foundation for future interpretive and 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 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.

REQUIRED CORE COURSES   UNITS

Complete THREE (3) courses:

ART 1/1H	Art and Civilization/Honors	3
ART 2/2H	Art and Civilization/Honors	3
ART 15	Beginning Drawing	3
Subtotal Units		9

IN ADDITION, complete ONE (1) course from LIST A:

LIST A:

ART 4/4H	African, Oceanic, Native American Art/Honors	3
ART 5	History of Asian Art	3
Subtotal Units		3

IN ADDITION, complete ONE (1) course from LIST B:

LIST B:
Any LIST A course not used above

ART 19	Life Drawing	3
ART 30	Fundamentals of Art/Volume, Plane & Form	3
ART 31	Fundamentals of Art/Composition & Color	3
ART 41	Introduction to Computergraphics	3
ART 50	Ceramics I	3
ART 60	Beginning Sculpture	3
ART 80	Elements of Photography	3
ART 81	Introduction to Fine Art Photography	3
OR		
PHOT 31	Intro to B&W Photography Darkroom	4
OR		
ART 23	Beginning Painting	3
Subtotal Units		3

IN ADDITION, complete One (1) course from LIST C:

LIST C:

Any LIST A or B course not used above		
ART 3/3H	Modern & Contemporary Art/Honors	3
ART 11/11H	Latin American Art and Architecture/Honors	3
PHOT 10	History of Photography	3
Subtotal Units		3
Total Units in the Major		18

Associate in Arts in Studio Arts for Transfer Degree (A.A.-T.), (Plan Code: 5013B/5013C)

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 Outcome:

- Create original artwork using a foundation of skills, craft, traditional and digital technologies.

REQUIRED COURSES		UNITS
ART 2/2H	Art and Civilization/Honors	3
ART 15	Beginning Drawing	3
ART 30	Fundamentals of Art/Volume, Plane & Form	3
ART 31	Fundamentals of Art/Composition & Color	3
Subtotal Units		12

IN ADDITION, complete ONE (1) course from LIST A:

LIST A:

ART 1/1H	Art and Civilization/Honors	3
ART 4/4H	African, Oceanic, Native American Art/Honors	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 41	Introduction to Computergraphics	3
ART 50	Ceramics I	3
ART 60	Beginning Sculpture	3
ART 70	Printmaking, Silkscreen	3
PHOT 31	Intro to B&W Photography Darkroom	4
OR		
PHOT 32	Introduction to Digital Photography	4
ART 34	Applied Design/Crafts	3
OR		
ART 35	Jewelry/Metalsmithing I	3
ART 71	Printmaking, Intaglio	3
OR		
ART 81	Introduction to Fine Art Photography	3
Subtotal Units		9-12
Total Units in the Major		24-27

Associate in Arts (A.A.) Degree, Art (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:

- 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.

Complete the Required Courses (36) units AND one of the OPTIONS listed below (6-8) units:

REQUIRED COURSES		UNITS
ART 1	Art and Civilization	3
ART 2	Art and Civilization	3
ART 15	Beginning Drawing	3
ART 23	Beginning Painting	3
ART 30	Fundamentals of Art/Volume, Plane & Form	3

ART 31	Fundamentals of Art/Composition & Color	3
ART 35	Jewelry/Metalsmithing 1	4
ART 41	Introduction to Computergraphics	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
Subtotal Units		36

APPLIED DESIGN OPTION
In addition to the above 38 units, complete SEVEN (7) units from the following:

ART 34	Applied Design/Crafts	3
ART 36	Jewelry/Metalsmithing 2	4
ART 38	Jewelry/Metalsmithing 4	4
ART 51	Ceramics II	3
ART 52	Ceramics III	3
ART 53	Ceramics IV	3
Subtotal Units		7

ART HISTORY OPTION
In addition to the above 38 units, complete SIX (6) units from the following:

ART 3	Modern & Contemporary Art	3
ART 4/4H	African, Oceanic, Native American Art	3
ART 5	History of Asian Art	3
ART 11/11H	Latin American Art and Architecture/Honors	3
ART 12	Gallery and Exhibition Design	3
PHOT 10	History of Photography	3
Subtotal Units		6

COMPUTER ART OPTION
In addition to the above 38 units, complete SIX (6) units from the following:

ART 42	Intro/3D & Multimedia Computergraphics	3
ART 43	Beginning Website Design	3
ART 44	Introduction to Graphic Design	3
ART 45	Computer Art for Drawing & Painting	3
ART 46	Computer Art & Design in 3D Modeling	3
ART 47	Computer Animation & Multimedia	3
ART 48	Computer Art & Design For TV & Video	3
ART 55	Introduction to Graphic Design	3
Subtotal Units		6

DRAWING AND PAINTING OPTION
In addition to the above 38 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
In addition to the above 38 units, complete SIX (6) units from the following:

ART 32	Intermediate Design	3
ART 43	Beginning Website Design	3
ART 44	Introduction to Graphic Design	3
ART 55	Introduction to Graphic Design	3
ART 56	Introduction to Typography	1.5
Subtotal Units		6

ILLUSTRATION OPTION
In addition to the above 38 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
ART 45	Computer Art for Drawing & Painting	3
Subtotal Units		6

PRINTMAKING OPTION
In addition to the above 38 units, complete SIX (6) units from the following:

ART 70	Printmaking, Silkscreen	3
ART 71	Printmaking, Intaglio	3
ART 72	Advanced Printmaking	3
Subtotal Units		6

SCULPTURE OPTION
In addition to the above 38 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		8

FINE ART PHOTOGRAPHY OPTION
In addition to the above 38 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	Photography Studio Lighting	4
PHOT 35	Photography for Publication	3

PHOT 37	Portrait Photography	4
PHOT 39	Photography on Location	3
PHOT 40	Mastering the Photographic Print	3
PHOT 41	Professional Photographic Portfolio	4
PHOT 42	Experimental Photography Laboratory	4
PHOT 43	Photoshop and Digital Image Management	3
PHOT 281	Photography Laboratory	1
Subtotal Units		7
Total Units in the Major		42-44

Certificate of Accomplishment, Fundamentals of Digital Media Arts (Plan Code: 4194)

The Fundamentals of Digital Media Arts Program is designed to prepare students for a multidisciplinary work environment while focusing on the creative uses of digital technology. This interdisciplinary program gives students the training and skills to meet the constantly changing demands from today's digital media marketplace.

Program Student Learning Outcomes:

- Produce professional quality digital media projects that demonstrates comprehension of visual design, digital production skills and an understanding of multi-disciplinary collaboration.

- Analyze, interpret, and exercise critical judgment in the evaluation of Digital Media Projects.

REQUIRED COURSES		UNITS
FILM 20	Fundamentals of Digital Film Production	3
OR		
R_TV 14	Electronic Field Production	2.5
R_TV 216	Non-Linear Video & Film Editing	2.5
PHOT 32	Introduction to Digital Photography	4
ART 41	Introduction to Computergraphics	3
DMA 201	Introduction to Digital Media Arts	3
Total Units		15-15.5

Certificate of Accomplishment, Graphic Design (Plan Code: 4195)

The Graphic Design certificate brings together core graphic design classes into a sequence that prepare students for entry level design positions for websites, production print publications and new developments in graphic design. This certificate is designed for students that are starting graphic design and for designers that are updating to current tools and techniques in basic design skills, typography, screen based design and print production techniques.

Program Student Learning Outcome:

- Produce professional quality graphic design projects that demonstrate comprehension of visual design, digital production skills and an understanding of multi-disciplinary collaboration.

REQUIRED COURSES		UNITS
ART 31	Fundamentals of Art/Composition & Color	3
ART 41	Introduction to Computergraphics	3
ART 43	Beginning Website Design	3
ART 44	Introduction to Graphic Design	3
ART 55	Introduction to Graphic Design	3
ART 56	Introduction to Typography	1.5
Total Units		16.5

Automotive Technology

Associate in Science, Automotive Technology (Plan Code: 2941)

The Associate in Science in Automotive Technology instruction will emphasize an 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:

- 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.

- Evaluate and identify faults in automotive performance components and perform service to factory specifications.

REQUIRED COURSES		UNITS
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 215	Automotive Brake Systems	3
AUTO 216	Automotive Electric Systems	3
AUTO 217	Automotive Air Conditioning	3
AUTO 218	Automotive Fuel Systems	3
AUTO 219	Automotive Light Diesel Engines	3
Total Units		30

Certificate of Achievement, Automotive Technology (Plan Code: 3941)

The Certificate of Achievement in Automotive Technology will emphasize an 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:

- 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.

- Evaluate and identify faults in automotive performance components and perform service to factory specifications.

REQUIRED COURSES · UNITS

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 Electric Systems	3
AUTO 217	Automotive Air Conditioning	3
AUTO 218	Automotive Fuel Systems	3
AUTO 219	Automotive Light Diesel Engines	3
Total Units		30

Certificate of Achievement, Automotive Engine and Transmission Service (Plan Code: 3939)

This Automotive Certificate of Achievement in Automotive Engine and Transmission Service 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.

- Evaluate and identify faults in automotive engine and drivetrains components and perform service to factory specifications.

REQUIRED COURSES · UNITS

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		16

Certificate of Achievement, Automotive Engine Performance Service (Plan Code: 3940)

This Certificate of Achievement in Automotive Engine Performance Service 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:

- 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.

- Evaluate and identify faults in automotive engine performance components and perform service to factory specifications.

REQUIRED COURSES — UNITS

AUTO 200	Introduction to Automotive Technology	3
AUTO 216	Automotive Electric Systems	3
AUTO 218	Automotive Fuel Systems	3
AUTO 219	Automotive Light Diesel Engines	3
Total Units		12

Certificate of Achievement, Automotive Maintenance Service (Plan Code: 3926)

This Certificate of Achievement in Automotive Maintenance Service 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:

- 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.

- Evaluate and identify faults in automotive undercar and underhood components and perform service to factory specifications.

REQUIRED COURSES — UNITS

AUTO 200	Introduction to Automotive Technology	3
AUTO 214	Automotive Wheel Alignment	3
AUTO 215	Automotive Brake Systems	3
AUTO 216	Automotive Electric Systems	3
AUTO 217	Automotive Air Conditioning	3
AUTO 218	Automotive Fuel Systems	3
Total Units		18

Certificate of Accomplishment in Automotive Quick Service (Plan Code: 4923)

This Certificate of Accomplishment in Automotive Quick Serve 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 Outcome:

- Evaluate and prepare vehicles for quick service according to the manufacturer procedures.

REQUIRED COURSES — UNITS

AUTO 200	Introduction to Automotive Technology	3
AUTO 201	Automotive Lubrication Service	1
AUTO 202	Automotive Tire Service	1
AUTO 203	Automotive Brake Service	1
Total Units		6

Certificate of Completion in Automotive Quick Service (Plan Code: 4924)

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:

- Demonstrate mastery of diagnostic tools and equipment used for automotive repair.

- Identify various automotive components.

- Demonstrate the technical and organizational employability skills required by the automotive industry.

REQUIRED COURSES — HOURS

AUTO 600	Introduction to Automotive Technology	90
AUTO 601	Automotive Lubrication Service	36
AUTO 602	Automotive Tire Service	36
AUTO 603	Automotive Brake Service	36
Total Hours		198

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.

Associate in Science (A.S.) Degree, Baking & Pastry Arts (Plan Code: 2142)

The Baking and Pastry Arts Associate in Science Degree 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:

- Create yeast bread products to industry standards.

- Create pastry products to industry standards.

- Synthesize the principles and reactions of basic baking ingredients and their properties alone and when combined with other ingredients.

- Demonstrate industry-standard kitchen safety and sanitation practices.

REQUIRED COURSES — UNITS

BCOM 222	Job Search Skills	3
BCOM 262	Soft Skills for the Workplace	1
CULAR 20	App Food Serv Sanit in Hotel/Rstr Mgmt	3
CULAR 225	Product and Menu Development	2
CULAR 241	Intro to Baking & Pastry Skills/Princ	5
CULAR 258	Artisan Breads	1.5
CULAR 259	Viennese Pastries	1.5
CULAR 242	Intermed Baking and Pastry Skills/Princ	5
CULAR 246	Specialty Cakes & French Pastries	3
CULAR 247	Cake Decorating	3
CULAR 243A	Advanced Bakery Operations	4
CULAR 243B	Advanced Bakery Practicum	4
Subtotal Units		36

IN ADDITION, complete THREE (3) units from the following:

CULAR 250	Culinary Skills for Baking Students	1.5
CULAR 252	Frozen Desserts	1.5
CULAR 253	Chocolate Confections, Deco & Showpieces	1.5
CULAR 254	Sugar Confections, Deco & Showpieces	1.5
CULAR 255	Plated Desserts	1.5
CULAR 256	Holiday Desserts	1.5
Subtotal Units		3
Total Units in the Major		39

RECOMMENDED courses but not required:

LEARN 811	Introduction to Study Skills	1
MATH 825	Culinary Math	1
COSA 1	Computer Information Competency	1

Certificate of Achievement, Baking & Pastry Arts (Plan Code: 3142)

The Baking and Pastry Arts Certificate of Achievement 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:

- Create yeast bread products to industry standards.

- Create pastry products to industry standards.

- Synthesize the principles and reactions of basic baking ingredients and their properties alone and when combined with other ingredients.

- Demonstrate industry-standard kitchen safety and sanitation practices.

REQUIRED COURSES—Complete the 39 units of required courses as listed in the Associate Degree major requirements.

Biological Sciences

The department has a multi-fold mission of (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 and increase awareness of personal health.

Associate in Science (A.S.) Degree, Biological Sciences (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:

- 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.

REQUIRED COURSES		UNITS

Select courses from the following, total 9-12 units:

ANAT	Anatomy	
BIO	Biology (excluding BIO 47, 48 or 49)	
PHYSI	Physiology	
Subtotal Units		9-12

IN ADDITION, complete SIX-NINE (6-9) units from:

ASTR	Astronomy Courses	
CHEM	Chemistry Courses	
ENVRS 1	Energy for the Future	
PGEOG	Physical Geography (excluding all other Geography-GEOG-courses)	
GEOL	Geology Courses	
MATH	Math Courses (excluding MATH 110, 805, 815)	
PHYS	Physics Courses	
Subtotal Units		6-9
Total Units in the Major		18

Biology

Associate in Science in Biology for Transfer Degree (A.S.-T) (Plan Code: 5505B/C)

This Associate in Science in Biology for Transfer program provides students with a foundation in core principals 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:

- 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.

REQUIRED COURSES		UNITS
BIO 1A	Biology for Science Majors	5
BIO 1B	Biology for Science Majors	5
Subtotal Units		10

In Addition, complete all courses from LIST A:

CHEM 1A	General Chemistry	5.5
AND		
CHEM 1B	General Chemistry	5.5
MATH 60	First Calculus Course	5
PHYS 2A	General Physics	4.5
AND		
PHYS 2B	General Physics	4.5
Subtotal Units		25
Total Units		35

Recommended Courses:

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	4.5
PHYS 3B	Physics for Sci & Eng-E&M	4.5

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 lifelong-learning environment. Students develop high-level knowledge and critical-thinking skills that will prepare them to make informed and ethically-responsible decisions in a complex global environment.

Associate in Science in Business Administration for Transfer Degree (A.S.-T.) (Plan Code: 5502B/5502C)

The Associate in Science in Business Administration for Transfer degree 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:

- Comprehend the primary elements of the language and theories of the business environment and demonstrate an understanding of basic mathematics and technology fundamentals.

- Use creative and critical-thinking strategies in the solution of complex business situations through the application of business, mathematical, and technological skills.

- Develop communication and teamwork skills for the purpose of ensuring future personal and professional success.

REQUIRED COURSES		UNITS
ACCTG 1A	Principles of Accounting	5
ACCTG 1B	Principles of Accounting	5
ECON 1/1H	Macro Economic Analysis/Honors	3
ECON 2/2H	Micro Economic Analysis/Honors	3
LAW 18A	Business Law	3
Subtotal Units		19

IN ADDITION, complete THREE to FOUR (3-4) units from LIST A:

STAT 1/1H	Elementary Statistics/Honors	4
MATH 47	Calculus for Business	3
Subtotal LIST A Units		3-4

IN ADDITION, complete SIX-SEVEN (6-7) units from LIST B:

Any LIST A course not used above		3-4
COSA 30	Introduction to Computers	3
OR		
COSA 50	Introduction to IT Concepts & Applications	4
GBUS 5	Introduction to Business	3
Subtotal LIST B Units		6-7
Total Units in the Major		28-30

**Nine (9) units of the Business Administration for Transfer coursework can be applied to the CSU-GE Breadth or IGETC patterns.

Associate in Arts Degree (A.A.), Business: Emphasis in Concentration

The Associate Degree in Business consists of the prescribed GE requirements, as well as the following 5 concentrations: accounting, general business, international business, management and marketing. 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.

REQUIRED COURSES (ALL CONCENTRATIONS)		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
*ACCTG 1A	Principles of Accounting	5
OR		
*ACCTG 200A	Introduction to Accounting	3

*For Accounting concentration, students must take ACCTG 1A

Subtotal Units 9-11

In addition to the required core, students must choose ONE of the following concentrations:

BUSINESS: ACCOUNTING CONCENTRATION (PLAN CODE: 1100)

REQUIRED COURSES		UNITS
ACCTG 1B	Principles of 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		15

Complete SIX (6) units from the following recommended electives:

LAW 18B	Business Law	3

ACCTG 200A	Introduction to Accounting	3
ECON 1	Macro Economic Analysis	3
ECON 2	Micro Economic Analysis	3
Subtotal Units		6
Total Units		30-32

BUSINESS: GENERAL BUSINESS CONCENTRATION (PLAN CODE: 1111)

REQUIRED COURSES		UNITS
IBUS 1	Introduction to International Business	3
MGMT 49A	Introduction to Management	3
OR		
MKTG 47	Essentials of Marketing	3
LAW 18B	Business Law	3
OR		
GBUS 25	Digital and Social Media	3
GBUS 10	Personal Financial Management	3
Subtotal Units		12

Complete SIX (6) units from the following recommended electives:

ECON 1	Macro Economic Analysis	3
ECON 4	Contemporary Economic Issues	3
Subtotal Units		6
Total Units		27-29

BUSINESS: INTERNATIONAL BUSINESS CONCENTRATION (PLAN CODE: 1151)

REQUIRED COURSES		UNITS
IBUS 1	Introduction to International Business	3
IBUS 20	Export-Import Business Practice	3
IBUS 60	International Business Law	3
IBUS 75	Introduction to Logistics	3
IBUS 52	Introduction to Supply Chain Management	3
Subtotal Units		15

Complete SIX (6) units from the following recommended electives:

LAW 18B	Business Law	3
ECON 1	Macro Economic Analysis	3
ECON 5	The Global Economy	3
Subtotal Units		6
Total Units		30-32

BUSINESS: MANAGEMENT CONCENTRATION (PLAN CODE: 1143)

REQUIRED COURSES		UNITS
MGMT 49A	Introduction to Management	3
OR		
MGMT 49B	Human Resources Management	3

MGMT 58	Leadership and Supervision	3
MGMT 60	Management & Organizational Behavior	3
MGMT 80	Small Business Entrepreneurship	3
Subtotal Units		12

Complete SIX (6) units from the following recommended electives:

LAW 18B	Business Law	3
ECON 2	Micro Economic Analysis	3
Subtotal Units		6
Total Units		30-32

BUSINESS: MARKETING CONCENTRATION (PLAN CODE: 1153)

REQUIRED COURSES		UNITS
MKTG 40	Salesmanship	3
MKTG 41	Marketing Communications	3
MKTG 47	Essentials of Marketing	3
GBUS 25	Digital and Social Media	3
Subtotal Units		12

Complete SIX (6) units from the following recommended electives:

LAW 18B	Business Law	3
ECON 2	Micro Economic Analysis	3
Subtotal Units		6
Total Units		27-29

Certificate of Achievement, Business: Accounting (Plan Code: 3100)

The Certificate of Achievement in Accounting will prepare a student for advancement into a baccalaureate-degree granting institution and/or for an entry-level position in the accounting function of a small/medium-sized business.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
ACCTG 1A	Principles of Accounting	5
OR		
ACCTG 200A	Introduction to Accounting	3
ACCTG 1B	Principles of 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		24-26

Certificate of Achievement, Business: General Business (Plan Code: 3111)

The Certificate of Achievement in General Business will prepare a student for advancement into business school at a baccalaureate-degree granting institution and/or for an entry-level position in a variety of functional areas in a small/medium-sized business.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
ACCTG 1A	Principles of Accounting	5
OR		
ACCTG 200A	Introduction to Accounting	3
IBUS 1	Introduction to International Business	3
MGMT 49A	Introduction to Management	3
OR		
MKTG 47	Essentials of Marketing	3
LAW 18B	Business Law	3
OR		
GBUS 25	Digital and Social Media	3
GBUS 10	Personal Financial Management	3
Total Units		21-23

Certificate of Achievement, Business: International Business (Plan Code: 3151)

The Certificate of Achievement in International Business will prepare a student for advancement into business school at a baccalaureate-degree granting institution and/or for an entry-level position in a small/medium-sized business involved in international trade and logistics.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
ACCTG 1A	Principles of Accounting	5
OR		
ACCTG 200A	Introduction to Accounting	3
IBUS 1	Introduction to International Business	3
IBUS 20	Export-Import Business Practice	3
IBUS 60	International Business Law	3
IBUS 75	Introduction to Logistics	3
IBUS 52	Introduction to Supply Chain Management	3
Total Units		24-26

Certificate of Achievement, Business: Management (Plan Code: 3143)

The Certificate of Achievement in Management will prepare a student for advancement into business school at a baccalaureate-degree granting institution 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.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
ACCTG 1A	Principles of Accounting	5
OR		
ACCTG 200A	Introduction to Accounting	3
MGMT 49A	Introduction to Management	3
OR		
MGMT 49B	Human Resources Management	3
MGMT 58	Leadership and Supervision	3
MGMT 60	Management & Organizational Behavior	3
MGMT 80	Small Business Entrepreneurship	3
Total Units		21-23

Certificate of Achievement, Business: Marketing (Plan Code: 3153)

The Certificate of Achievement in Marketing will prepare a student for advancement into business school at a baccalaureate-degree granting institution and/or for an entry-level position in a small/medium-sized business, in functions such as sales, advertising or product development.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
ACCTG 1A	Principles of Accounting	5
OR		
ACCTG 200A	Introduction to Accounting	3
MKTG 40	Salesmanship	3
MKTG 41	Marketing Communications	3
MKTG 47	Essentials of Marketing	3
GBUS 25	Digital and Social Media	3
Total Units		21-23

Certificate of Accomplishment, Business: Foundations of Accounting (Plan Code: 4200)

The Certificate of Accomplishment 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.

REQUIRED COURSES		UNITS
ACCTG 1A	Principles of Accounting	5
ACCTG 1B	Principles of Accounting	5
ACCTG 228	Computer Gen Ledger Account Systems	2
OR		
ACCTG 229	Spreadsheet Accounting	3
OR		
ACCTG 230	Quickbooks Accounting	2
Total Units		12-13

Certificate of Accomplishment, Business: Foundations of Business (Plan Code: 4111)

The Certificate of Accomplishment in Business – Foundations of Business 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.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
LAW 18A	Business Law	3
MKTG 40	Salesmanship	3
ACCTG 200A	Introduction to Accounting	3
OR		
ACCTG 1A	Principles of Accounting	5
Total Units		12-14

Certificate of Accomplishment, Business: Foundations of International Business (Plan Code: 4151)

The Certificate of Accomplishment in Business: Foundations of International Business 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 involved in international trade and logistics.

REQUIRED COURSES		UNITS
GBUS 5	Introduction to Business	3
IBUS 1	Introduction to International Business	3
IBUS 20	Export/Import Business Practice	3
IBUS 52	Introduction to Supply Chain Management	3
Total Units		12

Certificate of Accomplishment, Business: Foundations of Management (Plan Code: 4143)

The Certificate of Accomplishment in Business: Foundations of Management 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.

REQUIRED COURSES		UNITS
MGMT 49A	Introduction to Management	3
OR		
MGMT 49B	Human Resource Management	3
MGMT 58	Leadership and Supervision	3
MGMT 60	Mgmt. & Organizational Behavior	3
MGMT 80	Small Business Entrepreneurship	3
Total Units		12

Certificate of Accomplishment, Business: Foundations of Marketing (Plan Code: 4153)

The Certificate of Accomplishment in Business: Foundations of Marketing 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.

REQUIRED COURSES		UNITS
MKTG 40	Salesmanship	3
MKTG 41	Marketing Communications	3
MKTG 47	Essentials of Marketing	3
IBUS 52	Introduction to Supply Chain Management	3
Total Units		12

Certificate of Accomplishment, Business: Business Economics (Plan Code: 4145)

The Certificate of Accomplishment 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.

REQUIRED COURSES		UNITS
ACCTG 1B	Principals of Accounting	5
ECON 2	Micro Economic Analysis	3
LAW 18B	Business Law	3
Total Units		11

Certificate of Accomplishment, Business: Money and Banking (Plan Code: 4144)

The Certificate of Accomplishment 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 a financial or banking industry, and in functions such as accounting and budget planning.

REQUIRED COURSES		UNITS
ACCTG 1A	Principals of Accounting	5
ECON 1	Macro Economic Analysis	3
LAW 18A	Business Law	3
Total Units		11

Certificate of Accomplishment, Business: Logistics (Plan Code: 4127)

The Certificate of Accomplishment 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 involved in international trade, logistics and supply-chain management.

REQUIRED COURSES		UNITS
IBUS 1	Introduction to International Business	3
IBUS 20	Export- Import Bus. Practices	3
IBUS 52	Introduction to Supply Chain Management	3
IBUS 75	Introduction to Logistics	3
Total Units		12

Certificate of Accomplishment, Real Estate Salesperson (Plan Code: 4115)

The courses listed in the Real Estate Salesperson Certificate of Accomplishment 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.

REQUIRED COURSES		UNITS
REAL 80	Real Estate Principles	3
REAL 81A	Real Estate Practice	3
REAL 78	Real Estate Economics	3
REAL 253	Property Management	3
Total Units		12

Certificate of Accomplishment, Real Estate Broker (Plan Code: 4154)

The courses listed in the Real Estate Broker certificate of accomplishment, 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 CalBRE. For additional information regarding the Real Estate Salesperson license, refer to http://www.dre.ca.gov.

REQUIRED COURSES		UNITS
REAL 85	Real Estate Appraisal	3
REAL 87	Real Estate Finance	3
ACCTG 200A	Introduction to Accounting	3
LAW 18A	Business Law	3
Total Units		12

Certificate of Accomplishment, Foundations of Entrepreneurship (Plan Code: 4203)

The Foundations of Entrepreneurship Certificate of Accomplishment 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.

REQUIRED COURSES · UNITS

MGMT 49B	Human Resources Management	3
GBUS 25	Digital and Social Media	3
ACCTG 229	Spreadsheet Accounting	3
MGMT 80	Small Business Entrepreneurship	3
Total Units		12

Certificate of Accomplishment, Personal Financial Planning (Plan Code: 4202)

The Personal Financial Planning Certificate of Accomplishment 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.

REQUIRED COURSES · UNITS

GBUS 10	Personal Financial Management	3
ACCTG 205	Fundamentals of Tax	3
COSA 15	Microsoft Excel for Windows	3
Total Units		9

Certificate of Accomplishment, Social Media Application Development (Plan Code: 4201)

The Social Media Application Development Certificate of Accomplishment 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.

REQUIRED COURSES · UNITS

GBUS 5	Introduction to Business	3
GBUS 25	Digital and Social Media	3
COSP 201	Mobile App Development	1
Total Units		7

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.

Associate in Science (A.S.) Degree, Business Information Worker (Plan Code: 2129)

This Associate Degree is a two-year program leading to the Associate in Science (A.S.) degree. It is designed 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.

Program Student Learning Outcomes:

* Create a variety of business documents using business application software packages

REQUIRED COURSES · UNITS

BCOM 15	Business Communications	3
BCOM 25	Digital and Social Media	3
BCOM 263	Customer Service	3
COSA 5	Microsoft Windows Operating System	3
COSA 30	Introduction to Computers	3
COSA 10	Microsoft Word for Windows	3
COSA 15	Microsoft Excel for Windows	3
COSA 215	Microsoft Outlook for Windows	3
COSK 200	Keyboarding and Document Production	3
Subtotal Units in the Major		27

In ADDITION, select a total of THREE (3) units from the following:

BCOM 222	Job Search Skills	3
BCOM 260	Business Telephone Procedures	1
BCOM 262	Soft Skills for the Workplace	1
COSA 2	Critical Thinking Using Computers	3
COSA 20	Microsoft PowerPoint for Windows	3
COSA 35	Microsoft Office	3
COSA 214	Records Management and Filing	1
COSK 209	Speed/Accuracy Bldg. for Typists	1
COSK 233	Computer Keyboarding Skills	1

Subtotal Units	3
Total	30

Certificate of Achievement, Business Information Worker (Plan Code: 3129)

This Certificate of Achievement is a two-year program. It is designed 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.

Program Student Learning Outcome:

• Create a variety of business documents using business application software packages.

REQUIRED COURSES		UNITS
BCOM 15	Business Communications	3
BCOM 25	Digital and Social Media	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 30	Introduction to Computers	3
COSA 215	Microsoft Outlook for Windows	3
COSK 200	Keyboarding and Document Production	3
Subtotal Units in the Major		27

In ADDITION, select a total of THREE (3) units from the following:

BCOM 222	Job Search Skills	3
BCOM 260	Business Telephone Procedures	1
BCOM 262	Soft Skills for the Workplace	1
COSA 2	Critical Thinking Using Computers	3
COSA 20	Microsoft PowerPoint for Windows	3
COSA 35	Microsoft Office	3
COSA 214	Records Management and Filing	1
COSK 209	Speed/Accuracy Bldg. for Typists	1
COSK 233	Computer Keyboarding Skills	1
Subtotal Units		3
Total		30

Certificate of Accomplishment, Business Digital Literacy (Plan Code: 4130)

This certificate will develop students' current computer information competency skills in this short term course.

REQUIRED COURSES		UNITS
COSA 1	Computer Information Competency	1
Total Units		1

Certificate of Accomplishment, Customer Relations Specialist (Plan Code: 4157)

Students learn the communication skills and customer service techniques that are in-demand in the workforce.

Program Student Learning Outcome:

• Apply effective communication skills to satisfy customers' needs and build relationships.

REQUIRED COURSES		UNITS
BCOM 15	Business Communications	3
BCOM 263	Customer Service	3
Total Units		6

Certificate of Accomplishment, Digital and Social Media (Plan Code: 4156)

Students learn the most updated criteria for evaluating social media platforms and generating branding content.

Program Student Learning Outcomes:

• Evaluate social media platforms to determine suitability for a variety of digital content.

REQUIRED COURSES		UNITS
BCOM 15	Business Communications	3
BCOM 25	Digital and Social Media	3
BCOM 263	Customer Service	3
Total Units		9

Certificate of Accomplishment, Microsoft Essentials (Plan Code: 4155)

Students acquire the in-demand productivity software skills and the formatting knowledge that employers are looking for.

Program Student Learning Outcome:

• Create appropriately formatted deliverables using a variety of Microsoft Office software.

REQUIRED COURSES		UNITS
COSA 5	Microsoft Windows Operating System	3
COSA 30	Introduction to Computers	3
COSA 215	Microsoft Outlook for Windows	3
Total Units		9

Noncredit Certificate of Completion, Computer Hardware Repair (Plan Code: 4162)

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.

REQUIRED COURSES		HOURS
COSA 650	Intro. To IT Concepts & Applications	72
COSN 605	Computer Hardware Fundamentals	72
Total Hours		144

Noncredit Certificate of Completion, Office Technologies – Microsoft Outlook (Plan Code: 4160)

The certificate in Office Technologies – Microsoft Outlook will certify that students have achieved Microsoft Office skills necessary for success in pre-transfer level college courses. Furthermore, this certificate will verify that students have demonstrated skill achievement at levels that are necessary for completing the Microsoft Outlook Specialist Industry Certification Exam (MOS).

Program Student Learning Outcomes:

- Compose formatted emails, meeting requests, and task requests in Microsoft Outlook.

- Manage folders and contacts in Microsoft Outlook.

REQUIRED COURSES		HOURS
COSA 628	Microsoft Outlook, Introductory	18
COSA 629	Microsoft Outlook, Intermediate	18
COSA 630	Microsoft Outlook, Advanced	18
Total Hours		54

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.

Noncredit Certificate of Completion, Office Technologies – Microsoft PowerPoint (Plan Code: 4161)

The certificate in Office Technologies – Microsoft PowerPoint will certify that students have achieved Microsoft Office skills necessary for success in pre-transfer level college courses. Furthermore, this certificate will verify that students have demonstrated skill achievement at levels that are necessary for completing the Microsoft PowerPoint Industry Certification Exam (MOS).

Program Student Learning Outcome:

- Use Microsoft PowerPoint to create, customize, and format professional presentations.

REQUIRED COURSES		HOURS
COSA 620	Microsoft PowerPoint, Introductory	18
COSA 621	Microsoft PowerPoint, Intermediate	18
COSA 622	Microsoft PowerPoint, Advanced	18
Total Hours		54

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.

Noncredit Certificate of Completion, Office Technologies – Job Search Skills (Plan Code: 4164)

The certificate in Job Search Skills 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 self-evaluation, 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).

- Demonstrate the ability to communicate their employability soft and hard skills that land them the job.

REQUIRED COURSES		HOURS
BCOM 622	The Job Search Process	18
BCOM 623	Job Search Tools	18
BCOM 624	The Interview Process	18
Total Hours		54

Noncredit Certificate of Completion, Office Technologies – Microsoft Access
(Plan Code: 4165)

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.

- Create database tables, queries, forms, and reports relating to organization operations.

- Utilize the Microsoft Access Database Management system to address data maintenance and operational needs of common business scenarios.

REQUIRED COURSES		HOURS
COSA 625	Microsoft Access, Introductory	18
COSA 626	Microsoft Access, Intermediate	18
COSA 627	Microsoft Access, Advanced	18
Total Hours		54

Noncredit Certificate of Completion, Office Technologies – Microsoft Excel
(Plan Code: 4166)

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 Outcome:

- Use Microsoft Excel to create, customize, and format business and personal spreadsheets.

REQUIRED COURSES		HOURS
COSA 615	Microsoft Excel, Introductory	18
COSA 616	Microsoft Excel, Intermediate	18
COSA 617	Microsoft Excels, Advanced	18
Total Hours		54

Noncredit Certificate of Completion, Office Technologies – Microsoft Word
(Plan Code: 4167)

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 Outcome:

- Use Microsoft Word to create, customize, and format business documents.

REQUIRED COURSES		HOURS
COSA 610	Microsoft Word, Introductory	18
COSA 611	Microsoft Word, Intermediate	18
COSA 612	Microsoft Word, Advanced	18
Total Hours		54

Child Development: Early Childhood Education (CDECE)

The Child and Adult Development Department at Long Beach City College 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.

Associate in Science in Early Childhood Education for Transfer Degree (A.S.-T.), (Plan Code: 5501B/5501C)

The Associate in Science in Early Childhood Education for Transfer is designed for students who wish to transfer to a four-year 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:

- 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.

- Transfer from LBCC to a University.

REQUIRED COURSES		UNITS
CDECE 19	Health, Safety and Nutrition DS7	3
CDECE 45	Child & Adolescent Development DS1	3
CDECE 48	Child, Family & Community DS2	3
CDECE 50	Intro to Curriculum for Young Children	3
CDECE 53	Principles and Practices DS3	3
CDECE 61	Teaching in a Diverse Society DS3	3
CDECE 66	Observation and Assessment DS3	3
CDECE 68	Practicum D3	3
Total Units		24

Associate in Arts (A.A.) Degree, Child Development: Early Childhood Education (Plan Code: 1302)

This field of concentration 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:

- 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.

- Critically assess the components of linguistically and culturally relevant, inclusive, age appropriate, anti-bias approaches in promoting optimum learning and development.

- 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.

REQUIRED COURSES — UNITS

Complete Levels 1, 2, 3 and 4 and choose ONE (1) area of focused study.

LEVEL 1

CDECE 1	The Developing Professional	1
CDLL 52	Fieldwork/Preschool Techniques	3
CDECE 45	Child & Adolescent Development DS1	3
OR		
CDECE 47	Human Development DS1	3
CDECE 48	Child, Family & Community DS2	3
Subtotal Units		10

LEVEL 2

CDECE 19	Health, Safety and Nutrition DS7	3
CDECE 50	Intro to Curriculum for Young Child	3
CDECE 53	Principles and Practices DS3	3
CDECE 61	Teaching in a Diverse Society D3	3
Subtotal Units		12

LEVEL 3

CDECE 66	Observation and Assessment DS3	3
Subtotal Units		3

LEVEL 4

CDECE 68	Practicum D3	3
Subtotal Units		3
Subtotal Units Level 1+Level 2+Level 3+Level 4		28

In addition to the 28 units listed above, choose and complete ONE (1) area of focused study option.

CHILD BEHAVIOR OPTION

CDECE 59	Guiding Young Children DS3	3
CDECE 259	Challenging Behaviors in Early Childhood	3
Subtotal Units		6

CURRICULUM OPTION

CDECE 54	Art & Creative Dev in Early Childhood D3	3
CDECE 55	Music & Movement in Early Childhood D3	3
CDECE 57	Science & Math in Early Childhood D3	3
Subtotal Units		9

FAMILY CHILD CARE OPTION

CDFDC 212A	Family Child Care Management A	3
CDFDC 212B	Family Child Care Management B	3
Subtotal Units		6

WORKING WITH PARENTS OPTION

CDF 210A	Skills Strat for Family Workers Pt. I	3
CDF 210B	Skills Strat for Family Workers Pt. II	3
Subtotal Units		6

INFANT/TODDLER OPTION

CDECE 40	Infant Development & Educaring D4	3
CDECE 41	Toddler Development & Educaring D4	3
Subtotal Units		6

EARLY LITERACY OPTION

CDECE 34	Children's Literature DS3	3
CDECE 58	Language & Literacy in Early Childhood	3
Subtotal Units		6

SPECIAL NEEDS OPTION

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

CDECE 60A	Admin of Child Development Programs D6	3
CDECE 60B	Advanced Supervision of ECE D6	3
CDECE 31	Adult Supervision	2
Subtotal Units		8
Total Units		34-37

Certificate of Achievement, Child Development: Early Childhood Education (Plan Code: 3302)

This field of concentration 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:

- Design, implement, and evaluate environments and activities that support optimum developmental outcomes for young children.

- Demonstrate care and teaching practices for young children that integrate assessment, theory, and practice.

- Critically assess the components of linguistically and culturally relevant, inclusive, age appropriate, anti-bias approaches in promoting learning and development.

REQUIRED COURSES — Complete Levels 1, 2, 3 and 4 and choose ONE (1) Area of Focused Study, as listed in the A.A. major requirements.

Other Program Requirements for the A.A. and Certificates of Achievement:

For 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 school-age 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.

For 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 for an appointment.

Certificate of Accomplishment, CDECE: Assistant Teacher Certificate (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 the interrelationship of family, school, and community.

- Describe development of children from conception through adolescence in the physical, social, emotional, and cognitive domains.

REQUIRED COURSES		UNITS
CDECE 45	Child & Adolescent Development DS1	3
OR		
CDECE 47	Human Development DS1	3
CDECE 48	Child, Family & Community DS2	3
Total Units		6

Certificate of Accomplishment, CDECE: Associate Teacher Certificate (Plan Code: 4056)

May provide instruction and supervise assistant.

Program Student Learning Outcomes:

- Design, implement, and evaluate environments and activities that support optimum developmental outcomes for young children.

- Demonstrate care and teaching practices for young children that integrate assessment, theory, and practices.

REQUIRED COURSES		UNITS
CDECE 1	The Developing Professional	1
CDLL 52	Fieldwork/Preschool Child Techniques DS3	3
CDECE 45	Child & Adolescent Development DS1	3
OR		
CDECE 47	Human Development DS1	3
CDECE 48	Child, Family & Community DS2	3
CDECE 50	Intro to Curriculum for Young Children	3
Total Units		13

Certificate of Accomplishment, CDECE: Family Development (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.

REQUIRED COURSES / UNITS

Course	Title	Units
CDECE 47	Human Development DS1	3
CDECE 48	Child, Family & Community DS2	3
CDF 210A	Skills Strat for Family Workers Pt.1	3
CDF 210B	Skills Strat for Family Workers Pt.2	3
Total Units		12

Certificate of Accomplishment, Child Development: Permit Specialization Areas

For graduation with a Certificate of Accomplishment Area of Specialization Permit, as defined on the State Child Development Matrix for a master teacher:

1. Complete one of the specialization areas below with a minimum grade of "C" in each course.

2. Complete 24 units in Early Childhood Education, including CDECE 45 or 47, and CDECE 48, 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.

Complete and submit the certificate application 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/

Certificate of Accomplishment, Child Development: Permit Specialization Area - Child Health and Safety (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.

REQUIRED COURSES / UNITS

Course	Title	Units
CDECE 19	Health, Safety and Nutrition DS7	3
KINPP 23	First Aid and Safety	3
Total Units		6

Certificate of Accomplishment, Child Development: Permit Specialization Area - Children with Exceptional Needs (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 childrens' individual needs in an inclusive and natural environment.

REQUIRED COURSES / UNITS

Choose SIX (6) units from the following:

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
Total Units		6

Certificate of Accomplishment, Child Development: Permit Specialization Area - Family Child Care Certificate (Plan Code: 4061)

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.

REQUIRED COURSES   **UNITS**

CDFDC 212A	Family Child Care Management A	3
CDFDC 212B	Family Child Care Management B	3
Total Units		6

Certificate of Accomplishment, Child Development: Permit Specialization Area - Infant/Toddler Certificate (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.

REQUIRED COURSES   **UNITS**

CDECE 40	Infant Development & Educaring D4	3
CDECE 41	Toddler Development & Educaring D4	3
Total Units		6

Certificate of Accomplishment, Child Development: Permit Specialization Area - Early Literacy (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.

REQUIRED COURSES   **UNITS**

CDECE 34	Children's Literature	3
CDECE 58	Language & Literacy in Early Childhood	3
Total Units		6

Certificate of Accomplishment, Child Development: Permit Specialization Area - Curriculum in Early Childhood Education (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.

REQUIRED COURSES   **UNITS**

Choose 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	Science & Math in Early Childhood D3	3
Total Units		6

Child Development: Special Education Assistant

The Child and Adult Development Department at Long Beach City College 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.

Associate in Arts (A.A.) Degree, Child Development: Special Education Assistant (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:

- 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.

REQUIRED COURSES		UNITS
CDECE 47	Human Development DS1	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 70	Curriculum for Special Needs	3
CDSED 69	Special Education Practicum	3
SIGN 1A or 1B	American Sign Language, Beginning	3
Subtotal Units		21

IN ADDITION, complete SIX (6) units from the following courses:

CDECE 19	Health, Safety and Nutrition DS7	3
CDECE 61	Teaching in a Diverse Society D3	3
SIGN 1A or 1B	American Sign Language, Beginning	3
SIGN2A or 2B	American Sign Language, Intermed.	3
Subtotal Units		6
Total Units in the Major		27

Recommended: A valid Red Cross First Aid and CPR Certificate.

Certificate of Achievement, Child Development: Special Education Assistant (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:

- Design and evaluate environments and activities that support optimum developmental play and learning activities for an inclusive environment for all children.

- Demonstrate knowledge of applying effective guidance and interaction strategies to support all children's social learning, peer relations, and self-confidence.

- Demonstrate ethical and professional standards when engaging in collaborative learning and reflective practices.

Complete the 27 units of required courses as listed in the Associate Degree major requirements.

College and Workplace Readiness

Long Beach City College also offers a certificate of completion in the noncredit program to prepare students for College and Workplace Readiness.

Noncredit Certificate of Competency, College and Workplace Readiness (Plan Code: 4118)

The certificate in College and Workplace Readiness will certify that students have achieved the basic skills of reading, writing, computation and basic technology, financial and goal clarification necessary for success in pre-transfer level college courses. Furthermore, this certificate will verify that students have demonstrated skill achievement at levels that are necessary for pursuing high-skill, high wage employment.

REQUIRED COURSES		HOURS
BAE 601A	Basic Skills Development	27
BAE 601B	Basic Skills Development II	27
Total Hours		54

Students must log in a minimum of 54 contact hours of laboratory work. The student must complete the required assessment/proficiency exams in reading, writing, and mathematics for each course with a score of 80% or above in each required assessment/proficiency exam.

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.

Associate in Arts in Communication Studies for Transfer Degree (A.A.-T.) (Plan Code: 5002B/C)

Communication is a diverse field of academic and experiential study. Communication is intertwined with all of human life. The field of study deals with both language and thought thus identifying it as central to human existence. Students investigate intrapersonal and interpersonal manifestations such as, verbal and nonverbal modes of communication to assist in understanding how culture, demographics, gender and countless other variables affect the encoding and decoding of sending and receiving messages. The Associate in Arts in Communication Studies for Transfer Degree offers a variety of communication courses designed to expand student's inquisitive nature that leads to observation and resulting in new theories to be explored. Students who complete this degree will receive priority admission with junior status into the CSU system.

Program Student Learning Outcomes:

• Develop and apply critical thinking and persuasive communication strategies.

• Demonstrate an understanding of basic communication theory.

• Formulate and implement effective oral presentations.

REQUIRED COURSES / UNITS

COMM 10/10H	Elements of Public Speaking/Honors	3
Subtotal Units		3

IN ADDITION, complete SIX (6) units from LIST A:

LIST A

COMM 20	Elements of Interpersonal Communication	3
COMM 30	Elements of Group Communication	3
COMM 60	Elements of Argumentation & Debate	3
Subtotal LIST A Units		6

IN ADDITION, complete SIX (6) units from LIST B:

LIST B

Any LIST A course not used above

COMM 25	Elements of Intercultural Communication	3
COMM 31	Elements of Leadership Communication	3
COMM 50	Elements of Oral Interpretation	3
Subtotal LIST B Units		6

IN ADDITION, complete THREE (3) units from LIST C:

LIST C

Any LIST A or LIST B course not used above

ANTHR 2/2H	Cultural Anthropology/Honors	3
PSYCH 1/1H	Introduction to Psychology/Honors	3
SOCIO 1/1H	Introduction to Sociology/Honors	3
ENGL 2	Introduction to Literature/Composition	3
OR		
ENGL 3/3H	Argumentative & Critical Writing/Honors	4
JOURN 20	Beginning Newswriting and Reporting	4
Subtotal LIST C Units		3-4
Total Units in the Major		18-19

Associate in Arts (A.A.) Degree, Communication Studies (Plan Code: 1240)

Students are provided with a general education in the principles, concepts and methodologies of inter- personal/intercultural/group/leadership communication and informative/persuasive/argumentative/interpretive speaking.

Program Student Learning Outcomes:

• Develop and apply critical thinking and persuasive communication strategies.

• Formulate and implement effective oral presentations.

REQUIRED COURSES / UNITS

COMM 10/10H	Elements of Public Speaking/Honors	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 & Debate	3
Subtotal Units		15

IN ADDITION, select THREE (3) units from the following:

COMM 31	Elements of Leadership Communication	3
COMM 50	Elements of Oral Interpretation	3
Subtotal Units		3

RECOMMENDED but not required:

ANTHR 2	Cultural Anthropology	3
MGMT 49A	Introduction to Management	3
MGMT 49B	Human Resources Management	3
PSYCH 1	Introduction to Psychology	3
PSYCH 11	Social Psychology	3
R_TV 40	On-Camera Performance	2.5
SOCIO 1	Introduction to Sociology	3
TART 1	Acting 1-Introduction to Acting	3.5
Total Units in the Major		18

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.

Associate in Science (A.S.), Computer Science (Plan Code: 2119)

The 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 a global citizenship. This degree may help students succeed after transferring to a CSU or UC School Computer Science major program. Students wishing a bachelor's degree (transfer program) should meet with a counselor to discuss transferability of courses.

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.

Complete ONE of the following series:

COMPUTER SCIENCE COURSES		UNITS
CS 11	Introduction to Computer Science-C++	4
OR		
CS 21	Introduction to Computer Science-Java	4
Subtotal Units		4

Required Major Coursework:

CS 22	Data Structures and Algorithms	3
CS 51	Introduction to Computer Architecture	4
CS 61	Discrete Structures	4
MATH 60	First Calculus Course	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
Subtotal Units		31
Total Units in the Major		35

Certificate of Achievement, Computer Science (Plan Code: 3119)

The Certificate of Achievement in Computer Science 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. This series of courses is designed to place an emphasis on problem solving with a balance of skill acquisition and fundamental theory. Each CS courses 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.

REQUIRED COURSES—Complete the 35 units of required courses as listed in the Associate Degree requirements.

Certificate of Accomplishment, Android App Developer (Plan Code: 4119)

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).

REQUIRED COURSES		UNITS
CS 11	Introduction to Computer Science-C++	4
OR		
CS 21	Introduction to Computer Science-Java	4
COSP 230	Android App Development in Java	3
Total Units		7

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.

Program Student Learning Outcomes:

- 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.

Associate in Science (A.S.), Computer Security and Networking (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.

REQUIRED CORE COURSES		UNITS
BCOM 15	Business Communications	3
COSA 50	Intro to IT Concepts & Applications	4
COSN 5	Computer Hardware Fundamentals	4
COSN 10	Networking Fundamentals	4
COSN 205	UNIX/LINUX Fundamentals	4
COSN 225	Microsoft Windows Client	3
COSN 299	Security and Networking Capstone	4
COSS 271	Networking Security Fundamentals	3
Subtotal Units		29

IN ADDITION, select any TWO (2) courses from the following:

BCOM 222	Job Search Skills	3
COSE 271WE	Work Experience-Computer & Office Studies	1-4
COSA 210	Intro to Project Management for IT	3
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	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++	4
CS 21	Introduction to Computer Science-Java	4
Subtotal Units		1-4
Total Units in the Major		30-33

Certificate of Achievement, Computer Security and Networking (Plan Code: 3125)

This Certificate of Achievement 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.

REQUIRED COURSES—Complete the 30-33 units of required courses as listed before.

Certificate of Achievement, Cloud Computing (Plan Code: 3132)

The Cloud Computing program prepares students to design solutions for Infrastructure as a Service (IaaS) architectures by provisioning computing instances, establishing virtual private networks, managing databases, and storage within a secure online environment.

Students produce dynamic solutions responsive to information and computing technology workloads with on-demand pay-as-you-go pricing allowing flexibility for small business, entrepreneurship and enterprise adoption. Industry certifications are embedded to prepare for occupations in Cloud Architect, Cloud Support Associate, Cloud Engineer or Cloud Technicians. Some preparation in information technology or computer programming is recommended.

Program Student Learning Outcomes:

- Design Infrastructure as a Service (IaaS) solutions by provisioning computing instances, establishing virtual private networks, 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.

- Collaborate in a team designing business solutions in an industry aligned project.

REQUIRED COURSES		UNITS
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
COSN 10	Networking Fundamentals	4
Total Units		16

Certificate of Accomplishment, Microsoft Windows Networking Technician (Plan Code: 4086)

Students will learn the skills to connect computers, devices and people.

Program Student Learning Outcomes:

- Set up and construct a secure peer-to-peer and client server network.

- Install, configure, and backup mobile devices.

- Understand Operating System Configurations.

- Understand server roles.

REQUIRED COURSES		UNITS
COSN 10	Networking Fundamentals	4
COSN 200	Wireless and Mobile Devices	3
COSN 225	Microsoft Windows Client	3
COSN 230	Microsoft Windows Server	4
Total Units		14

Certificate of Accomplishment, Cyber Security (Plan Code: 4106)

Students will learn the skills to investigate cyber-attacks or stop them before they even begin.

Program Student Learning Outcomes:

- Set up and construct a secure peer-to-peer and client server network.

- Secure mobile devices and wireless networks.

- Examine general security concepts and communication security.

- Use forensic tools to extract digital evidence.

- Harden networks against reconnaissance and penetration.

REQUIRED COURSES		UNITS
COSN 10	Networking Fundamentals	4
COSS 200	Wireless and Mobile Devices	2
COSS 271	Network Security Fundamentals	4
COSS 272	Computer Forensics and Investigation	3
COSS 273	Ethical Hacking and Countermeasures	4
Total Units		17

Certificate of Accomplishment, Computer Hardware Technician (Plan Code: 4126)

Students learn the in-demand skills for running wired and wireless networks and prepare for a career in IT.

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.

REQUIRED COURSES		UNITS
COSA 50	Intro to IT Concepts & Applications	4
COSN 5	Computer Hardware Fundamentals	4
Total Units		8

Certificate of Accomplishment, Computer Network Technician (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.

REQUIRED COURSES		UNITS
COSN 10	Networking Fundamentals	4
COSN 200	Wireless and Mobile Devices	3
Total Units		7

Certificate of Accomplishment, UNIX Network Administrator (Plan Code: 4921)

Students learn the skills to get an entry level job configuring, administering and securing a UNIX/Linux network.

Program Student Learning Outcomes:

- Install, configure, and secure a Linux server.

- Install, configure and secure a Linux network and services.

- Describe and document a Linux network in relation to the OSI model.

REQUIRED COURSES		UNITS
COSN 10	Networking Fundamentals	4
COSN 205	UNIX/LINUX Fundamentals	4
COSN 210	LINUX Server Administration	4
COSN 215	LINUX Networking and Security	4
Total Units		16

Computer Support Specialist

The Computer Support Specialist program at Long Beach City College provides students with a solid foundation in computer support for the business environment. The Computer Support Specialist program covers customer service, IT concepts and applications. Supporting courses allow students to gain a thorough understanding of necessary business communication skills, operating systems, computer hardware and networking fundamentals.

Associate in Science (A.S.) Degree, Computer Support Specialist (Plan Code: 2123)

The Computer Support Specialist concentration offers a robust and relevant core course offerings that allows students to gain job skills and the critical thinking skills that are in-demand in the workforce. The program is designed to prepare students for employment in a variety of computer support related fields.

Program Student Learning Outcomes:

- Evaluate end user and customer support needs and apply appropriate tools and methodologies.

- Design, administer, and control user support software tools in customer relationship management and user fulfillment.

REQUIRED COURSES		UNITS
BCOM 15	Business Communications	3
BCOM 222	Job Search Skills	3
BCOM 263	Customer Service	3
COSA 2	Critical Thinking Using Computers	3
COSA 5	Microsoft Windows Operating System	3
COSA 50	Intro to IT Concepts & Applications	4
COSK 200	Keyboarding and Document Production	3
COSN 5	Computer Hardware Fundamentals	4
COSN 10	Networking Fundamentals	4
Total Units in the Major		30

Certificate of Achievement, Computer Support Specialist (Plan Code: 3123)

The Computer Support Specialist Certificate of Achievement provides students with the in-demand technical knowledge, data inputting and communication strategies required for Customer Support and Help Desk technicians.

REQUIRED COURSES – Complete 30 units in the major.

Certificate of Accomplishment, Customer Relations Specialist (Plan Code: 4157)

Students learn the communication skills and customer service techniques that are in-demand in the workforce.

Program Student Learning Outcome:

- Apply effective communication skills to satisfy customers' needs and build relationships.

REQUIRED COURSES		UNITS
BCOM 15	Business Communications	3
BCOM 263	Customer Service	3
Total Units		6

Certificate of Accomplishment, Computer Hardware Technician (Plan Code: 4126)

Students learn the in-demand skills for running wired and wireless networks and prepare for a career in IT.

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.

REQUIRED COURSES		UNITS
COSA 50	Introduction to IT Concepts & Applications	4
COSN 5	Computer Hardware Fundamentals	4
Total Units		8

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.

Program Student Learning Outcomes:

- Prepare students for transfer to baccalaureate-granting institutions.

- Provide educational and career opportunities in the computer technology field.

Associate in Science (A.S.) Degree, Computer Technology (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.

REQUIRED COURSES		UNITS
COSA 50	Intro to IT Concepts & Applications	4
COSN 5	Computer Hardware Fundamentals	4
COSP 7	Programming Concepts and Methodologies	4
COSP 8	Visual Basic Programming	4
COSW 20	Dynamic HTML Web Construction	4
CS 21	Introduction to Computer Science-Java	4
STAT 1/1H	Elementary Statistics	4
MATH 50	Precalculus Math	5
Total Units in the Major		33

Certificate of Achievement, Computer Technology (Plan Code: 3126)

The Certificate of Achievement in Computer Technology 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.

REQUIRED COURSES—Complete the 33 units of required courses as listed in the Associate Degree requirements.

Construction Technology

Associate in Science, Construction Technology (Plan Code: 2948)

The Associate in Science in Construction Technology 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.

REQUIRED COURSES

		UNITS
CONST 203	OSHA Standards for General Industry	2
CONST 205	Forklift Fundamentals	.5
CONST 215	Blueprint Reading for Construction Trade	3
CONST 230	Carpentry Fundamentals	3
CONST 235	Residential Roof Framing	3
CONST 240	Finished Carpentry	3
CONST 245	Residential Stairs	3
CONST 270	Cost Estimating	3
CONST 275	Contract Laws and Management	3
COSA 1	Computer Information Competency	1
Total Units		24.5

Certificate of Achievement, Construction Technology (Plan Code: 3948)

The Certificate of Achievement in Construction Technology 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.

REQUIRED COURSES

		UNITS
CONST 203	OSHA Standards for General Industry	2
CONST 205	Forklift Fundamentals	.5
CONST 215	Blueprint Reading for Construction Trade	3
CONST 230	Carpentry Fundamentals	3
CONST 235	Residential Roof Framing	3
CONST 240	Finished Carpentry	3
CONST 245	Residential Stairs	3
CONST 270	Cost Estimating	3
CONST 275	Contract Laws and Management	3
COSA 1	Computer Information Competency	1
Total Units		24.5

Certificate of Achievement, Construction Pre-Apprenticeship (Plan Code: 3953)

The Certificate of Achievement in Pre-Apprenticeship 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, lay out, 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 Outcome:

- Demonstrate the technical and organization employability skills required by the construction industry.

REQUIRED COURSES

		UNITS
CONST 200	Construction Pre-Apprenticeship	7
COSA 1	Computer Information Competency	1
BCOM 262	Soft Skills for the Workplace	1
Total Hours		9

Certificate of Achievement, Home Remodeling (Plan Code: 3949)

The Certificate of Achievement in Home Remodeling 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.

REQUIRED COURSES / UNITS

CONST 205	Forklift Fundamentals	.5
CONST 215	Blueprint Reading for Construction Trade	3
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 270	Cost Estimating	3
CONST 275	Contract Laws and Management	3
COSA 1	Computer Information Competency	1
Total Units		18.5

Certificate of Completion, Home Remodeling (Plan Code: 4163)

This certificate in Home Remodeling 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.

REQUIRED COURSES / HOURS

CONST 606	Workplace Competency Skills	18
CONST 615A	Home Remodeling – Tiling	27
CONST 615B	Home Remodeling – Drywall	27
CONST 615C	Home Remodeling – Painting	27
Total Hours		99

Certificate of Completion, Construction Pre-Apprenticeship (Plan Code: 4953)

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.

REQUIRED COURSES / HOURS

CONST 600	Construction Pre-Apprenticeship	180
COSA 601	Computer Information Competency	36
Total Hours		216

Certificate of Completion, Forklift Fundamentals (Plan Code: 4954)

The Certificate of Completion in Forklift Fundamentals 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).

REQUIRED COURSES		HOURS
CONST 605	Forklift Fundamentals	18
CONST 606	Workplace Competency Skills	18
Total Hours		36

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 industry-standard safety and sanitation practices.

Associate in Science (A.S.) Degree, Culinary Arts (Plan Code: 2147)

Students learn skills for positions in food preparation for institutional, restaurant airline catering, convention center, cruise line, supermarket, and hotel restaurant-type food operations. Students will enhance their skills in a variety of cooking techniques. The associate degree will provide students with a broad based general education, which will prepare them for global citizenry. There are course material fees associated with this program that range from $588.00-598.00. Additionally, school-specific chef's uniform and discipline-specific tools and equipment costs are approximately $80.00.

Program Student Learning Outcomes:

- Propose and assemble a complete three course meal from a given set of ingredients and select the most appropriate tools and equipment for each task.

- Compare and contrast the different knives used in a kitchen and effectively demonstrate their uses with competence.

- Analyze a plated meal, distinguish the different cooking techniques and methods used in its preparation, and critique the flavor, the plating, and the garnish.

- Demonstrate industry-standard kitchen safety and sanitation practices.

REQUIRED COURSES		UNITS
BCOM 222	Job Search Skills	3
BCOM 262	Soft Skills for the Workplace	1
CULAR 20	App. Food Serv. Sanit in Hotel/Rstr. Mgmt	3
CULAR 225	Product and Menu Development	2
CULAR 202	Intro to Culinary Skills & Principles	5
CULAR 211	Intermed Culinary Skills & Principles	4.5
CULAR 218	World Cuisines: Asian	3
CULAR 219	World Cuisines: Mediterranean	3
CULAR 222A	Advanced Restaurant Operations	4
CULAR 222B	Advanced Restaurant Practicum	4
Subtotal Units		32.5

IN ADDITION, complete SIX (6) units from the following:

CULAR 215	Buffets and Catering	1.5
CULAR 216	World Cuisine: American Regional	3
CULAR 217	Vegetarian & Specialty Cuisine	2
CULAR 230	Baking & Pastry Skills for Cul Students	3
Subtotal Units		6
Total Units in the Major		38.5

RECOMMENDED but not required courses:

LEARN 11	Introduction to Study Skills	1
MATH 825	Culinary Math	1
COSA 1	Computer and Information Competency	1

Certificate of Achievement, Culinary Arts (Plan Code: 3147)

Students learn skills for positions in food preparation for institutional, restaurant airline catering, convention center, cruise line, supermarket, and hotel restaurant-type food operations. Students will enhance their skills in a variety of cooking techniques.

Program Student Learning Outcome:

- Students will be able to understand and execute food preparation in Food Service operations using proper knife skills, accurate cooking methods and plating techniques, with the enhancement of International Cuisine knowledge while applying Safety & Sanitation rules according to Industry Standards.

REQUIRED COURSES—Complete the 38.5 units of required courses as listed in the Associate Degree major requirements.

Dance

Students completing this program should be fully prepared to move on to the next level of dance education.

Associate in Arts (A.A.) Degree, Dance (Plan Code: 1260)

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 body therapies, dance, choreography, performance, and teaching or dance studio operation.

Program Student Learning Outcomes:

- 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.

REQUIRED COURSES (Semester 1)		UNITS
DANCE 1	Dance Forms through the Ages	3
DANCE 14	Modern Dance 1	2
DANCE 20	Jazz Dance 1	2
DANCE 26	Ballet 1	2
Subtotal Units (for Semester 1)		9

REQUIRED COURSES (Semester 2)		UNITS
DANCE 12A	Pilates I	2
DANCE 15	Modern Dance 2	2
DANCE 21	Jazz Dance 2	2
DANCE 27	Ballet 2	2
Subtotal Units (for Semester 2)		8

REQUIRED COURSES (Semester 3)		UNITS
DANCE 16	Modern Dance 3	2
DANCE 24	Hip Hop	2
DANCE 28	Ballet 3	2
DANCE 31	Choreography I	2
DANCE 41/1	Dance Performance	.5

OR		
DANCE 41/2	Dance Performance	1
OR		
DANCE 41/3	Dance Performance	2
OR		
DANCE 41	Dance Performance	2.5
TART 42	Introduction to Stage Lighting	3
Subtotal Units (for Semester 3)		11.5-13.5

REQUIRED COURSES (Semester 4)		UNITS
DANCE 5	Tap Dance 1	2
DANCE 41/1	Dance Performance	.5
OR		
DANCE 41/2	Dance Performance	1
OR		
DANCE 41/3	Dance Performance	2
OR		
DANCE 41	Dance Performance	2.5

Also in Semester 4, complete ONE (1) of the following:

DANCE 17	Modern Dance 4	2
DANCE 29	Ballet 4	2
DANCE 32	Choreography 2	2

Also in Semester 4, complete ONE (1) of the following:

DANCE 3	Musical Theatre Dance	2
DANCE 6	Tap Dance 2	2
DANCE 12B	Pilates 2	2
DANCE 13	Turns	2
DANCE 18A	Folk and Ethnic Dance - African	2
DANCE 18B	Folk and Ethnic Dance Belly Dance	2
DANCE 19	Hip Hop Dance History	2
DANCE 33	Dance Choreography Workshop	2
DANCE 46	Ballroom/Social Dance	2
Subtotal Units (for Semester 4)		6.5-8.5
Total Units		35-39

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 business-related 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.

Associate in Science (A.S.) Degree, Database Management (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:

- 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.

REQUIRED COURSES   UNITS

BCOM 15	Business Communications	3
COSA 2	Critical Thinking Using Computers	3
COSA 25	Microsoft Access for Windows	3
COSN 205	UNIX/LINUX Fundamentals	4
COSN 250	Introduction to Cloud Computing	3
COSP 38	Database Concepts	4
COSP 236	Introduction to Microsoft SQL & T-SQL	2
COSP 237	Introduction to Oracle SQL & PL/SQL	2
COSP 238	Database Cloud Technology	3
COSW 30	Web Development with PHP/MySQL	4
Total Units		31

Certificate of Achievement, Database Management (Plan Code: 3127)

The Database Management certificate of achievement is designed to provide the fundamental knowledge and skills required of data management professionals. This certificate will prepare students for a variety of roles suitable for an entry level position as a business analyst, data analyst, data scientist, database application programmer or junior database administrator. The program provides students with

hands on experiences in three database systems including Microsoft Access, MySQL, and Microsoft SQL Server. Students learn to write SQL, create database objects, organize data, report and analyze, program forms, plan a database around a business need, normalize a relational database system, and build database web applications. Students have the opportunity to take a Microsoft Certification in Database Fundamentals 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.

REQUIRED COURSES—Complete the 31 units of required courses as listed in the Associate Degree requirements.

Certificate of Accomplishment, Database Administrator Specialist (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 Outcome:

- Demonstrate the ability to install database software on a computer system and configure it for use.

REQUIRED COURSES   UNITS

COSA 25	Microsoft Access for Windows	3
COSP 38	Database Concepts	4
COSP 238	Database Cloud Technologies	3
Total Units		10

Certificate of Accomplishment, SQL Programmer Specialist (Plan Code: 4158)

This certificate features instructor-led exercises and practice in designing and running programs in Microsoft Transact-SQL and Oracle PL/SQL, two of the most prominent and popular database languages used today.

Program Student Learning Outcome:
- Design, run, and analyze new and existing SQL programs according to commonly practiced industry standards.

REQUIRED COURSES		UNITS
COSP 236	Introduction to Microsoft SQL & T-SQL	2
COSP 237	Introduction to Oracle SQL & PL/SQL	2
Total Units		4

Diagnostic Medical Imaging (Radiologic Technology)

The Diagnostic Medical Imaging program (DMIP) at Long Beach City College 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 competent, ethical health care professional, and an Associate of Science Degree. The program emphasizes the necessity of professional development and life-long learning.

The program applicant needs to complete all units of the General Education requirement before program entry. This program requires the student to participate in clinical experience concurrent with DMIP 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 program completion requires the following: 1) completion of all required radiologic technology courses as outlined in catalog, 2) completion of approximately 1850 clinical hours, and 3) completion of all requirements for an Associate in Science degree as required by Long Beach City College. Eligibility for the post program ARRT Radiography registry exam and state CDPH-RHB CRT certification along with CDPH-RHB fluoroscopic examination are dependent upon meeting these requirements. Successful applicants have the right to use the title "Registered Radiologic Technologist" R.T. (R) CRT

Program Application Requirements

Applications 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, AH 61, and ANAT 41 within seven years 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. Students MUST keep the Admissions and Records Office AND the School of Health and Science advised of their current e-mail address, home address, and telephone number and any name changes. All changes MUST be submitted in writing.

6. Complete the Diagnostic Medical Imaging Program application form and bring the completed   application form and documentation to the School of Allied Health and Science, Room C100.

7. All applicants will be notified by email regarding the status of their applications.

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. While the candidate is on the waitlist, we suggest that they complete their Associate Degree courses as well as take the ATI TEAS exam.

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 1st 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 1st year. (An unclear background may prevent the student from

completing clinical requirements and jeopardize ARRT and CDPH certification.)

Program Admission Requirements

The following is considered in the selection process each November for the following Spring DMIP class:

1. Date of DMIP application.
2. Completion of the General Education requirements for an Associate degree Plan A, B, or C.
3. Must pass within three attempts 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 prior to the DMI program starting in the spring semester in order to progress in the DMI program. * **

*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 DMIP class, upon completion of

1. DMIP application submission **
2. Items # 2, 3, and 4 under "Program Admission Requirements"

**The LBCC DMIP participates with the Promised Pathways Program for Long Beach Unified High School District. Placement into the DMIP promise pathway is awarded based upon specific criteria (Contact DMIP Director for details).

Information Session

The Diagnostic Medical Imaging Program (DMIP) holds monthly information sessions from September to June (EXCEPT JANUARY). Please look up times, days, and locations of the information session on the LBCC website under "view our upcoming events" or you may contact the Allied Health Office, DMIP director, Allied Health Coordinator, or the counseling office.

1. Students MUST attend one of the DMIP information sessions before their DMIP application is accepted.
2. Students who need additional information about the Diagnostic Medical Imaging Program are invited to attend the DMIP monthly information sessions.

College Application Procedures

Applications 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.)
2. Submit transcripts from high school and previous college work to the Admissions Office and the School of Allied Health and Science.

Accreditation

Long Beach City College is fully accredited by the Western Association of Schools and Colleges. The program is approved by the American Registry of Radiological Technologies and the AART.

Eligibility for the ARRT Exam

Eligibility for the ARRT examination requires the candidate to complete an ARRT Accredited 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.

Associate in Science (A.S.) Degree, Diagnostic Medical Imaging (Radiologic Technology), (Plan Code: 2612)

This field of concentration 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). 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 resultant 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.

Prerequisite Courses

The following courses must be completed within five years prior to the first Spring Semester of the program:

REQUIRED COURSES		UNITS
ANAT 41	Anatomy & Physiology	5
AH 60	Medical Terminology	3
AH 61	Integration of Patient Care	2
Total Units		10

DMI Program Course Schedule

FIRST YEAR
Spring Semester REQUIRED COURSES:

DMI 10	Introduction to Radiologic Technology	3
DMI 403	Cross Sectional Anatomy	3
Subtotal Units		6

Summer Session REQUIRED COURSES:

DMI 20	Introduction to Radiologic Physics	3
Subtotal Units		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
DMI 40A	Clinical Radiography	2.5
Subtotal Units		11.5

Spring Semester REQUIRED COURSES:

DMI 24	Radiation: Biology and Protection	3
DMI 31	Positioning for Cranial Radiography	3
DMI 40B	Clinical Radiography	7.5
DMI 60	Radiologic Pathology	3
Subtotal Units		16.5

SECOND YEAR
Summer Session REQUIRED COURSES:

DMI 40C	Clinical Radiography	8.5
Subtotal Units		8.5

Fall Semester REQUIRED COURSES:

DMI 15	Computer Applications in Radiology	3
DMI 40D	Clinical Radiography	11
DMI 222	Venipuncture for Medical Imaging	.5
Subtotal Units		14.5

Winter Session REQUIRED COURSES:

DMI 61	Fluoroscopy	2
Subtotal Units		2

Spring Semester REQUIRED COURSES:

DMI 14	Trends and Self-Assessment in Rad Tech	3
DMI 40E	Clinical Radiography	11
Subtotal Units		14

RECOMMENDED but not required courses:

DMI 62	Mammography	3.5
LEARN 11	Learning and Academic Strategies	2
Total Units (in program)		76
Total Units (including Prerequisite)		86

Certificate of Achievement, Diagnostic Medical Imaging (Radiologic Technology) (Plan Code: 3612)

The courses within the Certificate of Achievement in DMI will qualify the student to take the Board Examinations for the CDPH - CRT, CDPH - Fluoroscopy Permit, and ARRT Credential in Radiography.

REQUIRED COURSES—Complete the 86 units of required courses as listed in the Associate Degree requirements.

Certificate of Accomplishment, Computed Tomography (Plan Code: 4045)

The courses within the Certificate of Accomplishment in CT will qualify the student to take the Board Examinations for the ARRT- CT certification.

REQUIRED COURSES		UNITS
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	Computed Tomography Physics	3
DMI 407	Computed tomography Procedures	3
Total Units		17

Certificate of Accomplishment, Magnetic Resonance Imaging Technologist (Plan Code: 4613)

The courses within the Certificate of Accomplishment in MRI will qualify the student to take the Board Examinations for the ARRT- MRI certification.

REQUIRED COURSES		UNITS
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	2.5
Total Units		17

Digital Design and Publication

The Desktop/Media Publishing program trains students to write, design, and produce a variety of publications on different computer platforms. The program prepares students to work in office environments involving desktop publishing or to work on a free-lance basis.

Associate in Arts (A.A.) Degree, Digital Design and Publication (Plan Code: 1023)

Students learn to write, design, and produce publications (websites, fliers, brochures, newsletters, in-house magazines). The program prepares students to work on websites, newspapers, magazines, in advertising agencies or in other environments involving digital design and publication or to work on a free-lance basis. For successful employment, you should be able to type 30+ words a minute, write with a proficiency equal to placement in ENGL 1, and have a basic understanding of the principles of color and design theory. This Associate degree prepares 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:

- Write, design, and produce a publication.

- Prepare students for entry-level position in desktop publishing.

REQUIRED COURSES		UNITS
JOURN 1A	Digital Design and Publication	3
JOURN 25	Free-Lance Writing	3
Subtotal Units		6

IN ADDITION, Complete TWELVE-FOURTEEN (12-14) units from the following courses:

JOURN 1B	Digital Design and Publication	3
JOURN 5	Introduction to Public Relations	4
JOURN 6	Magazine Writing	3
JOURN 20	Beginning Newswriting and Reporting	4
JOURN 40	Social Media in Journalism	3
JOURN 80	Multimedia Newsroom: News	4
JOURN 81	Multimedia Newsroom: Features	4
JOURN 82	Multimedia Newsroom: Profiles	4
JOURN 83	Multimedia Newsroom: Politics	4
JOURN 86	Multimedia Editors: Design	4
JOURN 87	Multimedia Editors: Visuals	4
JOURN 88	Multimedia Editor Training: Management	4
Subtotal Units		12-14
Total Units in the Major		18-20

Certificate of Achievement, Digital Design and Publication (Plan Code: 3023)

This Certificate of Achievement prepares students for an entry-level position in a variety of business settings and serves as a foundation for specialization.

REQUIRED COURSES—Complete the 18-20 units of required courses as listed in the Associate Degree requirements.

Digital Media Arts

Certificate of Achievement, Digital Media: Advanced Production (Plan Code: 3256)

The Digital Media Advanced Production program is an interdisciplinary program that builds on the Fundamentals of Digital Media Arts certificate and is designed to prepare students for entry and mid-level employment in digital media production.

Program Student Learning Outcomes:

- Demonstrate an understanding of pre-production, production and post-production digital media processes.

- Engage creativity and original thinking in the production of a Digital Media Art Production.

REQUIRED COURSES		UNITS
PHOT 33	Photography Studio Lighting	4
PHOT 43	Photoshop and Digital Image Management	3
FILM 25	Introduction to Digital Cinematography	3
Subtotal Units		10

IN ADDITION, complete a minimum of 12-15 units from the courses below:

PHOT 34	Advanced Photography- Applications	4
PHOT 35	Photography for Publication	3
PHOT 37	Portrait Photography	4
PHOT 39	Photography on Location	3
PHOT 41	Professional Photographic Portfolio	4
FILM 21	Intermediate Digital Film Production	3
R_TV 12	Television Lighting	2.5
R_TV 34	Music Video Production	2.5
Total Units		22-25

Certificate of Achievement, Digital Media: Interactive Design and Animation (Plan Code: 3255)

The Digital Media Interactive Design and Animation program builds on the Fundamentals of Digital Media Arts certificate and is designed to prepare students for entry-level and self-employment in interactive media design fields.

Program Student Learning Outcomes:

- Demonstrate an understanding of pre-production, production and post-production digital media processes.

- Engage creativity and original thinking in the production of a digital media art production.

REQUIRED COURSES		UNITS
ART 42	Intro/3D & Multimedia Computergraphics	3
ART 43	Beginning Website Design	3
ART 47	Computer Animation and Multimedia	3
ART 56	Introduction to Typography	1.5
Subtotal		10.5

IN ADDITION, complete a minimum of four electives 12-15 units from the courses below:

ART 46	Computer Art & Design in 3D Modeling	3
ART 48	Computer Art & Design for TV and Video	3
ART 49	Special Studies-Computer Art and Design	3
FILM 21	Intermediate Digital Film Production	3
FILM 25	Introduction to Digital Cinematography	3
PHOT 43	Photoshop and Digital Image Management	3
Subtotal		12-15
Total Units		22.5-25.5

Drafting- Architectural

The Drafting - Architecture occupational program creates an educational environment where students can achieve their individual goals by providing the necessary knowledge and skills to enter the design field of their choice by using the latest technologies and industry trends.

Associate in Science (A.S.), Drafting: Architectural (Occupational Program) (Plan Code: 2909)

This Associate Degree will prepare students for a design-related career and appropriate course selection may facilitate transfer to a professional degree program at a CSU/UC or private institution.

Program Student Learning Outcomes:

- Establish mastery of basic knowledge and skills and apply advanced technologies relevant to entering the architectural drafting and design field at an entry or advanced level.

- Develop career awareness, planning, employability skills, work habits, and the foundational knowledge necessary for success in the workplace.

- Possess the necessary technical knowledge and communication skills to identify, articulate and

solve problems pertaining to the built environment and perform tasks required within the architecture and/or environmental design professions.

REQUIRED COURSES

		UNITS
ARCHT 60	Architectural Design	8
OR		
ARCHT 61	Architectural Design	4
AND		
ARCHT 62	Architectural Design	4
ARCHT 64	Architectural Design	8
OR		
ARCHT 65	Architectural Design	4
AND		
ARCHT 66	Architectural Design	4
ARCHT 70A	Architectural Design	8
OR		
ARCHT 71A	Architectural Design	4
Total Units in the Major		20-24

Certificate of Achievement, Drafting: Architectural - Core Skills (Plan Code: 3906)

The Core Skills Certificate of Achievement will prepare students for an entry level position as an architectural drafter or junior draftsperson in a variety of design professional settings and may serve as a foundation for specialization.

REQUIRED COURSES

		UNITS
ARCHT 60	Architectural Design	8
OR		
ARCHT 61	Architectural Design	4
AND		
ARCHT 62	Architectural Design	4
ARCHT 64	Architectural Design	8
OR		
ARCHT 65	Architectural Design	4
AND		
ARCHT 66	Architectural Design	4
ARCHT 230	Building Information Modeling, Beginning	4

Recommended Courses but not required:

DRAFT 203	AutoCAD II, Advanced Concepts	4
OR		
DRAFT 204	3D Visualization/Animation	4
Total Units		20

Certificate of Achievement, Drafting: Architectural - Advanced Skills (Plan Code: 3909)

The Advanced Skills Certificate of Achievement will prepare students for an advanced position as an architectural drafter or draftsperson in a variety of design professional settings and may serve as a foundation for specialization.

REQUIRED COURSES

		UNITS
ARCHT 60	Architectural Design	8
OR		
ARCHT 61	Architectural Design	4
AND		
ARCHT 62	Architectural Design	4
ARCHT 64	Architectural Design	8
OR		
ARCHT 65	Architectural Design	4
AND		
ARCHT 66	Architectural Design	4
ARCHT 70A	Architectural Design	8
OR		
ARCHT 71A	Architectural Design	4
AND		
ARCHT 230	Building Information Modeling, Beginning	4
Subtotal Units		24

IN ADDITION, complete SIX (6) units from the following:

ARCHT 231	Building Information Modeling, Int.	4
ARCHT 232	Building Information Modeling, Adv.	4
ARCHT 240	Introduction to Green Design	3
ARCHT 241	Introduction to Leed	3
DRAFT 210	3D Printing Fundamentals I (FDM)	1.5
DRAFT 211	Laser Cutting Fundamentals	1.5
CARP 311	Carpentry 1	3
CARP 440	Blueprint Reading for Construction Trade	3
Subtotal Units		6

IN ADDITION, complete THREE-FIVE (3-5) units from the following:

ELECT 202	Electrical Mathematics	3
OR		
MATH 805	Modern Arithmetic	3
OR		
Higher Math Course (see available math courses)		3-5
Subtotal Units		3-5

Recommended Courses but not required:

DRAFT 203	AutoCAD II, Advanced Concepts	4

OR

DRAFT 204	3D Visualization/Animation	4
Total Units		33-35

Drafting-Mechanical Design

The Drafting - Mechanical Design (Occupational 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.

Associate in Science (A.S.) Degree, Drafting: Mechanical Design (Plan Code: 2913)

Students learn entry-level job skills in mechanical drafting and design. The Associate Degree will prepare students for a mechanical-design-related career, and appropriate course selection will facilitate transfer to a professional degree program at a CSU/UC or private institution.

Program Student Learning Outcomes:

- Establish mastery of basic knowledge and skills and apply advanced technologies relevant to entering the mechanical drafting and design field at an entry or advanced level.

- Develop career awareness, planning, employability skills, work habits, and the foundational knowledge necessary for success in the workplace.

- Possess the necessary technical knowledge and communication skills to identify, articulate and solve problems pertaining to the industrial manufacturing environment and perform tasks required within the mechanical design drafting professions.

REQUIRED COURSES		UNITS
CAD 50	Mechanical Drafting, Introduction	2
CAD 51	Mechanical Drafting, Intermediate	2
TEC 211	Print Reading for Industry	3
CAD 60	Geometric Dimensioning and Design	2
Subtotal Units		9

In addition, students must complete ONE (1) Software Option:

AutoCAD
AutoCAD: Complete the TWO (2) courses from the following:

CAD 202	AutoCAD I, Fundamentals	2
DRAFT 203	AutoCAD II, Advanced Concepts	4
DRAFT 204	3D Visualization/Animation	4
AutoCAD Subtotal Units		6-8

CATIA
CATIA: Complete the TWO (2) courses from the following:

CAD 220	Introduction to CATIA	2
DRAFT 221	Intermediate CATIA	3
DRAFT 222	Advanced CATIA	3
CATIA Subtotal Units		5-6

SolidWorks
SolidWorks: Complete the TWO (2) courses from the following:

DRAFT 230	Introduction SolidWorks Level 1	3
DRAFT 231	Intermediate SolidWorks Level 2	3
DRAFT 232	Advanced SolidWorks Level 3	3
SolidWorks Subtotal Units		6

In Addition, Complete ONE (1) course from the following:

ELECT 230A	Robotics Technology - Design	2
ADMT 50	Advanced Manufacturing, Introduction	3
MTFAB50	Introduction to Metalworking	4
WELD50	Introduction to Welding	4
Subtotal Units		3-4
Major Total Units		16-21

Certificate of Achievement, Drafting: Mechanical Design - Core Skills (Plan Code: 3907)

The Core Skills Certificate will prepare students for an entry-level position as a mechanical drafter trainee in a variety of design professional settings and will serve as a foundation for specialization.

REQUIRED COURSES		UNITS
CAD 50	Mechanical Drafting, Introduction	2
CAD 51	Mechanical Drafting, Intermediate	2
CAD 52	CADICAM	2
TEC 211	Print Reading for Industry	3
CAD 60	Geometric Dimensioning and Tolerancing	3
Subtotal Units		12

In addition, Students must complete ONE (1) Software Option:

AutoCAD
AutoCAD: Complete the TWO (2) courses from the following:

CAD 202	AutoCAD I, Fundamentals	2
DRAFT 203	AutoCAD II, Advanced Concepts	4
DRAFT 204	3D Visualization/Animation	4
AutoCAD Subtotal Units		6-8

CATIA

CATIA: Complete the TWO (2) courses from the following:

CAD 220	Introduction to CATIA	2
DRAFT 221	Intermediate CATIA	3
DRAFT 222	Advanced CATIA	3
CATIA Subtotal Units		5-6

SolidWorks

SolidWorks: Complete the TWO (2) courses from the following:

DRAFT 230	Introduction SolidWorks Level 1	3
DRAFT 231	Intermediate SolidWorks Level 2	3
DRAFT 232	Advanced SolidWorks Level 3	3
SolidWorks Subtotal Units		6

In Addition, Complete ONE (1) course from the following:

ELECT 230A	Robotics Technology - Design	2
ADMT 50	Advanced Manufacturing, Introduction	3
MTFAB 50	Introduction to Metalworking	4
WELD 50	Introduction to Welding	4
Subtotal Units		2-4
TOTAL UNITS		19-22

Certificate of Accomplishment, AutoCAD I, Fundamentals (108 Hrs) (Plan Code: 4015)

The Certificate of Accomplishment in AutoCAD I, Fundamentals (108 Hrs) is the first in a series of 3 certificated classes leading to a cumulative certificate - CAD Professional (324 Hours). This entry-level AutoCAD drafting course 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).

REQUIRED COURSE		UNITS
CAD 202	AutoCAD I, Fundamentals	2
Total Units		2

Certificate of Accomplishment, AutoCAD II, Advanced (108 Hrs) (Plan Code: 4016)

The Certificate of Accomplishment in AutoCAD II, Advanced Certificate (108 Hrs) is the second in a series of 3 certificated classes leading to a cumulative certificate - CAD Professional (324 Hours). This intermediate level AutoCAD drafting course covering 3D modeling 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).

REQUIRED COURSES		UNITS
DRAFT 203	AutoCAD II, Advanced Concepts	4
Total Units		4

Certificate of Accomplishment, AutoCAD III, Visualization, Rendering, Animation (108 Hours), (Plan Code: 4017)

The Certificates of Accomplishment in AutoCAD III, Visualization, Rendering, Animation (108 Hours) is the third in a series of 3 certificated classes leading to a cumulative certificate - CAD Professional (324 Hours). Advanced 3D modeling, rendering and animation concepts are explored utilize AutoCAD and one or more of the following – Sketchup, REVIT Architecture, 3D Studio MAX Software and/or other similar software.

REQUIRED COURSE		UNITS
DRAFT 204	3D Visualization/Animation	4
Total Units		4

Certificate of Accomplishment, CAD Professional Certificate (324 Hours), (Plan Code: 4018)

Successful completion of a series of 3 certificated classes (CAD 202 AutoCAD I, Fundamentals, DRAFT 203 AutoCAD II, Advanced Concepts and DRAFT 204 3D Visualization/Animation) allow students to apply for and   be awarded the Certificates of Accomplishment in CAD Professional Certificate (324 Hours).

REQUIRED COURSES		UNITS
CAD 202	AutoCAD I, Fundamentals	2
DRAFT 203	AutoCAD II, Advanced Concepts	4
DRAFT 204	3D Visualization/Animation	4
Total Units		10

Economics

Associate in Arts in Economics for Transfer Degree (A.A.-T.), (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.

REQUIRED COURSES		UNITS
ECON 1/1H	Macro Economics Analysis/Honors	3
ECON 2/2H	Micro Economics Analysis/Honors	3
STAT 1/1H	Elementary Statistics/Honors	4
MATH 60	First Calculus Course	5
Subtotal Units		15

IN ADDITION, complete THREE-FIVE (3-5) units from LIST A:

LIST A		
MATH 70	Second Calculus Course	5
ACCTG 1A	Principles of Accounting	5
ACCTG 1B	Principles of Accounting	5
BCOM 20	Business Writing	3
Subtotal Units		3-5

IN ADDITION, complete THREE-FIVE (3-5) units from LIST B:

LIST B		
Any LIST A course not already used		3-5
ECON 4	Contemporary Economic Issues	3
ECON 5	The Global Economy	3

Subtotal Units	3-5
Total Units in the Major	21-25

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 complete the Program Orientation Session prior to registering for any classes. Exceptions to this requirement are made for students in Sheet Metal or students in other non-electrical trades programs who want to enroll in ELECT 202; these students may contact Scott Fraser at sfraser@lbcc.edu for the Prerequisite Waiver form. At the Orientation, 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 bring 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 are eligible to enroll in ENGL 801 and READ 881 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.

Associate in Science (AS) Degree, Electrical Technology (Plan Code: 2920)

This Associate Degree will prepare students for career advancement once a Certificate of Achievement in Electrical Technology has been earned. Students prepare for entry-level employment in numerous electrical and electrically related trades. Upon completion of the Electrical Technology program, the student will be able to install, maintain, and repair electrical equipment and systems in a safe and workmanlike manner. This program is approved to offer whole general electrician curriculum as established by the Department of Industrial Relations - Division of Labor Standards Enforcement. Once a student has earned the Associate in Science (AS)

Degree, Electrical Technology, that student will be allowed to register to take the General Electrician's Certification Exam. The California Contractor's License requirements recognize the courses listed below as partial fulfillment of the experience requirements.

Limitation on Enrollment

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 Student Learning Outcomes:

- Analyze different types of power distribution systems and apply these systems in a design environment.

- Design commercial building blueprint design project: applying motor, transformer, power distribution and short circuit calculations meeting all the requirements of the National Electrical Code.

- Design and evaluate control system programs for the operation of automation systems, including timing, counting, sequential and process control operations.

REQUIRED COURSES

Course		UNITS
ELECT 202	Electrical Mathematics	3
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 204	First Semester Fundamentals of DC Electricity	3
ELECT 210A	Laboratory Practices 1	1

(204 and 210A must be taken concurrently)

ELECT 225	Algebra & Trigonometry for Technician	4
ELECT 209	Second Sem. Fund of Motor/Generators	3
ELECT 210B	Laboratory Practices 2	1

(209 and 210B must be taken concurrently)

ELECT 240	Introduction to the National Electrical Code	3
ELECT 212	Third Sem. Fund of AC Electricity	3
ELECT 210C	Laboratory Practices 3	1

(212 and 210C must be taken concurrently)

ELECT 435A	Electric Motor Control 1	2
ELECT 214	Fourth Semester AC Principles & Pract	3
ELECT 210D	Laboratory Practices 4	1

(214 and 210D must be taken concurrently)

ELECT 245	Electrical Code - Commercial	3
ELECT 250	Electrical Code - Industrial	3

ELECT 242	Electrical Code - Grounding	1.5
Subtotal Units		37.5

IN ADDITION, complete SEVEN & ONE HALF (7.5) units from the following courses:

CISCO 250	Communications Cabling Installation	3
CISCO 251	Introduction to Networking	3
CISCO 252	Routing and Switching Essentials	3
CISCO 253	Scaling Networks	3
CISCO 254	Connecting Networks	3
ELECT 41	Technical Applications of Minicomputers	2
ELECT 227	Variable Speed Drive Fundamentals	3
ELECT 230A	Robotics Technology-Design	3
ELECT 230B	Robotics Technology- Integration	3
ELECT 230C	Robotics Technology-Applications	3
ELECT 261	Introduction to Renewable Energy	3
ELECT 262	Solar 1- Grid-Tied Solar Photovoltaics	3
ELECT 263	Solar 2- Advanced Solar Photovoltaics	3
ELECT 271	Electrical Cost Estimating 1	3
ELECT 275	Electrical Pipe Bending (A)	.5
ELECT 276	Electrical Pipe Bending (B)	.5
ELECT 277	Blueprint Reading for Electricians	3
ELECT 280	Traffic Signals Systems 1	3
ELECT 284	Traffic Signal Controllers & Digital Systems	3
ELECT 435B	Electrical Motor Control 2	2
Subtotal Units		7.5
Total Units in the Major		45

Certificate of Achievement, Electrical Technology (Plan Code: 3920)

Students prepare for entry-level employment in numerous electrical and electrically related trades. Upon completion of the Electrical Technology program, the student will be able to install, maintain, and repair electrical equipment and systems in a safe and workmanlike manner. This program is approved to offer whole general electrician curriculum as established by the Department of Industrial Relations - Division of Labor Standards Enforcement. Once a student has earned the Certificate of Achievement, Electrical Technology, that student will be allowed to register to take the General Electrician's Certification Exam. The California Contractor's License requirements recognize the courses listed below as partial fulfillment of the experience requirements.

Program Student Learning Outcomes:

- Analyze different types of power distribution systems and apply these systems in a design environment.

- Design commercial building blueprint design project: applying motor, transformer, power distribution and short-circuit calculations meeting all the requirements of the National Electrical Code.
- Design and evaluate control system programs for the operation of automation systems, including timing, counting, sequential and process control operations.

REQUIRED COURSES—Complete the 45 units of required courses as listed in the Associate Degree requirements.

Certificate of Achievement, Electrical Apprenticeship Preparation (Plan Code: 3954)

The Electrical Apprenticeship Preparation Certificate of Achievement 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 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 Student Learning Outcome:

- Demonstrate the ability to solve basic electrical calculations and communicate results in detailed summary reports.

REQUIRED COURSES		UNITS
ELECT 225	Algebra & Trigonometry for Technician	4
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 204	First Semester Fundamentals of DC Electricity	3
ELECT 275	Electrical Pipe Bending	1
ELECT 240	Introduction to the National Electrical Code	3
Total Units		14

Certificate of Accomplishment, Network Cabling Specialist (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.

REQUIRED COURSES		UNITS
CISCO 250	Communications Cabling Installation	3
Total Units		3

Certificate of Accomplishment, CISCO Certified Network Associate (Plan Code: 4091)

Students earning this CISCO award have demonstrated knowledge and skills required to pass the Cisco Certified Network Associate (CCNA) certification exam, and are ready for immediate employment as a network administrator of Cisco switches, routers, and wireless access points.

REQUIRED COURSES		UNITS
CISCO 251	Introduction to Networking	3
CISCO 252	Routing and Switching Essentials	3
CISCO 253	Scaling Networks	3
CISCO 254	Connecting Networks	3
Total Units		12

Certificate of Accomplishment, Traffic Signal Systems 1 (Plan Code: 4029)

Students earning this Traffic Signal Systems 1 award have demonstrated knowledge and skills relating to the maintenance and troubleshooting of traffic signal control systems as dictated by the International Municipal Signals Association (IMSA).

REQUIRED COURSES		UNITS
ELECT 280	Traffic Signals Systems 1	3
ELECT 284	Traffic Signal Controllers & Digital Systems	3
Total Units		6

Certificate of Accomplishment, Solar Photovoltaics Installation and Design (Plan Code: 4920)

Students earning this Solar Photovoltaics Installation and Design award have demonstrated knowledge and skills relating to the design, maintenance, and installation of solar systems as dictated by The North American Board of Certified Energy Practitioners (NABCEP).

Program Student Learning Outcomes:

- Design a residential solar photovoltaic electrical system that meets all National Electrical Code requirements.

- Analyze performance of solar photovoltaic electrical system, and safely fine-tune system for optimal performance.

REQUIRED COURSES		UNITS
ELECT 261	Introduction to Renewable Energy	3
ELECT 262	Solar 1- Grid-Tied Solar Photovoltaics	3
ELECT 263	Solar 2- Advanced Solar Photovoltaics	3
Total Units		9

Electrical Technology, Automation Technician

Associate in Science, Electrical Technology, Automation Technician (Plan Code: 2991)

The Associate of Science in Electrical Technology, Automation Technician 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. Limitation on Enrollment - 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 Student Learning Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of robotic, PLC and automation control systems.

REQUIRED COURSES		UNITS
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES		UNITS
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		11
Total Units		39.5

Certificate of Achievement, Electrical Technology, Automation Technician (Plan Code: 3991)

The Electrical Technology, Automation Technician Certificate of Achievement 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. Limitation on Enrollment - 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 Student Learning Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of robotic, PLC and automation control systems.

REQUIRED COURSES — UNITS

Course	Title	Units
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES — UNITS

Course	Title	Units
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		11
Total Units		39.5

Certificate of Achievement, Automation Technician (Plan Code: 3931)

The Automation Technician Certificate of Achievement 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 Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of robotic, PLC and automation control systems.

REQUIRED CONCENTRATION COURSES — UNITS

Course	Title	Units
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		11

Electrical Technology, CISCO Certified Network Installation Associate

Associate in Science, Electrical Technology, CISCO Certified Network Installation Associate (Plan Code: 2992)

The Associate Degree Electrical Technology, CISCO Certified Network Installation 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. Limitation on Enrollment - 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 Student Learning Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.

REQUIRED COURSES — UNITS

Course	Title	Units
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES — UNITS

Course	Title	Units
CISCO 250	Communications Cabling Installation	2
CISCO 251	Introduction to Networking	2
CISCO 252	Routing and Switching Essentials	2
CISCO 253	Scaling Network	2
CISCO 254	Connecting Networks	2
Subtotal Units		10
Total Units		38.5

Certificate of Achievement, Electrical Technology, CISCO Certified Network Installation Associate (Plan Code: 3992)

The Electrical Technology, CISCO Certified Network Installation Associate Certificate of Achievement 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. Limitation on Enrollment - 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 Student Learning Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.

REQUIRED CORE COURSES		UNITS
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES		UNITS
CISCO 250	Communications Cabling Installation	2
CISCO 251	Introduction to Networking	2
CISCO 252	Routing and Switching Essentials	2
CISCO 253	Scaling Network	2
CISCO 254	Connecting Networks	2
Subtotal Units		10
Total Units		38.5

Certificate of Achievement, CISCO Certified Network Installation Associate (Plan Code: 3932)

The CISCO Certified Network Installation Associate Certificate of Achievement 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 Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of CISCO related network infrastructure.

REQUIRED CORE COURSES		UNITS
CISCO 250	Communications Cabling Installation	2
CISCO 251	Introduction to Networking	2
CISCO 252	Routing and Switching Essentials	2
CISCO 253	Scaling Network	2
CISCO 254	Connecting Networks	2
Total Units		10

Electrical Technology, General Industrial Electrician

Associate in Science, Electrical Technology, General Industrial Electrician (Plan Code: 2993)

The Associate Degree in Electrical Technology, General Industrial Electrician 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. Limitation on Enrollment - 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 Student Learning Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of electrical systems.

REQUIRED CORE COURSES

Course	Title	Units
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES

Course	Title	Units
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
Total Units		41.5

Certificate of Achievement, Electrical Technology, General Industrial Electrician (Plan Code: 3993)

The Electrical Technology, General Industrial Electrician Certificate of Achievement 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. Limitation on Enrollment - 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 Student Learning Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of electrical systems.

REQUIRED CORE COURSES

Course	Title	Units
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4

ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES

Course	Title	Units
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
Total Units		41.5

Certificate of Achievement, General Industrial Electrician (Plan Code: 3933)

The General Industrial Electrician Certificate of Achievement 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 Outcome:

- Develop procedures for the successful installation, maintenance and troubleshooting of electrical systems.

REQUIRED COURSES

Course	Title	Units
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		13

Electrical Technology, NETA High Voltage Test Technician

Associate in Science, Electrical Technology, NETA High Voltage Test Technician (Plan Code: 2995)

The Associate of Science in NETA High Voltage Test Technician Certificate of Achievement 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 NETA 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. Limitation on Enrollment - 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 Student Learning Outcome:

• Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over- current protection and power distribution systems.

REQUIRED CORE COURSES

		UNITS
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES

		UNITS
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
Total Units		40.5

Certificate of Achievement, Electrical Technology, NETA High Voltage Test Technician (Plan Code: 3995)

The NETA High Voltage Test Technician Certificate of Achievement 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 NETA 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. Limitation on Enrollment - 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 Student Learning Outcome:

• Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over- current protection and power distribution systems.

REQUIRED CORE COURSES

		UNITS
ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4
ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES

		UNITS
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
Total Units		40.5

Certificate of Achievement, NETA High Voltage Test Technician (Plan Code: 3935)

The NETA High Voltage Test Technician Certificate of Achievement 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 NETA 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 Outcome:

- Develop procedures for the successful maintenance and troubleshooting of high voltage electrical switchgear, over- current protection and power distribution systems.

REQUIRED COURSES — UNITS

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		12

Electrical Technology, Solar Installation and Maintenance

Associate in Science, Electrical Technology, Solar Installation and Maintenance (Plan Code: 2994)

The Associate Degree in Solar Installation and Maintenance 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.

Limitation on Enrollment - 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 Student Learning Outcome:

- Analyze various types of solar power generation systems and demonstrate the ability to properly size systems to meet demand.

REQUIRED CORE COURSES — UNITS

ELECT 253	OSHA Standards for Construction Safety	2
ELECT 225	Algebra and Trigonometry for Technicians	4
ELECT 204	First Semester Fundamentals of DC Electricity	4
ELECT 240	Introduction to National Electrical Code	3
ELECT 209	Second Sem Fund of Motors/Generators	4
ELECT 435A	Motor Control Wiring and Troubleshooting	2
ELECT 212	Third Semester Fund of AC Electricity	4

ELECT 214	Fourth Semester AC Principles & Practice	4
ELECT 242	Electrical Code-Grounding	1.5
Subtotal Units		28.5

REQUIRED CONCENTRATION COURSES — UNITS

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 277	Blueprint Reading for Electricians	3
ELECT 475	Electrical Pipe Bending	1
Subtotal Units		12
Total Units		40.5

Certificate of Achievement, Solar Installation and Maintenance (Plan Code: 3934)

The Certificate of Achievement in Solar Installation and Maintenance 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 Outcome:

- Analyze various types of solar power generation systems and demonstrate the ability to properly size systems to meet demand.

REQUIRED CONCENTRATION COURSES — UNITS

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 277	Blueprint Reading for Electricians	3
ELECT 275	Electrical Pipe Bending	1
Total Units		12

Elementary Teacher Education

Associate in Arts Elementary Teacher Education for Transfer Degree (A.A.-T.), (Plan Code: 5019B/5019C)

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:

- 70% or more of students with declared education majors who have completed 30 or more units of the AA-T in Elementary Teacher Education pathway are able to earn the AA-T within six years.

- Students will evaluate their level of introductory preparation for careers in teaching and related subject knowledge on a self-assessment survey.

REQUIRED COURSES		UNITS
EDUC 20	Intro to Elementary Classroom Teaching	3
CDECE 45	Child & Adolescent Development DS1	3
BIO 41	Contemporary Biology	3
OR		
BIO 41H	Honors Contemporary Biology	3
AND		
BIO 41L	Contemporary Biology Laboratory	1
OR		
BIO 41LH	Honors Contemporary Biology Lab	1
CHEM 4	Survey of Chemistry and Physics	4
OR		
PHYS 4	Survey of Chemistry and Physics	4
GEOL 10	Earth Science for Educators	4
MATH 28	Mathematics for Elementary Teaching 1	3
COMM 10	Elements of Public Speaking	3
OR		
COMM 10H	Honors Elements of Public Speaking	3
ENGL 1	Reading and Composition	4
OR		
ENGL 1H	Honors Reading and Composition	4
ENGL 2	Introduction to Literature/Composition	4
OR		
ENGL 2H	Honors Introduction to Literature/Comp.	4
GEOG 40	World Regional Geography	3
HIST 2B	World History to 1500	3
HIST 10	Hist./Early American (Colonial-Reconstr)	3
OR		
HIST 10H	Honors History/Early America	3
POLSC 1	Introduction to Government	3
OR		

POLSC 1H	Honors Introduction to Government	3
Subtotal Units		44

In Addition, select ONE course (4 units) from LIST A:

LIST A

ENGL 3	Argumentative and Critical Writing	4
OR		
ENGL 3H	Honors Argumentative and Critical Writing	4
Subtotal Units		4

In Addition, select ONE course (4 units) from LIST B:

LIST B

MUSIC 40	Appreciation of Music	3
OR		
MUSIC 40H	Honors Appreciation of Music	3
TART 25	Introduction to Theatre	3
Subtotal Units		3
Total Units in the Major		51

Engineering

The Long Beach City College 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.

Program Student Learning Outcomes:

- To serve students for the fulfillment of their own personal goals.

- To serve students to meet career/transfer requirements.

Associate in Science (A.S.) Degree, Engineering (Plan Code: 2520)

This Associate Degree may facilitate transfer for a four-year engineering degree. Students who wish to transfer may need to meet additional requirements.

REQUIRED COURSES		UNITS
CHEM 1A	General Chemistry	5.5
ENGL 1	Reading and Composition	4
ENGR 3B	Engineering Graphics	3
ENGR 17	Electrical Engineering Circuits	3
ENGR 17L	Electrical Engineering Circuits Lab	1
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. & Engr.-Mechanics	5.5
PHYS 3B	Physics for Sci. & Engr.-E & M	4.5
Total Units in the Major		39

Engineering Technology

The Engineering Technology program at Long Beach City College 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.

Associate in Science, Engineering Technology, (Plan Code: 2521)

The Associate in Science in Engineering Technology Degree provides students with a fundamental knowledge of the, engineering technology field, engineering design, principles of engineering technology, digital electronics technology and computer integrated manufacturing. This degree 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 in order to improve process to eliminate waste in lean manufacturing settings. The Associate in Science in Engineering Technology degree at Long Beach City College prepares students for transfer to a California State University.

Program Student Learning Outcomes:

- Apply principles of engineering technology to design problems and constraints.

- Create and design robotic tools using automated equipment.

REQUIRED COURSES		UNITS
ADMT 50	Adv. Manufacturing, Introduction	3
CAD 51	Mechanical Drafting, Intermediate	2
CAD 60	Geometric Dimensioning and Tolerancing	3
ELECT 230A	Robotics Technology Design	2
ELECT 230B	Robotics Technology Integration	2
ELECT 231	Electro-Hydraulics and Pneumatic Systems	2
ETEC 10	Introduction to Engineering Technology	1
ETEC 20	Introduction to Engineering and Design	2.5
ETEC 30	Principles of Engineering Technology	2.5
ETEC 40	Electronics for Engineering Technology	2.5
ETEC 60	Material Science for Engineering Tech	3
MTFAB 280	Introduction to Robotic Welding	2.5
Total Units in the Major		28

Certificate of Achievement, Engineering Technology, (Plan Code: 3521)

The Certificate of Achievement in Engineering Technology provides students with a fundamental knowledge of the, engineering technology field, engineering design, principles of engineering technology, digital electronics technology and computer integrated manufacturing. 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.

- Create and design robotic tools using automated equipment.

REQUIRED COURSES		UNITS
ADMT 50	Adv. Manufacturing, Introduction	3
CAD 51	Mechanical Drafting, Intermediate	2
CAD 60	Geometric Dimensioning and Tolerancing	3

ELECT 230A	Robotics Technology Design	2
ELECT 230B	Robotics Technology Integration	2
ELECT 231	Electro-Hydraulics and Pneumatic Systems	2
ETEC 10	Introduction to Engineering Technology	1
ETEC 20	Introduction to Engineering and Design	2.5
ETEC 30	Principles of Engineering Technology	2.5
ETEC 40	Electronics for Engineering Technology	2.5
ETEC 60	Material Science for Engineering Tech	3
MTFAB 280	Introduction to Robotic Welding	2.5
Total Units in the Major		28

Certificate of Achievement, Engineering Automation Technology, (Plan Code: 3522)

The Engineering Automation Technology certificate 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 Outcome:

* Create and design robotic tools using automated equipment.

REQUIRED COURSES		UNITS
ADMT 50	Adv. Manufacturing, Introduction	3
CAD 51	Mechanical Drafting, Intermediate	2
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 in the Major		16.5

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.

Associate in Arts in English for Transfer Degree (A.A.-T.), (Plan Code: 5003B/C)

The Associate in Arts in English for Transfer Degree at Long Beach City College id 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:

* 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.

REQUIRED COURSES		UNITS
Complete TWO (2) courses:		
ENGL 2	Introduction to Literature/Composition	4
OR		
ENGL 4	Critical Analysis of Literature	4
ENGL 3/3H	Argumentative and Critical Writing/Honors	4
Subtotal Units		8

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/Honors	4
ENGL 45/45H	World Literature II/Honors	4

ENGL 46	Survey of British Literature I	4
ENGL 47	Survey of British Literature II	4
Subtotal LIST A Units		8

IN ADDITION, complete ONE (1) course from LIST B:

LIST B

Any LIST A course not used above		4
ENGL 26	Creative Writing 1	3
ENGL 33/33H	Mythology/Honors	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 Lit/Honors	3
ENGL 50A	Introduction to Poetry Writing	3
ENGL 51A	Introduction to Fiction Writing	3
Subtotal LIST B Units		3-4

IN ADDITION, complete ONE (1) course from LIST C:

LIST C

Any LIST A or LIST B course not used above		3-4
ENGL 24	College Grammar	4
ENGL 32	Masterpieces/Asian Literature (in English)	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 49/49H	Film and Literature/Honors	3
ENGL 52A	Intro to Novel Writing	3
Subtotal LIST C Units		3-4
Total Units in the Major		18-24

Associate in Arts (A.A.) Degree, English, Language and Literature (Plan Code: 1395)

This field of concentration in the Language and Literature sequence prepares the student for baccalaureate study in English, Comparative Literature, and Liberal Arts.

Program Student Learning Outcome:

- Develop and sustain a coherent interpretation of literature that acknowledges historical and cultural contexts.

LANGUAGE & LITERATURE
REQUIRED COURSES   UNITS

ENGL 1/1H	Reading and Composition/Honors	4
ENGL 2	Introduction to Literature/Composition	4
OR		
ENGL 4	Critical Analysis of Literature	4
Subtotal Units		8

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/Honors	4
ENGL 45/45H	World Literature II/Honors	4
ENGL 46	Survey of British Literature I	4
ENGL 47	Survey of British Literature II	4
Subtotal Units		12

IN ADDITION, complete SIX-SEVEN (6-7) units of the following courses:

ENGL 3/3H	Argumentative and Critical Writing/Honors	4
ENGL 24	College Grammar	3
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/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	3
ENGL 43B	Introduction to Shakespeare	3
ENGL 48/48H	Modern & Contemporary Literature/Honors	3
ENGL 49/49H	Film and Literature/Honors	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
Total Units in the Major		32-33

Associate in Arts (A.A.) Degree, English, Creating Writing (Plan Code: 1396)

The Creative Writing sequence prepares the student for possible publication.

Program Student Learning Outcome:

- Compose poems and short works of fiction using various forms and techniques.

REQUIRED COURSES   **UNITS**

ENGL 1/1H	Reading and Composition/Honors	4
ENGL 2	Introduction to Literature/Composition	4
ENGL 24	College Grammar	4
ENGL 26	Creative Writing 1	3
Subtotal Units		15

IN ADDITION, complete THREE (3) 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
Subtotal Units		3

IN ADDITION, complete SIX (6) units from any of the courses listed in the Language & Literature Degree

Subtotal Units	6
Total Units in the Major	24

RECOMMENDED courses but not required:

ENGL 6	Production of Literary Publications	3
ENGL 7	Editing a Literary Review	3
JOURN 25	Free Lance Writing	3

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).

Noncredit Certificate of Competency, English for Everyday – Level 1 (Plan Code: 4170)

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.

- Formulate questions and responses to questions on familiar and unfamiliar topics utilizing grammatical patterns introduced at this level.

REQUIRED COURSES   **HOURS**

ESL 640	English for Everyday 1	108
ESL 641	English for Everyday 2	108
Total Hours		216

Noncredit Certificate of Competency, English for Everyday – Level 2 (Plan Code: 4171)

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.

- Formulate questions and responses to questions on familiar and unfamiliar topics utilizing grammatical patterns introduced at this level.

REQUIRED COURSES   **HOURS**

ESL 642	English for Everyday 3	108
ESL 643	English for Everyday 4	108
Total Hours		216

Noncredit Certificate of Competency, English for Everyday – Level 3 (Plan Code: 4172)

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.

- Formulate questions and responses to questions on familiar and unfamiliar topics utilizing grammatical patterns introduced at this level.

REQUIRED COURSES / HOURS

REQUIRED COURSES		HOURS
ESL 644	English for Everyday 5	108
ESL 645	English for Everyday 6	108
Total Hours		216

Students must master 70% or higher of the course concepts in order to be promoted into the next course in the sequence.

Noncredit Certificate of Competency, Reading Skills for ESL Students - Level 1 (Plan Code: 4173)

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:

- Recognize grammatical structure of new words on the basis of form and sentence position.

- Identify the main idea and supporting details in a reading selection.

REQUIRED COURSES		HOURS
ESL 602A	Reading Skills for ESL Students 1	27
ESL 602B	Reading Skills for ESL Students 2	27
ESLLC 699	Basic Skills for ESL Students	54
Total Hours		108

Noncredit Certificate of Competency, Reading Skills for ESL Students - Level 2 (Plan Code: 4174)

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:

- Analyze a passage for specific content.

- Defend an opinion or viewpoint about a text.

REQUIRED COURSES		HOURS
ESL 602C	Reading Skills for ESL Students 3	27
ESL 602D	Reading Skills for ESL Students 4	27

ESLLC 699	Basic Skills for ESL Students	54
Total Hours		108

Noncredit Certificate of Competency, Reading Skills for ESL Students - Level 3 (Plan Code: 4175)

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:

- Identify main ideas and supporting details in reading passages.

- Respond accurately to questions based on events in reading passages.

REQUIRED COURSES		HOURS
ESL 602E	Reading Skills for ESL Students 5	27
ESL 602F	Reading Skills for ESL Students 6	27
ESLLC 699	Basic Skills for ESL Students	54
Total Hours		108

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

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.

Noncredit Certificate of Competency, Workplace Language Skills for ESL, Level 1 (Plan Code: 4176)

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 Outcome:

- ESL students will be able to competently use listening, speaking, reading and writing skills in the workplace at low-intermediate level.

REQUIRED COURSES / HOURS

ESL 670	Listen/Speak for Work for ESL Level 1	90
ESL 671X	Read/Write for Work for ESL Level 1	90
Total Hours		180

Noncredit Certificate of Competency, Workplace Language Skills for ESL, Level 2 (Plan Code: 4177)

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 Outcome:

- ESL students will be able to competently use listening, speaking, reading and writing skills in the workplace at an intermediate level.

REQUIRED COURSES / HOURS

ESL 672	Listen/Speak for Work for ESL Level 2	90
ESL 673X	Read/Write for Work for ESL Level 2	90
Total Hours		180

Noncredit Certificate of Competency, Workplace Language Skills for ESL, Level 3 (Plan Code: 4178)

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 Outcome:

- Students will be able to select and use conventional organizational, formatting and grammatical elements to compose and edit a cover letter; and select and use appropriate cultural and sociolinguistic norms for a U.S. style mock job interview.

REQUIRED COURSES / HOURS

ESL 674	Listen/Speak for Work for ESL Level 3	90
ESL 675X	Read/Write for Work for ESL Level 3	90
Total Hours		180

Noncredit Certificate of Competency, Intermediate Oral Skills (Plan Code: 4179)

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.

REQUIRED COURSES / HOURS

ESL 613	Conversation Skills	27
ESL 615	Accent Reduction	108
ESLLC 699	Basic Skills for ESL Students	54*
Total Hours		143

*Only 8 hours of ESLLC 699 are required for this certificate.

Noncredit Certificate of Completion, Intermediate Grammar (Plan Code: 4180)

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.

REQUIRED COURSES / HOURS

ESL 610A	Fundamentals of English Grammar 1	54
ESL 610B	Fundamentals of English Grammar 2	54
ESLLC 699	Basic Skills for ESL Students	54*
Total Hours		116

*Only 8 hours of ESLLC 699 are required for this certificate.

Noncredit Certificate of Competency, Intermediate Reading and Writing (Plan Code: 4181)

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.

REQUIRED COURSES / HOURS

ESL 612	Reading for Information and Pleasure	27
ESL 614	Composition for ESL Students	27
ESL 618	Vocabulary Development	54
ESLLC 699	Basic Skills for ESL Students	54*
Total Hours		116

*Only 8 hours of ESLLC 699 are required for this certificate.

Family & Consumer Studies (FACS)

The FACS program prepares individuals to balance personal, family, and work place responsibilities throughout the life cycle.

Associate in Arts (A.A.) Degree, Family and Consumer Studies (Plan Code: 1335)

Students are provided lower division transfer classes for a bachelor's degree in Family and Consumer Sciences, and provide opportunities for developing skills and competencies for multiple roles of home, family and career.

Program Student Learning Outcomes:

- Develop skills and work place competencies needed for success in the work place.

- Analyze cultural forces and their effects on the individual and family.

- Evaluate and develop personal finance plans.

REQUIRED COURSES / UNITS

CDECE 47	Human Development	3
FACS 50	Consumer Awareness	3
FACS 64	Life Management	3
FD 9	Clothing Selection	3
OR		
FD 10	Textile Fibers and Fabrics	3
OR		
F_N 21	Food Selection and Meal Preparation	4
FD 20	Introduction to Fashion Industry	3
F_N 20	Nutrition and Life	3
Total Units in the Major		18-19

RECOMMENDED COURSES but not required:

CDECE 66	Observation and Assessment DS3	3
FD 9	Clothing Selection	3
FD 10	Textile Fibers and Fabrics	3
FD 24	Beginning Sewing	1.5
F_N 21	Food Selection and Meal Preparation	4
F_N 252A	Cake Decorating Techniques	1.5
F_N 252B	Cake Decorating for Special Occasions	1.5
F_N 260	Cultural Foods	1.5
F_N 261	Cooking for Wellness	.5
F_N 262	Cooking for Singles	1.5
FLO 286A	Introduction to Floral Design-Fall Flowers	2
FLO 286B	Introduction to Floral Design-Spring Flowers	2

Certificate of Achievement, Family and Consumer Studies (Plan Code: 3335)

This Certificate of Achievement will prepare students for an entry-level position in any of the generalized fields of Family and Consumer Studies which include Child Development, Family & Consumer Studies, Fashion, Foods and Nutrition and Interior Design.

REQUIRED COURSES—Complete the 18-19 units of required courses as listed in the Associate Degree requirements.

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.

Associate in Arts (A.A.) Degree, Fashion Design (Plan Code: 1324)

This degree will provide technical training as part of the undergraduate requirements necessary for those students wishing to transfer to a college or university in fashion design or related majors.

Program Student Learning Outcomes:

- Create an environment that promotes critical thinking, creativity, teamwork, soft skills, multicultural and global awareness and understanding of social organizational and technological systems.

- Predict fashion trends and analyze form, silhouette, proportion, texture and drape or fabric to develop a fashion line for a target customer.

ENTRY LEVEL CLASSES
REQUIRED COURSES

Course	Title	UNITS
FD 3	Intro to Careers in Design Merchandising	2
FD 5	Intro/Manufacturing for Design/Merchan	2
FD 200	Fashion Prediction/Promotion: Crit View	1
FD 9	Clothing Selection	3
FD 36A	Pattern Drafting I: Basic Block	1.5
FD 36B	Pattern Drafting II: Pattern Manipulation	1.5
FD 37A	Pattern Drafting I: Basic Sloper	1.5
FD 37B	Pattern Drafting II: Sloper Manipulations	1.5
FD 214	Quick Sketch Croquis Drawing	2
OR		
FD 215	Fashion Sketching I	2
FD 24	Beginning Sewing	1.5
Subtotal Units		17.5

INTERMEDIATE LEVEL CLASSES
REQUIRED COURSES

Course	Title	UNITS
FD 25	Intermediate Sewing	1.5
OR		
FD 26	Advanced Sewing	2
FD 10	Textile Fibers and Fabrics	3

Course	Title	Units
FD 20	Introduction to Fashion Industry	3
FD 27	Production Sewing	1.5
FD 32	History of Fashion	3
FD 38A	Fashion Design I	3
FD 38B	Fashion Design II	3
FD 45A	Digital Fashion Illustration	1.5
FD216	Fashion Portfolio Development	2
Subtotal Units		21.5-22
Total Units in the Major		39-39.5

RECOMMENDED but not required courses

Course	Title	Units
ART 1 OR 2	Art & Civilization	3
ART 15	Beginning Drawing	3
ART 41	Introduction to Computergraphics	3
FD 23	Fashion/Merchandise Buying	3
FD 213	Textile Surface Design	1
FD 230	Fashion Design Laboratory	.5
FD 231	Fashion Design Lab – Garment Closures	.5
FD 240	Fashion Show Promotion and Management	2.5
IBUS 20	Export-Import Business Practices	3
MKTG 40	Salesmanship	3
MGMT 80	Small Business Entrepreneurship	3

Associate in Arts (A.A.) Degree, Fashion Design: Assistant Designer/Stylist (Plan Code: 1325)

This degree will provide part of the undergraduate requirements necessary for those students wishing to transfer to a college or university in fashion or related majors.

Program Student Learning Outcomes:

- Create an environment that promotes critical thinking, creativity, teamwork, soft skills, multicultural and global awareness and understanding of social organizational and technological systems.

- Provide educational opportunities in the field of fashion for career employment, advanced study, and professional development.

- Predict fashion trends and analyze form, silhouette, proportion, texture and drape of fabric to develop a fashion line for a target customer.

ENTRY LEVEL CLASSES
REQUIRED COURSES

Course	Title	UNITS
FD 3	Intro to Careers in Design/Merchandising	2
FD 5	Intro Manufacturing for Design/Merchan	2
FD 200	Fashion Prediction/Promotion: Crit View	1
FD 27	Production Sewing	1.5

FD 36A	Pattern Drafting I: Basic Block	1.5
FD 36B	Pattern Drafting II: Pattern Manipulation	1.5
FD 214	Quick Sketch Croquis Drawing	2
FD 45A	Digital Fashion Illustration	1.5

Complete TWO (2) of the following courses:

FD 24	Beginning Sewing	1.5
FD 25	Intermediate Sewing	1.5
FD 26	Advanced Sewing	2
Subtotal Units for Entry Level		16-16.5

IN ADDITION, complete the following INTERMEDIATE LEVEL course:

FD 9	Clothing Selection	3
FD 10	Textile Fibers and Fabrics	3
FD 45B	Advanced DIgital Fashion Illustration	1.5
FD 216	Fashion Portfolio Development	2
Subtotal Units for Intermediate Level		9.5
Total Units in the Major		25.5-26

RECOMMENDED but not required courses for students interested in degree or certificate:

ART 1 or 2	Art and Civilization	3
ART 15	Beginning Drawing	3
ART 31	Fundamentals of Art/Composition & Color	3
FD 20	Intro to the Fashion Industry	3
FD 23	Fashion/Merchandising Buying	3
FD 41	Fashion Show Production	2.5
FD 213	Textile Surface Design	1
FD 230	Fashion Design Laboratory	.5
FD 231	Fashion Design Lab-Garment Closures	.5
FD 258	Swimwear	1

Certificate of Achievement, Fashion Design (Plan Code: 3324)

The Certificate of Achievement will prepare students for entry-level positions in the apparel design and manufacturing industry. This comprehensive course of study will provide students with technical, practical and conceptual development skills resulting in a professional fashion design portfolio

Program Student Learning Outcomes:

- Predict fashion trends and analyze form, silhouette, proportion, texture and drape of fabric to develop a fashion line for a large customer.

ENTRY LEVEL CLASSES

REQUIRED COURSES		UNITS
COSA 1	Computer Information Competency	1
FD 3	Intro to Careers in Design/Merchandising	2
FD 20	Introduction to the Fashion Industry	3
FD 36A	Pattern Drafting I: Basic Block	1.5
FD 36B	Pattern Drafting II: Pattern Manipulation	1.5
FD 37A	Pattern Draping I: Basic Sloper	1.5
FD 37B	Pattern Draping II: Sloper Manipulations	1.5
FD 5	Intro Manufacturing for Design/Merchan	2
FD 200	Fashion Prediction/Promotion: Crit View	1
FD 214	Quick Sketch Croquis Drawing	2
OR		
FD 215	Fashion Sketching I	2
Subtotal Units		17

Complete TWO (2) from the following:

FD 24	Beginning Sewing	1.5
FD 25	Intermediate Sewing	1.5
FD 26	Advanced Sewing	2
Subtotal Units		20-20.5

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 9	Clothing Selection	3
FD 10	Textile Fibers and Fabrics	3
FD 27	Production Sewing	1.5
FD 32	History of Fashion	3
FD 38A	Fashion Design I	3
FD 38B	Fashion Design II	3
FD 41	Fashion Show Production	2.5
FD 45A	Digital Fashion Illustration	1.5
FD 244	Computer Patternmaking	1
FD 70	Work Experience Issues-Fashion Design	1
FD 271WE	Work Experience-Fashion Design	1-4
FD 258	Swimwear	1
Subtotal Units		24.5-27.5

ADVANCED LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 45B	Advanced Digital Fashion Illustration	1.5
FD 38C	Fashion Design III	3
FD 38D	Fashion Design IV	3
FD 39A	Garment Technical Packages	1
FD 40	Advanced and Production Pattern Drafting	1.5
FD 216	Fashion Portfolio Development	2
Subtotal Units		12
Total Units in Major		56.5-60

RECOMMENDED but not required courses

ART 1 or 2	Art & Civilization	3
ART 15	Beginning Drawing	3
ART 41	Introduction to Computergraphics	3
FD 23	Fashion/Merchandising Buying	3
FD 213	Textile Surface Design	1
FD 230	Fashion Design Laboratory	.5
FD 231	Fashion Design Lab-Garment Closures	.5

FD 240	Fashion Show Promotion and Management	2.5
IBUS 20	Export-Import Business Practices	3
MKTG 40	Salesmanship	3
MGMT 80	Small Business Entrepreneurship	3

Certificate of Achievement, Fashion Design: Assistant Designer/Stylist (Plan Code: 3325)

The Certificate of Achievement will prepare students for entry-level positions in the apparel design and manufacturing industry. This course of study will provide students with conceptual development and basic skills in fashion design.

Program Student Learning Outcomes:

- Provide educational opportunities in the field of fashion for career employment, advanced study and professional development.

- Predict fashion trends and analyze form, silhouette, proportion, texture and drape of fabric to develop a fashion line for a large customer.

REQUIRED COURSES		UNITS
COSA 1	Computer Information Competency	1
FD 3	Intro to Careers in Design/Merchandising	2
FD 27	Production Sewing	1.5
FD 36A	Pattern Drafting I: Basic Block	1.5
FD 36B	Pattern Drafting II: Pattern Manipulation	1.5
FD 37A	Pattern Draping I: Basic Sloper	1.5
FD 37B	Pattern Draping II: Sloper Manipulations	1.5
FD 5	Intro Manufacturing for Design/Merchan	2
FD 200	Fashion Prediction/Promotion: Crit View	1
FD 214	Quick Sketch Croquis Drawing	2

Complete TWO (2) of the following courses:

FD 24	Beginning Sewing	1.5
FD 25	Intermediate Sewing	1.5
FD 26	Advanced Sewing	2
Subtotal Units for Entry Level		18.5-19

IN ADDITION, complete the following INTERMEDIATE LEVEL courses:

FD 9	Clothing Selection	3
FD 10	Textile Fibers and Fabrics	3
FD 38A	Fashion Design I	3
FD 39A	Garment Technical Packages	1
FD 244	Computer Patternmaking	1
FD 45A	Digital Fashion Illustration	1.5
FD 45B	Advanced Digital Fashion Illustration	1.5
FD 70	Work Experience Issues – Fashion Design	1

| FD 271WE | Work Experience – Fashion Design | 1-4 |
| Subtotal Units for Intermediate Level | | 16-19 |

IN ADDITION, complete the following ADVANCED LEVEL courses:

FD 38B	Fashion Design II	3
FD 216	Fashion Portfolio Development	2
Subtotal Units for Advanced Level		5
Total Units		39.5-43

Certificate of Achievement, Fashion Design: Patternmaker/Technical Design (Plan Code: 3319)

The Certificate of Achievement will prepare students for entry-level position as a patternmaker in the apparel design and manufacturing industry.

ENTRY LEVEL CLASSES
REQUIRED COURSES		UNITS
COSA 1	Computer Information Competency	1
FD 3	Intro to Careers in Design/Merchandising	2
FD 10	Textile Fibers and Fabrics	3
FD 36A	Pattern Drafting I: Basic Block	1.5
FD 36B	Pattern Drafting II: Pattern Manipulation	1.5
FD 214	Quick Sketch Croquis Drawing	2
FD 24	Beginning Sewing	1.5
Subtotal Units for Entry Level		12.5

INTERMEDIATE LEVEL CLASSES
REQUIRED COURSES		UNITS
FD 5	Intro Manufacturing Design/Merchand	2
FD 25	Intermediate Sewing	1.5
OR		
FD 26	Advanced Sewing	2
FD 37A	Pattern Draping I: Basic Sloper	1.5
FD 37B	Pattern Draping II: Sloper Manipulations	1.5
FD 27	Production Sewing (one semester)	1.5
FD 40	Advanced and Production Pattern Drafting	1.5
FD 45A	Digital Fashion Illustration	1.5
FD 244	Computer Patternmaking	1
Subtotal Units for Intermediate Level		12-12.5

ADVANCED LEVEL CLASSES
REQUIRED COURSES		UNITS
FD 38A	Fashion Design I	3
FD 39A	Garment Technical Packages	1
FD 45B	Advanced Digital Fashion Illustration	1.5
FD 70	Work Experience Issues-Fashion Design	1
FD 271WE	Work Experience-Fashion Design	1-4
FD 216	Fashion Portfolio Development	2

Subtotal Units for Advanced Level		9.5-12.5
Total Units for Major		34-37.5

RECOMMENDED but not required courses:

ART 1 or 2	Art and Civilization	3
ART 15	Beginning Drawing	3
FD 20	Introduction to Fashion Industry	3
FD 38B	Fashion Design	3
FD 38C	Fashion Design	3
FD 38D	Fashion Design	3
FD 213	Textile Surface Design	1
FD 230	Fashion Design Laboratory	.5
FD 258	Swimwear	1

Certificate of Achievement, Fashion Design: Samplemaker (Plan Code: 3323)

The Certificate of Achievement will prepare students for entry-level position as a samplemaker in the apparel design and manufacturing industry.

Program Student Learning Outcomes:

- Provide educational opportunities in the field of fashion for career development, advanced study and professional development.
- Demonstrate advanced sewing skills and techniques of apparel construction.

ENTRY LEVEL CLASSES

REQUIRED COURSES		UNITS
COSA 1	Computer Information Competency	1
FD 3	Intro to Careers in Design/Merchandising	2
FD 5	Intro Manufacturing for Design/Merchan	2
FD 10	Textile Fibers and Fabrics	3
FD 24	Beginning Sewing	1.5
FD 25	Intermediate Sewing	1.5
FD 244	Computer Patternmaking	1
OR		
FD 45A	Digital Fashion Illustration	1.5
Subtotal Units		12-12.5

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 26	Advanced Sewing	2
FD 27	Production Sewing	1.5
FD 36A	Pattern Drafting I: Basic Block	1.5
FD 36B	Pattern Drafting II: Pattern Manipulation	1.5
FD 70	Work Experience Issues-Fashion Design	1
FD 271WE	Work Experience-Fashion Design	1-4
FD 258	Swimwear	1

Subtotal Units		9.5-12.5
Total Units in Major		21.5-25

RECOMMENDED but not required courses:

ART 1 or 2	Art and Civilization	3
ART 15	Beginning Drawing	3
FD 20	Introduction to the Fashion Industry	3
FD 230	Fashion Design Laboratory	2
FD 213	Textile Surface Design	1
FD 244	Computer Patternmaking	1

Fashion Merchandising

The Fashion Merchandising program at LBCC 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.

Associate in Arts in Fashion Merchandising (A.A.), (Plan Code: 1326)

This degree will provide industry specific training as part of the undergraduate requirements necessary for those students wishing to transfer to a college or university in Fashion Merchandising or related majors.

Program Student Learning Outcomes:

- Create an environment that promotes critical thinking, creativity, teamwork, soft skills, multicultural and global awareness and understanding of social organizational and technological systems.
- Provide educational opportunities in the field of fashion for career employment, advanced study and professional development.
- Calculate mark-ups, markdowns and open-to buy using formulas.

ENTRY LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 3	Intro to Careers in Design/Merchandising	2
FD 5	Intro Manufacturing for Design/Merchan	2
FD 9	Clothing Selection	3
FD 20	Introduction to Fashion Industry	3
Subtotal Units		10

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 10	Textiles Fibers and Fabrics	3
FD 22A	Merchandising for a Profit I	1.5
FD 22B	Merchandising for a Profit II	1.5
FD 32	History of Fashion	3
FD 45A	Digital Fashion Illustration	1.5
FD 200	Fashion Prediction/Promotion: Crit View	1
Subtotal Units		11.5

ADVANCED LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 23	Fashion/Merchandise Buying	3
FD 45B	Advanced Digital Fashion Illustration	1.5
Subtotal Units		4.5
Total Units in Major		26

RECOMMENDED but not required courses:

FD 24	Beginning Sewing	1.5
IBUS 52	International Marketing	3
COSA 50	Intro to IT Concepts & Applications	4

Certificate of Achievement, Fashion Merchandising (Plan Code: 3326)

This Certificate of Achievement will prepare students for careers in all phases of retailing and manufacturing in the growing California Fashion Industry. Students will be equipped for entry-level positions such as Buyer, Assistant Buyer, Merchandise Manager, Fashion Coordinator, Fashion Director, Display Specialist, Stylist, Advertising, Sales Promotion, Department Manager, Consumer Consultant, Store Manager, Fashion Illustrator, Area Manager plus various opportunities in Apparel Manufacturing and Textiles.

ENTRY LEVEL CLASSES

REQUIRED COURSES		UNITS
COSA 1	Computer Information Competency	1
FD 3	Intro to Careers in Design/Merchandising	2
FD 5	Intro Manufacturing for Design/Merchan	2
FD 9	Clothing Selection	3
FD 20	Introduction to Fashion Industry	3
FD 24	Beginning Sewing	1.5
FD 200	Fashion Prediction/Promotion: Crit View	1
FACS 50	Consumer Awareness	3
OR		
FACS 64	Life Management	3
Subtotal Units for Entry Level		16.5

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 10	Textiles Fibers and Fabrics	3
FD 22A	Merchandising for a Profit I	1.5
FD 22B	Merchandising for a Profit II	1.5
FD 32	History of Fashion	3
FD 39A	Garment Technical Packages	1
FD 41	Fashion Show Production	2.5
FD 45A	Digital Fashion Illustration	1.5
FD 45B	Advanced Digital Fashion Illustration	1.5
OR		
FD 214	Quick Sketch Croquis Drawing	2
MKTG 40	Salesmanship	3
Subtotal Units for Intermediate Level		18.5-19

ADVANCED LEVEL CLASSES

REQUIRED COURSES		UNITS
FD 23	Fashion/Merchandise Buying	3
FD 70	Work Experience Issues-Fashion Design	1
FD 72 or 73	Work Experience-Fashion Design	2-3
MKTG 41	Marketing Communications	3
IBUS 1	Introduction to International Business	3
OR		
IBUS 20	Export-Import Business Practices	3
Subtotal Units for Advanced Level		12-13
Total Units		47-48.5

RECOMMENDED but not required courses:

FD 24	Beginning Sewing	1.5
IBUS 52	International Marketing	3
COSA 50	Intro to IT Concepts & Applications	4

Film

Students completing the program should be fully prepared to move on to a more advanced level in a post-secondary institution or in the workforce.

Associate in Arts (A.A.) Degree, Film (Plan Code: 1265)

Students gain a broader knowledge of film as a medium of mass communication and cultural artifact, as well as basic experience in film production practice and technique. The program provides lower division preparation for students interested in transfer to a baccalaureate degree in this field.

Program Student Learning Outcomes:

- Ability to synthesize lower-division level of principles and theories related to visual story telling using cinematic structure.

- A respect for film as a means of personal, cultural, or social expression synthesizing production technique and creative vision.

ENTRY LEVEL CLASSES

REQUIRED COURSES		UNITS
FILM 1	Introduction to Film Studies	3
FILM 40	Introduction to Screenwriting	3
Subtotal Units for Entry Level		6

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES		UNITS
FILM 2A	Film History I	3
OR		
FILM 2B	Film History II	3
FILM 20	Fundamentals of Digital Film Production	3
R_TV 216	Non-Linear Video & Film Editing	2.5
Subtotal Units for Intermediate Level		8.5

CHOOSE FIVE and ONE-HALF TO SIX (5.5-6) Units from the following courses:

FILM 10	Film Genres	3
FILM 11	Film Directors and Artists	3
FILM 21	Intermediate Digital Film Production	3
FILM 25	Introduction to Digital Cinematography	3
R_TV 12	Television Lighting	2.5
Subtotal Units		5.5-6

RECOMMENDED but not required courses:

ART 31	Fundamentals of Art/Composition & Color	3
ART 42	Intro 3D & Multimedia Computergraphics	3
ENGL 26	Creative Writing	3
PHOT 32	Introduction to Digital Photography	4
R_TV 14	Electronic Field Production	3
R_TV 15	Advanced TV Production	2.5
R_TV 34	Music Video Production	2.5
TART 1	Introduction to Acting	3
Total Units in the Major		20-20.5

Certificate of Achievement, Digital Filmmaking (Plan Code: 3257)

The Digital Filmmaking program is designed to prepare students for entry-level and self-employment in the film and television fields. Students are given basic skills in all aspects of film and video production & 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:

- Demonstrate an understanding of concept, design and creation of film projects.

- Demonstrate an ability to work collaboratively to produce film projects.

- Engage creativity and original thinking in the production of a film project.

- Develop a career path in the film and television industry.

REQUIRED CORE COURSES		UNITS
FILM 1	Introduction to Film Studies	3
FILM 20	Fundamentals of Digital Film Production	3
FILM 25	Introduction to Digital Cinematography	3
R_TV 216	Non-Linear Video & Film Editing	2.5
R_TV 70	Fieldwork in Radio/Television	3
R_TV 60	Pro Tools (Digital Audio Recording/Edit)	2.5
Subtotal Units		17

In Addition to the above, Complete SIX (6) UNITS from the following:

ART 48	Computer Art & Design for TV and Video	3
FILM 21	Intermediate Digital Film Production	3
FILM 40	Introduction to Screenwriting	3
Subtotal Units		6
Total Units		23

Film, Television & Electronic Media

The Associate in Science in 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.

Associate in Science in Film, Television, and Electronic Media for Transfer (A.S.-T) (Plan Code: 5507B/C)

Program Student Learning Outcomes:

- 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.

REQUIRED COURSES		UNITS
Complete TWO (2) courses:		
R_TV 1	Introduction to Broadcasting	3
FILM 1	Introduction to Film Studies	3
R_TV 4	Writing & Production Planning	3
OR		
FILM 40	Introduction to Screenwriting	3
Subtotal Units		6

IN ADDITION, complete ONE (1) course from each area of LIST A for a total of (6) units:

AREA 1: Audio

R_TV 60	Pro Tools (Digital Audio Recording/Edit)	2.5
R_TV 21	Radio Production	3

AREA 2: Video or Film Production

FILM 20	Fundamentals of Digital Film Production	3
OR		
R_TV 14	Electronic Field Production	3
R_TV 13	Television Production	3
FILM 21	Intermediate Digital Film Production	3
Subtotal Units		6

IN ADDITION, complete ONE (1) course from LIST B:

Any LIST A course not used above

ART 10	Art Appreciation	3
ART 2	Art and Civilization	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:

Any LIST A or LIST B course not used above

ART 48	Computer Art & Design for TV and Video	3
R_TV 70	Fieldwork in Radio/Television	3
R_TV 8	Introduction to Media Production	3
R_TV 37	Radio/Television Management and Sales	3
FILM 10	Film Genres	3
FILM 11	Film Directors and Artists	3
Subtotal Units		3
Total Units in the Major		24

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.

Associate in Science (A.S.) Degree, Fire 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:

- Explore the history, development, structure, and functions of the American fire service.

- Apply prevention/protection/fire-fighting theories, principles, and concepts to address real-life situations in the field.

- Recognize the importance of and practice of the safety behaviors in a professional fire service setting.

- Analyze, interpret, and evaluate prevention/protection/fire-fighting theories, policies, practices, and procedures to develop strategies to prevent, control, and fight fires.

REQUIRED COURSES		UNITS
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 courses:

FIRE 53	Fire Hydraulics	3
FIRE 54	Hazardous Materials 1	3
FIRE 57	Introduction to Tactics and Strategy	3
FIRE 58	Intro to Fire Company Administration	3
FIRE 61	Rescue Practices	3
FIRE 62	Fire Apparatus & Equipment	3
FIRE 64	Hazardous Materials 2	3
FIRE 65	Fundamental of Fire Safety	3
FIRE 240	Firefighter I Physical Agility	.5
EMT 251	Emergency Medical Technician	4
EMT 251L	Emergency Medical Technician Lab	2
PUBAD 1	Introduction to Public Administration	3
Subtotal Units		9
Total Units in the Major		24

Certificate of Achievement, Fire Science (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.

REQUIRED COURSES—Complete the 24 units of required courses as listed in the Associate Degree requirements.

Floral Design

The Floral Design program is the development of student competency for employment as floral designers.

Associate in Arts (A.A.) Degree, Floral Design (Plan Code: 1328)

The Associate in Arts, Floral Design 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:

- Develop foundational knowledge and skills for the design and production of industry acceptable floral displays.

- Develop work place competencies needed for employment in the floral design field.

- Analyze, interpret and exercise critical judgment in the evaluation of floral art forms.

ENTRY LEVEL CLASSES
REQUIRED COURSES		UNITS
FLO 286A	Introduction to Floral Design: Fall Flowers	2
FLO 286B	Introduction to Floral Design: Spring Flowers	2
MGMT 80	Small Business Entrepreneurship	3
OR		
MKTG 40	Salesmanship	3
Subtotal Units		7

Complete FIVE (5) UNITS from the following:

ART 30	Fundamentals of Art/Volume, Plane & Form	3
OR		
ART 31	Fundamentals of Art/Composition & Color	3
AND		
HORT 15A	Basic Horticulture	2
OR		
HORT 15B	Basic Horticulture	2
Entry Level Total Units		12

INTERMEDIATE LEVEL CLASSES
REQUIRED COURSES		UNITS
FLO 287A	Intermediate Floral Design – Wedding	2
FLO 287B	Intermediate Floral Design – Sympathy	2
FLO 287C	Intermediate Floral Design - Banquet Holiday	2
Intermediate Level Total Units		6

ADVANCED LEVEL CLASSES
REQUIRED COURSES		UNITS
FLO 288	Advanced Floral Design	2
FLO 289	Applied Floral Shop Operation	3
FLO 290	Floral Creativity and Competition	.5
Advanced Level Subtotal Units		5.5
Total Units in the major		23.5

Certificate of Achievement, Floral Design (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.

REQUIRED COURSES—Complete the 23.5 units of required courses as listed in the Associate Degree requirements box on the first page.

Foreign Languages

The Foreign Languages program at Long Beach City College 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.

Associate in Arts for Transfer (A.A.-T.) Degree, Spanish (Plan Code: 5010B/C)

The Associate in Arts in Spanish for Transfer Degree at Long Beach City College 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:

- Students will demonstrate reading comprehension at the appropriate level in the target language.

- Students will demonstrate aural comprehension at the appropriate level in the target language.

- Students will formulate ideas orally at the appropriate level in the target language.

- Students will formulate ideas in writing at the appropriate level in the target language.

REQUIRED COURSES		UNITS
SPAN 1	Elementary Spanish	5
SPAN 2	Elementary Spanish	5
SPAN 3	Intermediate Spanish	5
OR		
SPAN 9	Spanish for Spanish Speakers	5
SPAN 4	Intermediate Spanish	5
OR		
SPAN 10	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 25D	Advanced Spanish: Literature	3
Total Units in the Major		23

Associate in Arts (A.A.) Degree, Foreign Languages (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 Learning Outcomes:

- Students will demonstrate reading comprehension at the appropriate level in the target language.

- Students will demonstrate aural comprehension at the appropriate level in the target language.

- Students will formulate ideas orally at the appropriate level in the target language.

- Students will formulate ideas in writing at the appropriate level in the target language.

PROFICIENCY EMPHASIS
Options in French, German, and Spanish at the Intermediate or Advanced Level.

For students who are studying French, German, or Spanish and who want to achieve a level of competency for baccalaureate work, and/or to combine their foreign languages with another skill.

Complete 15 units from ONE LANGUAGE (French, German, or Spanish) and FIVE-SIX (5-6) additional units from the courses listed below:

REQUIRED COURSES

		UNITS
Elementary Language 1 (CHIN, FREN, GER, ITAL, JAPAN, SPAN)		5
Elementary Language 2 (CHIN, FREN, GER, ITAL, JAPAN, SPAN)		5
Intermediate Language 3 (FREN, JAPAN, SPAN) OR		5
SPAN 9/9H	Spanish for Spanish Speakers	5
Intermediate Language 4 (FREN or SPAN) OR		5
SPAN 10/10H	Spanish for Spanish Speakers	5
SPAN 8	Spoken Spanish	3
SPAN 25A	Adv. Spanish: Culture in Literature	3
SPAN 25B	Adv. Spanish: History	3
SPAN 25C	Adv. Spanish: Politics, Current Events	3
SPAN 25D	Adv. Spanish: Literature	3
FREN 25A	Advanced French: Culture in Literature	3
LING 1	Linguistics 1	3
LING 3	Introduction to World Languages	3
Total Units in the Major		20-21

Certificate of Achievement, Foreign Languages (Plan Code: 3420)

The Certificate of Achievement currently offered in French, German, Japanese, and Spanish certifies for a potential employer that the student can communicate effectively, both verbally and in writing, in a wide range of situations, in both professional and personal settings.

Program Student Learning Outcomes:

- Students will demonstrate reading comprehension at the appropriate level in the target language.

- Students will demonstrate aural comprehension at the appropriate level in the target language.

- Students will formulate ideas orally at the appropriate level in the target language.

- Students will formulate ideas in writing at the appropriate level in the target language.

REQUIRED COURSES- Complete the 20-21 units of required courses listed in the Associate Degree requirements.

General Education

Certificate of Achievement, CSU GE Breadth (Plan Code: 3000)

The Long Beach City College 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 field of concentration 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.

Students may earn a Certificate of Achievement in General Education after completed 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 Long Beach City College counselor or see the appropriate requirements listed in Plan B.

Certificate of Achievement, IGETC (Plan Code: 3001)

The Long Beach City College Certificate of Achievement in IGETC will provide students with the required general education coursework needed for transfer to a four-year 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 field of concentration 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.

Students may earn a Certificate of Achievement in General Education after completed 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 spatial science that synthesizes interactions between human society and physical environments to develop a broad understanding of the distribution and organization of both physical and human landscapes and environments. Geography students develop strong analytical

and communication skills, including methods of geographic observation, data collection, analysis, mapping, modeling and reporting of findings.

Associate in Arts in Geography for Transfer Degree (A.A.-T.), (Plan Code: 5009B/5009C)

The Department of Physical Science 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, and geography of California; technical skills: use and application of Geographic Information Systems, and field techniques in geography. 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:

- 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.

REQUIRED COURSES		UNITS
PGEOG 1	Physical Geography	3
GEOG 2	Elements of Cultural Geography	3
Subtotal Units		6

In Addition, select TWO TO THREE courses (6-9 units) from LIST A:

LIST A		
PGEOG 1L	Physical Geography Lab	1.5
GEOG 40	World Regional Geography	3
GEOG 48	Geography of California	3
GEOG 10	Intro. to Geographic Information Systems	3

PGEOG 2	Weather and Climate	3
GEOG 15F	Field Geography	2
Subtotal Units		6-9

In Addition, select two courses (6 units minimum) from LIST B:

LIST B
Any LIST A course not used above
GEOG 5	The Global Economy	3
OR		
ECON 5	The Global Economy	3
STAT 1/1H	Elementary Statistics/Honors	4
ANTHR 2/2H	Cultural Anthropology/Honors	3
Subtotal Units		6-7
Total Units in the Major		18-22

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 at LBCC 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.

Associate in Science in Geology for Transfer Degree (A.S.-T.), (Plan Code: 5503B/5503C)

The Associate in Science in Geology for Transfer degree at Long Beach City College 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:

- 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.

REQUIRED COURSES		UNITS
GEOL 1/1H	General Physical Geology/Honors	4.5
OR		
GEOL 2	General Geology, Physical	3
AND		
GEOL 2L	General Geology, Physical Lab	1.5
GEOL 3/3H	Historical Geology/Honors	4.5
CHEM 1A	General Chemistry	5.5
CHEM 1B	General Chemistry	5.5
MATH 60/60H	First Calculus Course/Honors	5
MATH 70/70H	Second Calculus Course/Honors	5
Total Units in the Major		30

History

The History Department offers the Associate in Arts in History for Transfer Degree at Long Beach City College 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.

Associate in Arts in History for Transfer Degree (A.A.-T.), (Plan Code: 5006B/5006C)

The Associate in Arts in History for Transfer Degree 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:

- 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.

REQUIRED COURSES   UNITS

HIST 10/10H	Hist./Early America (Colonial-Reconstr)/Honors	3
HIST 11/11H	Hist./Modern America (Reconstr-Present)Honors	3
Subtotal Units		6

IN ADDITION, complete TWO (2) courses from LIST A:

HIST 1A	History: Western (European) Civilization	3
OR		
HIST 2B	World History to 1500	3
HIST 1B	History: Western (European) Civilization	3
OR		
HIST 2C	World History Since 1500	3
Subtotal Units		6

IN ADDITION, complete ONE (1) course each in GROUP 1 and 2

GROUP 1-Complete ONE (1) course not used in LIST A or any course below:

Any LIST A course not used above

HIST 9A	History of China	3
HIST 9B	History of Japan & Korea	3
HIST 9C	History of India & Southeast Asia	3
HIST 18	History of Mexico	3
HIST 25	History of the American Women	3
HIST 27A	History of the African-American to 1877	3
HIST 27B	Hist/African-American (Reconstr-Present)	3
Subtotal Units		3

GROUP 2-Complete ONE (1) course not used in LIST A or any course below:

Any LIST A course not used above

| HIST 5A | History of England & Great Britain | 3 |
| HIST 5B | History of England & Great Britain | 3 |

HIST 8A/8AH	History of the Americas/Honors	3
HIST 8B/8BH	History of the Americas/Honors	3
HUMAN 1/1H	Comparative World Cultures/Honors	3
OR		
SOCSC 1/1H	Comparative World Cultures/Honors	3
HUMAN 7	American Pluralism and Identity	3
OR		
SOCSC 7	American Pluralism and Identity	3
Subtotal Units		3
Total Units in the Major		18

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.

Associate in Science (A.S.) Degree, Horticulture (Plan Code: 2962)

This field of concentration 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:

- 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.

REQUIRED COURSES   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 or 15B	Basic Horticulture	2
Subtotal Units		14

IN ADDITION, complete TWENTY (20) units from the following courses:

BIO 5	Plant Biology	4
FLO 286A	Introduction to Floral Design-Fall Flowers	2
FLO 286B	Introduction to Floral Design-Spring Flowers	2
HORT 15A or 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 & Safety	3
MGMT 58	Leadership and Supervision	3
MGMT 80	Small Business Entrepreneurship	3
MKTG 47	Essentials of Marketing	3
Subtotal Units		20
Total Units in the Major		34

Certificate of Achievement, Horticulture (Plan Code: 3962)

This Certificate of Achievement 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.

REQUIRED COURSES—Complete the 34 units of required courses as listed in the Associate Degree requirements.

Human Services

The Human Services program prepares students for careers in the helping professions, may prepare students for the first two years of their transferable Human Services 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.

Associate in Arts (A.A.) Degree, Human Services (Plan Code: 1810)

This Associate Degree 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. 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:

- Develop a psychosocial treatment plan for a client.

- Analyze information and assess level of crisis intervention needed to best meet client needs.

REQUIRED COURSES		UNITS
HS 1	Introduction to Social Work	3
HS 43	Case Management: Treatment & Aftercare	3
OR		
HS 50	Law and Ethics	3
HS 207	Development of Helping/Listening Skills	3
HS 72A	Field Instruction and Seminar I	3.5
Subtotal Units		12.5

IN ADDITION, Complete TWELVE (12) units from any of the following courses (emphasis on ONE GROUP is recommended):

GERONTOLOGY GROUP

F_N 20	Nutrition & Life	3
HS 26	Introduction to Gerontology	3
HS 45	Stress Management for Case Managers	3

CRIMINAL JUSTICE GROUP

ADJUS 14	Juvenile Law and Procedures	3
ADJUS 20	Introduction to Corrections	3
HS 7	Introduction to Victimology	3
HS 40A	Introduction to Addictive Behaviors	3
HS 40B	Introduction to Addictive Behaviors	3

HS 41	Introduction to Chemical Dependency	3
HS 43	Case Management: Treatment & Aftercare	3
HS 46	Physiology and Pharmacology of Drugs	3
SOCIO 11	Race & Ethnic Relations in the U.S.	3

DOMESTIC VIOLENCE GROUP

ADJUS 253	Understanding Domestic Violence	3
HS 43	Case Management: Treatment & Aftercare	3
HS 50	Law and Ethics	3
HS 260	Domestic Violence Intervention Strategies	3

GENERAL HUMAN SERVICES GROUP

ECON 1	Macro Economics Analysis	3
HS 40A	Intro to Addictive Behaviors	3
HS 40B	Intro to Addictive Behaviors	3
HS 43	Case Management: Treatment & Aftercare	3
HS 45	Stress Management for Case Managers	3
HS 47	Intervention, Treatment & Recovery	3
HS 48	Group & Family Process	3
HS 50	Law and Ethics	3
HS 252	Co Occurring Disorders	3
HS 260	Domestic Violence Intervention Strategies	3
PUBAD 1	Introduction to Public Administration	3
SOCIO 2	Modern Social Problems	3
COMM 20	Elements of Communication	3

FAMILY SERVICES GROUP

ADJUS 253	Understanding Domestic Violence	3
CDECE 47	Human Development	3
FACS 50	Consumer Awareness	3
FACS 64	Life Management	3
HS 40A	Introduction to Addictive Behaviors	3
HS 40B	Introduction to Addictive Behaviors	3
HS 47	Intervention, Treatment & Recovery	3
HS 48	Group & Family Process	3
HS 242	Conflict Resolution/ Mediation	3
HS 255	Alcohol & Drug Prevention & Education	3
HS 260	Domestic Violence Intervention Strategies	3
SOCIO 11	Race and Ethnic Relations in the U.S.	3
SOCIO 40	Sociology of the Family	3
Subtotal Units		12
Total Units in the Major		24.5

Certificate of Achievement, Human Services (Plan Code: 3810)

This Certificate of Achievement will prepare students for an entry-level position in the human services/social work field.

Program Student Learning Outcome:

- Demonstrate an ability to work with a diverse population in resolving chronic and crisis issues that impact family, health, employability and social standing.

REQUIRED COURSES—Complete the 24.5 units of required courses as listed in the Associate Degree requirements.

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.

Associate in Arts in Journalism for Transfer Degree (A.A.-T.), (Plan Code: 5014B/C)

The Associate in Arts in Journalism for Transfer degree is designed to provide students with exciting hands-on 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:

- Gather and prepare material accurately and fairly while meeting deadlines.
- Apply teamwork skills to publish a newspaper, magazine, or website.

REQUIRED CORE COURSES   UNITS
Complete THREE (3) courses:

JOURN 10	Intro to Global Media Communications	3
JOURN 20	Beginning Newswriting and Reporting	4
JOURN 80	Multimedia Newsroom: News	4
OR		
JOURN 81	Multimedia Newsroom: Features	4
OR		
JOURN 82	Multimedia Newsroom: Profiles	4
OR		
JOURN 83	Multimedia Newsroom: Politics	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
OR		
JOURN 36	Digital Photojournalism	3
JOURN 86	Multimedia Editors: Design	4
OR		
JOURN 87	Multimedia Editors: Visuals	4
OR		
JOURN 88	Multimedia Editor Training: Management	4
Subtotal Units		3-4

IN ADDITION, complete TWO (2) courses from LIST B:

LIST B:

PHOT 10	History of Photography	3
JOURN 1A	Digital Design and Publication	3
STAT 1/1H	Elementary Statistics/Honors	4
COMM 10	Elements of Public Speaking	3
ECON 1/1H	Macro Economic Analysis/Honors	3
OR		
ECON 2/2H	Micro Economic Analysis/Honors	3
ENGL 3/3H	Argumentative and Critical Writing/Honors	3
PHIL 12	Introduction to Logic	3
OR		
PHIL 22	Symbolic Logic	3
POLSC 1/1H	Introd. to American Government/Honors	3
POLSC 2	Comparative Government	3
COMM 60	Elements of Argumentation and Debate	3
Subtotal Units		6-7
Total Units in the Major		20-22

Associate in Arts (A.A.) in Journalism – Newspaper/Magazine (Plan Code: 1411)

This field of concentration, 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.

REQUIRED COURSES   UNITS

JOURN 1A	Digital Design and Publication	3
OR		
JOURN 6	Magazine Writing	3
JOURN 10	Intro to Global Media Communications	3
JOURN 20	Beginning Newswriting and Reporting	4
JOURN 25	Free-Lance Writing	3
JOURN 35	Photojournalism	3
OR		
JOURN 36	Digital Photojournalism	3
Subtotal Units		16

IN ADDITION, complete TWO (2) courses from the following:

JOURN 40	Social Media in Journalism	3
JOURN 81	Multimedia Newsroom: Features	4
JOURN 82	Multimedia Newsroom: Profiles	4
JOURN 83	Multimedia Newsroom: Politics	4
Subtotal Units		7-8
Total Units		23-24

Associate in Arts (A.A.) in Journalism – Public Relations (Plan Code: 1412)

The emphasis in PUBLIC RELATIONS provides a basic program for students interested in careers in any aspect of public relations and in writing and editing in-house or web sites.

REQUIRED COURSES   UNITS

JOURN 1A	Digital Design and Publication	3
JOURN 5	Introduction to Public Relations	4
JOURN 10	Intro to Global Media Communications	3
JOURN 20	Beginning Newswriting and Reporting	4
JOURN 36	Digital Photojournalism	3
Subtotal Units		17

IN ADDITION, complete TWO (2) courses from the following:

JOURN 81	Multimedia Newsroom: Features	4
JOURN 82	Multimedia Newsroom: Profiles	4
JOURN 83	Multimedia Newsroom: Politics	4
Subtotal Units		8
Total Units in the Major		25

Associate in Arts (A.A.) in Journalism – Publications Specialist (Plan Code: 1413)

The Publication Specialist emphasis provides a basic program for students interested in learning to produce a variety of publications including newsletters, brochures, websites, proposals, social-media platforms and house magazines.

REQUIRED COURSES		UNITS
JOURN 1A	Digital Design and Publication	3
JOURN 6	Magazine Writing	3
JOURN 20	Beginning Newswriting and Reporting	4
JOURN 25	Free-Lance Writing	3
JOURN 35	Photojournalism	3
OR		
JOURN 36	Digital Photojournalism	3
Subtotal Units		16

IN ADDITION, complete TWO (2) courses from the following:

JOURN 40	Social Media in Journalism	3
JOURN 81	Multimedia Newsroom: Features	4
JOURN 82	Multimedia Newsroom: Profiles	4
JOURN 83	Multimedia Newsroom: Politics	4
Subtotal Units		7-8
Total Units in the Major		23-24
Total Degree Units		60 Units minimum

Certificate of Achievement, Photojournalism (Plan Code: 3414)

The Photojournalism Certificate of Achievement provides students with the ability to learn the entry-level 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.

REQUIRED COURSES		UNITS
ENGL 1 or ENGL 1H	Reading & Composition/Honors	4
OR		
ENGL 105	Fundamentals of Writing	4
PHOT 31	Basic Photography - Black and White	4
PHOT 32	Introduction to Digital Photography	4
PHOT 35	Photography for Publication	3
Subtotal Units		15

IN ADDITION, complete TWO (2) courses from the following:

JOURN 81	Multimedia Newsroom: Features	4
JOURN 82	Multimedia Newsroom: Profiles	4
JOURN 83	Multimedia Newsroom: Politics	4
Subtotal Units		8

Complete NINE-ELEVEN (9-11) units from the following:

JOURN 6	Magazine Writing	3
JOURN 40	Social Media in Journalism	3
JOURN 81	Multimedia Newsroom: Features	4
OR		
JOURN 82	Multimedia Newsroom: Profiles	4
OR		
JOURN 83	Multimedia Newsroom: Politics	4
JOURN 86	Multimedia Editors: Design	4
OR		
JOURN 87	Multimedia Editors: Visuals	4
OR		
JOURN 88	Multimedia Editor Training: Management	4
PHOT 39	Photography on Location	3
Subtotal Units		9-11
Total Units		32-34

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.

Associate in Arts in Kinesiology for Transfer Degree (A.A.-T.), (Plan Code: 5004B/5004C)

The Associate in Arts in Kinesiology for Transfer (A.A.-T.) degree 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 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.

REQUIRED COURSES / UNITS

		UNITS
KINPP 1	Introduction to Kinesiology	3
ANAT 1	Human Anatomy	4
PHYSI 1	Human Physiology	5
Total Units		12

IN ADDITION, complete ONE (1) course from at least THREE (3) different areas of the following list:

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 Aerobics	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		3

IN ADDITION, complete TWO (2) courses from the list below:

STAT 1/H	Elementary Statistics/Honors	4
CHEM 1A	General Chemistry	5.5
OR		
CHEM 3	Intro to Gen, Organic & Biochemistry	5
PHYS 2A	General Physics	4.5

PHYS 3A	Physics for Sci. & Eng.-Mechanics	5.5
KINPP 23	First Aid and Safety	3
Subtotal Units		7-10.5
Total Units in the Major		22-26

Associate in Arts (A.A.), Kinesiology (Plan Code: 1701)

A Kinesiology Associates Degree 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 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.

REQUIRED COURSES / UNITS

		UNITS
KINPP 1	Introduction to Kinesiology	3
KINPP 4	Lifetime Wellness Principles	3
KINPP 23	First Aid and Safety	3
Subtotal Units		9

IN ADDITION, complete SIX (6) units from the following:

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 12	Techniques of Physical Fitness	2
KINPP 14	Theory of Athletic Coaching	3
KINPP 15	Sports Officiating-Fall	3
KINPP 17	Sports Officiating-Spring	3
KINPF 81	Fitness and Wellness Center	1
Subtotal Units		6

IN ADDITION, complete NINE (9) units from at least FOUR (4) of the following categories:

ACTIVITY THEORY

KINPP 70A	Exercise Science & Fitness Assessment	3
KINPP 70B	Fitness Program Design & Instruction	3

KINPP 230	Kinesiology Practicum	3
KINPP 233	Techniques of Strength and Conditioning	3

AQUATICS

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

INDIVIDUAL & DUAL ACTIVITIES

KING 10	Badminton	1
KING 10B	Badminton	1
KING 84	Tennis	1

FITNESS

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 84A	Fitness & Wellness	2
KINPF 84B	Fitness & Wellness	2

COMBATIVE

KING 65	Martial Arts	1
KING 65B	Martial Arts	1
KING 66	Self Defense	1
KING 66B	Self Defense	1

TEAM SPORTS

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

INTERCOLLEGIATE ATHLETICS

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
Subtotal Units		9
Total Units in the Major		24

Certificate of Accomplishment, Athletic Coaching (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 Outcome:

- Develop a statement of philosophy for athletic coaching.

REQUIRED COURSES		UNITS
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		15

Certificate of Accomplishment, Personal Trainer (Plan Code: 4700)

This certificate prepares students for national certification testing and is recognized in the Greater Long Beach area for enhanced employment opportunities in the field of personal training.

REQUIRED COURSES		UNITS
KINPP 70A	Exercise Science & Fitness Assessment	3
KINPP 70B	Fitness Program Design & Instruction	3
KINPP 230	Kinesiology Practicum	3
KINPP 233	Techniques of Strength and Conditioning	3
KINPP 23	First Aid and Safety	3
F_N 26	Nutrition for the Active Person	1
Total Units		16

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.

Associate in Science, Library Technician (A.S.), (Plan Code: 2033)

The Long Beach City College Library Technician Associate of Science Degree 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 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.

REQUIRED COURSES		UNITS
LIB 200	Foundations of Library Services	3
LIB 210	Introduction to Access Services	3
LIB 220	Introduction to Acquisitions	3
LIB 230	Special Topics in Library Services	3
LIB 240	Introduction to Cataloging	3
Subtotal Units		15

IN ADDITION, complete THREE-FOUR (3-4) UNITS from the following:

COSA 30	Introduction to Computers	3
COSA 35	Microsoft Office	3
COMM 20	Elements of Interpersonal Communication	3
COMM 25	Elements of Intercultural Communication	3
LIB 271WE	Work Experience Library Technician	1-4
Subtotal Units		3-4
Total Units in the Major		18-19

Certificate of Achievement, Library Technician (Plan Code 3030)

The Long Beach City College Library Technician Certificate of Achievement 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 library automation essentials such as acquisitions, cataloging, circulation, public access catalogs, techniques of information retrieval, and leadership.

REQUIRED COURSES—Complete the 18-19 units of required courses as listed in the Associate Degree requirements

Linguistics

The mission of the Linguistics program at LBCC 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."

Program Student Learning Outcomes:

- Demonstrate knowledge and analytical skills concerning the nature and function of language.

- Demonstrate awareness of the nature of language and its role in human society, describe theories of language and how theories relate to data, and analyze linguistic structures and their functions.

Associate in Arts, Linguistics (Plan Code: 1398)

REQUIRED COURSES		UNITS
LING 1	Introduction to Linguistics	3
LING 3	Introduction to World Languages	3
PHIL 12	Introduction to Logic	3
PSYCH 1	Introduction to Psychology	3
Subtotal Units		12

IN ADDITION, complete at least 6-10 units from the following courses:

CDCE 58	Language and Literacy in Early Childhood	3
COMM 25	Elements of Intercultural Communication	3
ENGL 24	English Grammar	3

Second semester or higher of any foreign language:

SIGN 2B	American Sign Language, Intermediate 2	3
CHIN 2	Elementary Chinese 2	5
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
ITAL 4	Intermediate Italian	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	Spanish for Spanish Speakers	5
SPAN 9H	Honors Spanish for Spanish Speakers	5
SPAN 10	Spanish for Spanish Speakers	5
SPAN 10H	Honors 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 Events	3
SPAN 25D	Advanced Spanish: Literature	3
Subtotal Units		6-10
Total Units		18-22

Mathematics

The Long Beach City College 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.

Associate in Science in Mathematics for Transfer Degree (A.S.-T.), (Plan Code: 5500 B/C)

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.

Program Student Learning Outcomes:

- To serve students to meet graduation for an Associate degree in science mathematics for transfer.

- To serve students to meet career/transfer requirements.

REQUIRED COURSES		UNITS
MATH 60	First Calculus Course	5
MATH 70	Second Calculus Course	5
MATH 80	Third Calculus Course	5

MATH 84	Intro Differential Eqns and Linear Alg	5
Subtotal Units		20

IN ADDITION, complete ONE (1) course from LIST A:

LIST A

MATH 21A	Statistics Pathway A	5
MATH 21B	Statistics Pathway B	5
MATH 55	Discrete Mathematics	4
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
ENGR 54	Computer Methods	3.5
CS 11	Introduction to Computer Programming-C++	4
CS 21	Introduction to Computer Science-Java	4
STAT 1/1H	Elementary Statistics/Honors	4
Subtotal		3-5.5
Total Units in the Major		23.5-25.5

Associate in Science Degree (A.S.), Mathematics (Plan Code: 2530)

This field of concentration 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:

- Serve students to meet graduation/GE requirements.

- Serve students for the fulfillment of their own personal goals.

- Service students to meet career/transfer requirements.

REQUIRED COURSES		UNITS
ENGL 1	Reading and Composition	4
ENGR 54	Computer Methods	3.5
MATH 60/60H	First Calculus Course/Honors	5
MATH 70/70H	Second Calculus Course/Honors	5
MATH 80	Third Calculus Course	5
MATH 84	Intro Differential Eqns and Linear Alg	5
PHYS 3A	Physics for Sci. & Eng.-Mechanics	5.5
Subtotal Units		33

IN ADDITION, complete TWO (2) of the following courses:

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	Macro Economic Analysis	3
ECON 2	Micro Economic Analysis	3
GEOL 2	General Geology, Physical	3
GEOL 3	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 Physics	4.5
Subtotal Units		6-11
Total Units in the Major		39-44

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.

Associate in Science, Medical Assisting: Combined Administrative/Clinical (A.S.), (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:

- 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.

COMBINED ADMINISTRATIVE/CLINICAL PROGRAM

FIRST SEMESTER

REQUIRED COURSES		UNITS
BIO 60	Human Biology 1	4
OR		

ANAT 41	Anatomy & Physiology	5
AH 60	Medical Terminology	3
MA 270	Introduction to Medical Assisting	3
MA 280	Health Care Clinical Procedures	3

AND

Administrative Option Courses

Students choose either the accounting option or the database option. When an option is chosen, the student must complete the courses from that option.

ADMINISTRATIVE OPTIONS

OPTION 1 (Accounting):

REQUIRED COURSES		UNITS
ACCTG 200A	Introduction to Accounting	3
COSA 1	Computer Information Competency	1
COSA 10	Microsoft Word for Windows	3

OPTION 2 (Database):

REQUIRED COURSES		UNITS
COSA 15	Microsoft Excel for Windows	3
COSA 25	Microsoft Access for Windows	3
Subtotal Units		19-21

SECOND SEMESTER

REQUIRED COURSES		UNITS
AH 276	Health Care Law	1
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

AND

Complete Administrative Option Courses

Subtotal Units		12
Total Units in the Major		31-33

Certificate of Achievement, Medical Assisting: Combined Administrative/Clinical (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.

REQUIRED COURSES - Complete the 31-33 units of required courses listed in the Associate Degree requirement box.

Total Units: 31-33

Certificate of Achievement, Medical Assisting: Administrative Option (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.

FIRST SEMESTER

REQUIRED COURSES		UNITS
BIO 60	Human Biology 1	4

OR

ANAT 41	Anatomy & Physiology	5
AH 60	Medical Terminology	3
MA 270	Introduction to Medical Assisting	3

AND

Administrative Option Courses

Students choose either the accounting option or the database option. When an option is chosen, the student must complete the courses from that option.

ADMINISTRATIVE OPTIONS

OPTION 1 (Accounting):

REQUIRED COURSES		UNITS
ACCTG 200A	Introduction to Accounting	3
COSA 1	Computer Information Competency	1
COSA 10	Microsoft Word for Windows	3

OPTION 2 (Database):

REQUIRED COURSE		UNITS
COSA 15	Microsoft Excel for Windows	3
COSA 25	Microsoft Access for Windows	3
Subtotal Units		16-18

SECOND SEMESTER

REQUIRED COURSES		UNITS
AH 276	Health Care Law	1
MA 288	Medical Assisting Practicum Seminar	1
MA 290	Basic Medical Insurance Billing	3
Complete Administrative Option Courses		
Subtotal Units 5		
Total Units	21-23	

Certificate of Achievement, Medical Assisting: Clinical Option (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.

FIRST SEMESTER

REQUIRED COURSES		UNITS
BIO 60	Human Biology 1	4
OR		
ANAT 41	Anatomy & Physiology	5
AH 60	Medical Terminology	3
MA 270	Introduction to Medical Assisting	3
MA 280	Health Care Clinical Procedures	3
COSA 1	Computer Information Competency	1
Subtotal Units 14-15		

SECOND SEMESTER

REQUIRED COURSES		UNITS
AH 276	Health Care Law	1
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	12
Total Units	26-27

Certificate of Accomplishment, Emergency Medical Technician (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.

REQUIRED COURSES		UNITS
EMT 251	Emergency Medical Technician	4
EMT 251L	Emergency Medical Technician Laboratory	2
Total Units		6

Certificate of Accomplishment, Medical Insurance Billing (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.

REQUIRED COURSES		UNITS
AH 60	Medical Terminology	3
MA 290	Basic Medical Insurance Billing	3
Total Units		6

Certificate of Accomplishment, Phlebotomy (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 accredited by the California Department of Public Health.

REQUIRED COURSES		UNITS
AH 220	Phlebotomy	2
AH 223	Phlebotomy Practicum	1
Total Units		3

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.

Associate in Science Degree (A.S.), Metal Fabrication Technology (Plan Code: 2984)

The Associate Degree will provide the student with the technical competencies required to meet the demands of the metal fabrication industries. 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:

- Perform a common sheet metal layout and fabrication project.
- Perform common metal fabrication using power machinery to produce a fabrication project.
- Demonstrate the ability to read and interpret construction blueprints.

REQUIRED COURSES		UNITS
ELECT 253	OSHA Standards for Construction Safety	2
MTFAB 50	Introduction to Metalworking	4
MTFAB 220B	Advanced Metal Layout and Fabrication	4
MTFAB 220C	Power Metalworking Machine Operations	4
MTFAB 260	Blueprint Reading for Metal Fabrication	3
MTFAB 421	Metal Fabrication and Layout	1
WELD 50	Introduction to Welding	4
Total Units		22
Total Degree Units		60 Units minimum

Certificate of Achievement, Metal Fabrication Technology: Core Skills (Plan Code: 3982)

The Core Skills Certificate of Achievement will prepare students for an entry-level position as a trainee in metal layout, fabrication, welding and installation.

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.

- Demonstrate the ability to read and interpret construction blueprints.

REQUIRED COURSES		UNITS
MTFAB 50	Introduction to Metalworking	4
ELECT 202	Electrical Mathematics	3
ELECT 253	OSHA Standards for Construction Safety	2
MTFAB 220C	Power Metalworking Machine Operations	4
MTFAB 260	Blueprint Reading for Metal Fabrication	3
MTFAB 421	Metal Fabrication and Layout	1
WELD 50	Introduction to Welding	4
CONST 205	Forklift Fundamentals	.5
Total Units		21.5

RECOMMENDED but not required:

DRAFT 201	Introduction to Drafting	4
MTFAB 220D	CNC Metal Fabrication Systems	4
MTFAB 223	Sheet Metal Duct Systems and Fabrication	3
MTFAB 420	Metal Fabrication and Layout	2
MTFAB 421	Metal Fabrication and Layout	1
WELD 400	Band Welding	2

Certificate of Achievement, Metal Fabrication Technology: Advanced Skills (Plan Code: 3983)

The Advanced Skills Certificate of Achievement 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 sheet metal CNC fabrication, drafting and welding and in preparation for acceptance into apprenticeship in one of the metalworking trades.

Program Student Learning Outcomes:

- Analyze and apply software to design a sheet metal part and export it to the CNC plasma table in the proper vector format.
- Design and fabricate an advanced sheet metal project involving two different pieces of CNC fabrication equipment.

REQUIRED COURSES		UNITS
MTFAB 50	Introduction to Metalworking	4
ELECT 202	Electrical Mathematics	3
ELECT 253	OSHA Standards for Construction Safety	2
MTFAB 220C	Power Metalworking Machine Operations	4
MTFAB 260	Blueprint Reading for Metal Fabrication	3
MTFAB 421	Metal Fabrication and Layout	1
WELD 50	Introduction to Welding	4
CONST 205	Forklift Fundamentals	.5
Total Units		21.5

Select (1) one of the following areas of emphasis:

Advanced Metal Fabrication and Layout Skills - Complete a minimum of 15 units

MTFAB 220B	Advanced Metal Layout/Fabrication	4
MTFAB 220D	CNC Metal Fabrication Systems	4
MTFAB 270	Metallurgy	3
DRAFT 201	Introduction to Drafting	4

Advanced Metal Fabrication and Arc Welding Skills - Complete a minimum of 13 units

WELD 212	Introduction to Shielded Metal Arc Welding	4
WELD 413 OR	SMAW Flat/Horz Groove Welds with Backing	2
WELD 414 OR	SMAW Vert & OHV/HD Grv Welds w/Backing	2
WELD 415 OR	SMAW Flat/Horz Open Root Groove Welds	2
WELD 416	SMAW Vert & O/H Open Root Groove Welds	2
WELD 221 OR	Arc Welding Structural Certification	3
MTFAB 270	Metallurgy	3

Advanced Metal Fabrication and Inert Gas Welding Skills - Complete a minimum of 13 units

WELD 214	Introduction to Gas Tungsten Arc Welding	4
WELD 213 OR	Introduction to Semi-Automatic Welding	4
WELD 480 OR	Welding (Inert Gas)	2
WELD 482 OR	Gas Tungsten Arc Welding Basic Joints	2
WELD 483 OR	Gas Metal Arc/Flux Core Arc Welding	2
WELD 221 OR	Arc Welding Structural Certification	3
MTFAB 270	Metallurgy	3
Subtotal Units		13-15
Total Units		34.5-36.5

Certificate of Accomplishment, Robotic Welding Automation (Plan Code: 4922)

The Metal Fabrication Technology Certificate of Accomplishment in Robotic Welding Automation 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.

Program Student Learning Outcome:

• Safely operate common robotic welding automation systems while performing basic programming and welding functions.

REQUIRED COURSES		UNITS
MTFAB 280	Introduction to Robotic Welding	2.5
MTFAB 281	Intermediate Robotic Welding	2.5
WELD 50	Introduction to Welding	4
MTFAB 260	Blueprint Reading for Metal Fabrication	3
MTFAB 270	Metallurgy	3
Total Units		15

Music

The Music program at Long Beach City College 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.

Associate in Arts in Music for Transfer Degree (A.A.-T.), (Plan Code: 5008B/C)

The goals of the Associate in Arts in Music for Transfer degree 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:

• 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.

REQUIRED CORE COURSES

		UNITS
MUSIC 6	Introduction to Music Theory	3
AND		
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
MUSIC 92AD	Applied Vocal & Instrumental Music	.5
Subtotal Units		17

IN ADDITION, complete FOUR courses (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
OR		
MUSIC 13AD	College Symphony Orchestra	1.5
OR		
MUSIC 23AD	Jazz Choir	1.5
OR		
MUSIC 24AD	Vocal Jazz Ensemble	1.5
OR		
MUSIC 38AD	Wind Ensemble	1.5
OR		
MUSIC 54AD	Jazz Big Band	1.5
OR		
MUSIC 57AD	Jazz Combos	1.5
Subtotal Units		6

LIST A: 3 Units Minimum		
MUSIC 16	Musicianship II	1
MUSIC 40/40H	Musicianship III	3
Total Units in the Major		26

Associate in Arts (A.A.), Music (Plan Code: 1220)

The Associate Degree in Music 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:

- Students will achieve sophomore proficiency ranking in performance repertoire and technique.
- Students will achieve sophomore proficiency level in theory, musicianship, and piano placement exams.

REQUIRED COURSES

		UNITS
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 Music	0.5
MUSIC 92AD	Applied Vocal & Instrumental Music (take 3 times)	0.5
Subtotal Units		18

REQUIRED Performance Ensemble - FOUR (4) SEMESTERS required:

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 38AD	Wind Ensemble	1.5
OR		
MUSIC 23AD	Jazz Choir	1.5
OR		
MUSIC 24AD	Vocal Jazz Ensemble	1.5
OR		
MUSIC 54AD	Jazz Big Band	1.5
Subtotal Units		6

Piano Proficiency Component (Three Semesters of Piano)

MUSIC 51A	Beginning Piano 1	3
MUSIC 51B	Beginning Piano 2	3
MUSIC 51C	Intermediate Piano 1	3
Subtotal Units		9

REQUIRED	Chamber Music Component	
MUSIC 25AD	Chamber Music Ensemble	1.5
OR		
MUSIC 41AD	Madrigal A'Capella Choir	1.5
OR		
MUSIC 57AD	Jazz Combos	1.5
OR		
MUSIC 24AD	Vocal Jazz Ensembles	1.5
Subtotal Units		1.5
Total Units in the Major		34.5

Nursing: LVN to RN
Career Ladder Program

The faculty members of the Associate Degree Nursing Program uphold the mission statement of Long Beach City College, and a commitment to excellence in supporting the community and lifelong learning of our students.

Accreditation

Long Beach City College is fully accredited by the Western Association of Schools and Colleges.

The nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd., NE Suite 500, Atlanta, GA, 30326, (404) 975-5000 and approved by the State of California Board of Registered Nursing. The Career Ladder Program (Licensed Vocational Nurse to Registered Nurse Program) is designed to be completed in two and a half semesters.

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, see BRN Policy on Denial of Licensure.

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 licensure.

2. All applicants should be physically and emotionally fit. If selected, applicant will need to show proof of meeting this requirement.

3. A strong command of the English language, both written and verbal is essential for successful completion of the program.

4. All applicants must show proof of a Social Security Number as a Social Security Number is required by some clinical agencies and by the California Board of Registered Nurses in order to take the NCLEX-RN exam.

5. All applicants must have a LBCC student ID number.

6. All applicants must show proof of high school graduation or equivalency in the form of a diploma, transcripts or GED.

7. All applicants must have a valid VN license and submit copy of VN license.

Sequential Procedure for Application to the Program:

1. Applicants are required to attend a mandatory 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: http://nursing.lbcc.edu.

2. All applicants must see a counselor to develop an educational plan and for evaluation of previous courses and proficiencies.

3. Complete the Reading Proficiency requirement for graduation through the LBCC assessment testing or completion of READ 82 or 83 with a grade of "C" or higher. Proper documentation must be submitted with application.

4. Complete the Mathematics Proficiency requirement for graduation through the LBCC assessment testing or completion of MATH 120, 130 or 130A with a grade of "C" or higher. Proper documentation must be submitted with application.

5. Complete the information portion of the Information Proficiency requirement with a grade of "C" or higher. Proper documentation must be submitted with application.

6. Complete ENGL 1, SOCIO 1 and PSYCH 1 with a grade of "C" or higher.

7. Applicants must have a minimal overall GPA of 2.5 or higher.

8. 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.

9. Official transcripts from all colleges attended must be submitted with the application.

10. Unofficial transcripts from LBCC must be submitted with the application..

11. Complete and sign the application found on the nursing website: http://nursing.lbcc.edu.

12. Meet with a counselor to have your application signed.

13. Submit self-addressed stamped envelope with your application and all required documents. Incomplete applications will NOT be considered.

14. 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.

Associate in Science, LVN to RN Career Ladder Degree (A.S.), (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.

Program Student Learning Outcomes:

- Synthesize the theories and principles that encompass the nursing process and pathological conditions.

- Manage all aspects of the nursing process to achieve positive patient outcomes.

PREREQUISITES COURSE FOR THE PROGRAM

1. Complete the following courses with a "C" or better.

REQUIRED COURSES		UNITS
ANAT 1	Human Anatomy	4
PHYSI 1	Human Physiology	5
BIO 2	General Microbiology	5
PSYCH 1	Introduction to Psychology	3
ENGL 1	Reading and Composition	4
Subtotal Units		21

RECOMMENDED but not required:

ADN 225	Nursing Applications of Pharmacology	3

2. Pass Nursing Department Examination with a score of 75% or better immediately after completion of ADN 20A. 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.

FIRST SEMESTER

REQUIRED COURSES		UNITS
ADN 20A	Transition to Second Level Nursing	1

(Student must be prepared to enter the program within one year after successful completion of ADN 20A)

COMM 10, 20, or 30	General Ed. Requirement	3
SOCIO 1	Introduction to Sociology	3
Subtotal Units		7

SECOND SEMESTER

REQUIRED COURSES		UNITS
ADN 21B	Mental Health	2.5
ADN 21BL	Mental Health Lab	3
ADN 31A	Trends in Nursing A	1
ADN 35A	Maternal/Newborn Nursing	1.5
ADN 35AL	Maternal/Newborn Nursing Lab	1.5
ADN 35B	Pediatric Nursing	1.5
ADN 35BL	Pediatric Nursing Lab	1.5
Subtotal Units		12.5

THIRD SEMESTER

REQUIRED COURSES		UNITS
ADN 22B	Advanced Nursing II Role Transition	2.5
ADN 22BL	Adv. Nursing II Role Transition Lab	3
ADN 31B	Trends in Nursing B	1
ADN 45A	Advanced Medical/Surgical Nursing	2.5
ADN 45AL	Advanced Medical/Surgical Nursing Lab	3
Subtotal Units		12
Total Units in the Major		31.5
Total Program Units (including prerequisites)		68.5

Certificate of Achievement, LVN to RN Career Ladder (30-unit option), (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.

PREREQUISITES

1. Complete the following courses with a "C" or better.

REQUIRED COURSES		UNITS
PHYSI 1	Human Physiology	5
BIO 2	General Microbiology	5
Total Prerequisite Units		10

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.

3. Provisionally accepted students must successfully pass the TEAS exam with 62 or higher in order to continue in the program.

FIRST SEMESTER

REQUIRED COURSES		UNITS
ADN 20A	Transition to Second Level Nursing	1
Subtotal Units		1

SECOND SEMESTER

REQUIRED COURSES		UNITS
ADN 35A	Maternal/Newborn Nursing	1.5
ADN 35AL	Maternal/Newborn Nursing Lab	1.5
ADN 21B	Mental Health	2.5
ADN 21BL	Mental Health Lab	3
ADN 31A	Trends in Nursing A	1
Subtotal Units		9.5

THIRD SEMESTER

REQUIRED COURSES		UNITS
ADN 45A	Advanced Medical/Surgical Nursing	1.5
ADN 45AL	Advanced Medical/Surgical Nursing Lab	1.5
ADN 22B	Advanced Nursing II - Role Transition	2.5
ADN 22BL	Advanced Nursing II Role Transition Lab	3
ADN 31B	Trends in Nursing B	1
Subtotal Units		9.5
Total Units (10 Prerequisites + 20 Required Certificate Courses)		30

Nursing: Associate Degree (RN) Program

The nursing program provides a high quality nursing education to qualified and diverse students for the development of entry-level nurses who are prepared to meet the evolving healthcare needs of the community. The faculty strive to create a student-centered environment of collaboration, lifelong learning, and mentorship to promote academic excellence and compassionate nursing care.

Accreditation

Long Beach City College is fully accredited by the Western Association of Schools and Colleges. The nursing program is accredited by the Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE Suite 500, Atlanta, GA 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 are part of the application for licensure. For more information, request BRN Policy Denial of Licensure. For additional information call (562) 938-4166.

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 licensure.

2. All applicants should be physically and emotionally fit. If selected, applicant will need to show proof of meeting this requirement.

3. A strong command of the English language, both written and verbal is essential for successful completion of the program.

4. All applicants must show proof of a Social Security Number as a Social Security Number is required by some clinical agencies and by the California Board of Registered Nurses in order to take the NCLEX-RN exam.

5. All applicants must have a LBCC student ID number.

6. All applicants must show proof of high school graduation or equivalency in the form of a diploma, transcripts or GED.

7. This program is not for the Licensed Vocational Nurses (LVN's). LVN's should apply to the LVN to RN Career Ladder Program.

Sequential Procedure for Application to the Program:

1. Applicants are required to attend a mandatory 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: http://nursing.lbcc.edu.

2. All applicants must see a counselor to develop an educational plan and for evaluation of previous courses and proficiencies.

3. Complete the Reading Proficiency requirement for graduation through the LBCC assessment testing or completion of READ 82 or 83 with a grade of "C" or higher. Proper documentation must be submitted with application.

4. Complete the Mathematics Proficiency requirement for graduation through the LBCC assessment testing or completion of MATH 120, 130 or 130A with a grade of "C" or higher. Proper documentation must be submitted with application.

5. Complete the information portion of the Information Proficiency requirement with a grade of "C" or higher. Proper documentation must be submitted with application.

6. Complete ENGL 1 with a grade of "C" or higher.

7. Applicants must have a minimal overall GPA of 2.5 or higher.

8. 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.

9. Official transcripts from all colleges attended must be submitted with the application.

10. Unofficial transcripts from LBCC must be submitted with the application.

11. Complete and sign the application found on the nursing website: http://nursing.lbcc.edu.

12. Meet with a counselor to have your application signed.

13. Submit self-addressed stamped envelope with your application and all required documents.

14. Incomplete applications will NOT be considered.

15. All provisional 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.

Associate in Science, Registered Nursing (A.S.), (Plan Code: 2620)

The program is designed to be completed in two years (after completion of pre-requisites) and qualifies the student to take the NCLEX-RN licensing examination. 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:

- Synthesize the theories and principles that encompass the nursing process and pathological conditions.

- Manage all aspects of the nursing process to achieve positive patient outcomes.

PREREQUISITES
(Required Prior to Enrollment in Program)

REQUIRED COURSES		UNITS
ANAT 1	Human Anatomy	4
PHYSI 1	Human Physiology	5
BIO 2	General Microbiology	5
ENGL 1	Reading and Composition	4
Subtotal Units		18

FIRST SEMESTER

REQUIRED COURSES		UNITS
ADN 11A	Introduction to Nursing	2.5
ADN 11AL	Introduction to Nursing Lab	1.5
ADN 11B	Health Deviations 1	2.5
ADN 11BL	Health Deviations 1 Lab	1.5
PSYCH 1	Introduction to Psychology	3
SOCIO 1	Introduction to Sociology	3
Subtotal Units		14

SECOND SEMESTER

REQUIRED COURSES		UNITS
ADN 12A	Health Deviations 2	2.5
ADN 12AL	Health Deviations 2 Lab	1.5
ADN 12B	Health Deviations 3	2.5
ADN 12BL	Health Deviations 3 Lab	1.5
COMM 10, 20, OR 30 General Ed. Requirements		3
Subtotal Units		11

THIRD SEMESTER

REQUIRED COURSES		UNITS
ADN 21B	Mental Health	2.5
ADN 21BL	Mental Health Lab	3
ADN 31A	Trends in Nursing A	1
ADN 35A	Maternal/Newborn Nursing	1.5
ADN 35AL	Maternal/Newborn Nursing Lab	1.5
ADN 35B	Pediatric Nursing	1.5
ADN 35BL	Pediatric Nursing Lab	1.5
Subtotal Units		12.5

FOURTH SEMESTER

REQUIRED COURSES		UNITS
ADN 22B	Advanced Nursing II Role Transition	2.5
ADN 22BL	Adv. Nursing II - Role Transition Lab	3
ADN 31B	Trends in Nursing B	1
ADN 45A	Advanced Medical/Surgical Nursing	2.5
ADN 45AL	Advanced Medical/Surgical Nursing Lab	3.0
Subtotal Units		12

RECOMMENDED but not required courses:

ADN 201-204 Nursing Skills Adjunct Lab		.5
ADN 212	Clinical Practicum I	2
ADN 221	Clinical Practicum II	2
ADN 222	Clinical Practicum III	2
ADN 225	Pharmacology	3
ADN 810	Preparation for Nursing	.5
AH 60	Medical Terminology	3
VN 222	Intravenous Therapy & Blood Withdrawal	1.5
AH 225	Basic Arrhythmia Recognition	.5
Total Units in the Major		67.5

Nursing: Vocational / Practical

Prepare students for entry-level vocational nursing licensure and competent practice.

Program Admissions Requirements

1. CNA Certificate: Starting Fall 2014, the requirement of a current State of California Nurse Assistant Certificate (C.N.A) becomes mandatory for all first time applicants. Completion of VN 215 plus state competency examination and certificate fulfills this requirement.

2. Reading Proficiency: Meet the current college graduation reading proficiency requirements. In order to do so, please contact the Liberal Arts campus counseling department at (562) 938-4049, or the Pacific Coast campus counseling department at (562) 938-3920 to schedule the LBCC Assessment test(s) and for a group meeting with a counselor.

3. *Starting Fall 2014 Application Period—Completion of English 105 or higher required.

4. Math Proficiency: Qualify for Math 110 through the LBCC Assessment tests; or complete Math 815 or higher with a grade of "C" or better. If math classes were taken at another college, meet with a counselor to initiate an evaluation of the course for equivalency.

5. Writing Proficiency: Met for graduation: Qualification for English 1 or completion of English 105. Starting Fall 2014.

6. High School: Proof of high school graduation (12 years) is required. Official transcripts from a USA high school, or official General Educational Development (GED) certificate, or official transcripts from a college showing an AA/AS/BA/BS is required. All foreign transcripts must be evaluated by ACEI translation service.

7. Grade Point Average: If previous college work has been completed, a GPA of 2.0 must be achieved.

8. Information Meeting: Applicants should attend an information meeting prior to submitting an application.

9. Meetings are held on the 2nd Tuesday of the month in Bldg. C at 4:30 p.m. Please view VN webpage to verify date and time.

10. Prerequisite Courses: All prerequisite courses must be completed prior to entering the program. However, students may apply for the program DURING THE 1ST WEEK OF Fall & Spring semester. Please call the Nursing office for exact dates. Prerequisites must have been completed within the previous five years.

11. 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.

12. 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 1st 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 2 ½ semester (or 45 weeks) program...The program admits students twice a year in March and October only.

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: AH 60 (Medical Terminology), BIO 60 Lab (Human Biology Lab), CDECE 47 (Human Development), COUNS 1 (Orientation for College Success), LEARN 11 (Learning and Academic Strategies), MATH 110 (First Course in Algebra), PSYCH 1 (Introduction to Psychology), and SOCIO 1 (Introduction to Sociology), KINPP 23 (First Aid & Safety Education) and ENGL 1 (Reading & Composition), A.D.N. 810 (Preparation for Nursing).

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.

Associate in Science (A.S.), Nursing: Vocational/ Practical (Plan Code: 2630)

Completion of the Vocational Nursing Program qualifies the student to take the national licensing examination for Vocational nurses (NCLEX-PN). 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 Long Beach City College 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:

• Synthesize theories and principles necessary for licensure as a vocational nurse.

• Develop entry-level LVN job readiness skills and employment status 1-year post graduation.

Complete the following PREREQUISITE courses with a minimum grade of "C" or better in each course:

REQUIRED COURSES		UNITS
BIO 60	Human Biology 1	4
VN 220	Transition to Vocational Nursing	4
VN 225 or ADN 225	Pharmacology	3
VN 215	Fundamentals of Nursing	0-6
OR		
Certified Nursing Assistant (CNA) certificate issued by the State of California (Contact Nursing Department)		
Subtotal Units		11-17

Complete the following required courses with a minimum grade of "C" or better in each course:

REQUIRED COURSES		UNITS
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 Deviations 4	3
VN 265L	Common Health Deviations 4 Lab	3

For both the Associate in Science and the Certificate of Achievement, the following courses are recommended, BUT ARE NOT REQUIRED to earn either.

ADN 225	Pharmacology	3
ADN 810	Preparation for Nursing	.5
AH 60	Medical Terminology	3

AH 222	Intravenous Therapy & Blood Withdrawal	1.5
AH 225	Basic Arrhythmia Recognition	.5
Total Units in the Major		47-53

Certificate of Achievement, Nursing: Vocational/Practical (Plan Code: 3630)

Completion of the Vocational Nursing Program qualifies the student to take the national licensing examination for Vocational nurses (NCLEX-PN). 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 Long Beach City College Associate Degree Nursing Program for the Career Ladder LVN-RN Program.

REQUIRED COURSES—Complete the 47-53 units of required courses as listed in the Associate Degree requirements.

Certificate of Accomplishment, Nursing Assistant (Plan Code: 4630)

This certificate prepares students in basic-entry level fundamental nursing skill sets. Completion of course VN216 prepares students to test for the state competency examination for a Certified Nursing Assistant. (C.N.A.)

REQUIRED COURSES		UNITS
VN 216	Home Health Aide	1.5
Total Units		1.5

Certificate of Accomplishment, Home Health Aide (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 VN215 course.

REQUIRED COURSES		UNITS
VN 215	Fundamentals of Nursing	6
TOTAL UNITS		6

Nutrition and Dietetics Program

The Dietetics program at Long Beach City College is the development of the student competency to provide nutritional care services in food service management and clinical nutrition care. This program is designed to train students to be employed as Dietetic Service Supervisors and Nutrition Assistants who function as managers/supervisors and nutritional care specialists in health care and nutrition related facilities.

Associate in Science in Nutrition and Dietetics for Transfer Degree (A.S.-T) (Plan Code: 5506B/C)

This Associate in Science in Nutrition and Dietetics for Transfer degree 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:

Upon successful completion of this program, students will be able to:

- 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.

REQUIRED COURSES		UNITS
F_N 20	Nutrition and Life	3
PSYCH 1	Introduction to Psychology	3
CHEM 1A	General Chemistry	5.5
BIO 2	General Microbiology	5
Subtotal Units		16.5

LIST A: Complete TWO (2) courses:
| CHEM 12A | Organic Chemistry | 5.5 |

ANAT 1	Human Anatomy	4
STAT 1	Elementary Statistics	4
Subtotal Units		8-9.5

LIST B: Complete ONE (1) course:

F_N 21	Food Selection and Meal Preparation	4
Subtotal Units		4
Total Units in the Major		28.5-30

Associate in Arts (A.A.) Degree, Dietetic Service Supervisor (Plan Code: 1320)

The Dietetic Service Supervisor is the food service director of a health care facility, is a member of the dietetic team, functioning under the supervision of a Registered Dietitian or administrator. This program is the state approved program meeting federal Omnibus Budget Reconciliation Act (OBRA) and Title 22 requirements of the California State Department of Public Health 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. Completers are also employed in community nutrition agencies, school lunch, adult and child nutrition programs. Upon successful completion of the program, the student is eligible to apply for a Dietetic Service Supervisor Certificate. The student may also receive the Associate in Arts degree if the graduation requirements are completed.

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.

REQUIRED COURSES   UNITS

F_N 20	Nutrition and Life	3
F_N 21	Food Selection and Meal Preparation	4
F_N 224	Sanitation, Safety and Equipment	3
F_N 225	Intro to Food Service/Work Organizations	3
F_N 227	Supervision and Training Techniques	3
F_N 228	Food Production Management	3
F_N 230A	Clinical Field Experience I (2 semesters required)	2.5, 2.5
F_N 231	Menu Planning and Food Purchasing	3

| F_N 232 | Therapeutic Diets | 3 |
| Total Units in the Major | | 30 |

Recommended for the Natural Sciences Requirement: BIO 60 (preferred), BIO 2, PHYSI 1, ANAT 1, or any CHEM.

Recommended for the Proficiency in Mathematics:

It is recommended that the student complete this proficiency prior to enrollment in F_N 228 and F_N232 by presenting a passing score on the placement test or successful completion of a mathematics course at the level of elementary algebra (MATH 110 or 220) or higher.

Recommended for the Social Sciences Requirement: SOCIO 1 or PSYCH 1.

Associate in Arts (A.A.) Degree, Nutrition Assistant (Plan Code: 1321)

The Nutrition Assistant is a member of the dietetic health care team, functioning under the direction of a Registered Dietitian/Nutritionist. 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 pathway.

REQUIRED COURSES   UNITS

Complete the 30 unit coursework required for the Dietetic Service Supervisor Program. IN ADDITION, complete the courses listed below.

F_N 234	Advanced Nutrition Care	3
F_N 235	Advanced Medical Nutrition Therapy	3
F_N 236	Dietetic Professional Development Seminar	1
F_N 240A	Clinical Field Experience II (2 semesters required)	3, 3
Subtotal Units		13
Total Units in the Major		43

RECOMMENDED but not required courses:

F_N 26	Nutrition for the Active Person	1
F_N 233	Special Topics in Health Care Dietetics	1
F_N 250	Nutrition in Healthy Cooking	2
F_N 253	ServSafe Certification	1
F_N 255C	Nutrition for Adults & Aging	1
F_N 255D	Vegetarian Lifestyle	1
F_N 256	Weight Control & Energy Balance	2
F_N 260	Cultural Foods	.5
F_N 261	Cooking for Wellness	.5
F_N 262	Cooking for Singles	.5

Recommended for the Natural Sciences Requirement: BIO 60 (preferred), BIO 2, PHYSI 1, ANAT 1, or any CHEM.

Recommended for the Proficiency in Mathematics:

It is recommended that the student complete this proficiency prior to enrollment in F_N 228 and F_N232 by presenting a passing score on the placement test or successful completion of a mathematics course at the level of elementary algebra (MATH 110 or 220) or higher.

Certificate of Achievement, Dietetic Service Supervisor (Plan Code: 3320)

The Dietetic Service Supervisor is the food service director of a health care facility, is a member of the dietetic team, functioning under the supervision of a Registered Dietitian or administrator. This program is the state approved program meeting federal Omnibus Budget Reconciliation Act (OBRA) and Title 22 requirements of the California State Department of Public Health 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. Completers are also employed as supervisors in community nutrition agencies, school lunch, elder nutrition and child nutrition programs. Upon successful completion of the program, the student is eligible to apply for a Certificate of Achievement in Dietetic Service Supervisor.

REQUIRED COURSES		UNITS
F_N 20	Nutrition and Life	3
F_N 21	Food Selection and Meal Preparation	4
F_N 224	Sanitation, Safety and Equipment	3
F_N 225	Intro to Food Service/Work Organizations	3
F_N 227	Supervision and Training Techniques	3
F_N 228	Food Production Management	3
F_N 230A	Clinical Field Experience I	
	(2 semesters required)	2.5, 2.5

F_N 231	Menu Planning and Food Purchasing	3
F_N 232	Therapeutic Diets	3
Total Units in the Major		30

Certificate of Achievement, Formula Room Technician (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.

REQUIRED COURSES		UNITS
F_N 20	Nutrition and Life	3
F_N 21	Food Selection and Meal Preparation	4
F_N 224	Sanitation, Safety and Equipment	3
F_N 232	Therapeutic Diets	3
F_N 234	Advanced Nutrition Care	3
COSA 1	Computer Information Competency	1
Total Units		17

Certificate of Accomplishment, Formula Room Technician (Plan Code: 4321)

This Certificate of Accomplishment will prepare a student to work in specialized formula rooms in hospitals and healthcare settings.

REQUIRED COURSES		UNITS
F_N 20	Nutrition and Life	3
F_N 21	Food Selection and Meal Preparation	4
F_N 224	Sanitation, Safety and Equipment	3
F_N 232	Therapeutic Diets	3
Total Units		13

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.

Associate in Arts in Philosophy for Transfer Degree (A.A.-T.) (Plan Code: 5012B/C)

Associate in Arts in Philosophy for Transfer degree 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 Outcome:

- Describe philosophical problems and apply critical thinking and logic skills to analyze them.

REQUIRED COURSES		UNITS
Select TWO (2) courses below:		
PHIL 22 AND	Symbolic Logic	3
PHIL 6/6H OR	Introduction to Philosophy	3
PHIL 7/7H	Introduction to Ethics	3
Subtotal Units		6

IN ADDITION, complete ONE (1) course from LIST A:

LIST A
Any REQUIRED CORE not already used.

PHIL 9	Introduction to Existentialism	3
PHIL 10	Introduction to Feminist Philosophy	3
Subtotal Units		3

IN ADDITION, complete TWO (2) courses from LIST B:

LIST B
Any LIST A course not already used.

HIST 1A	History: Western European Civilization	3
HIST 1B	History: 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 B course not already used.

PHIL 11	Critical Thinking	3
PHIL 12	Introduction to Logic	3
PHIL 8	Introduction to Non-Western Philosophy	3
Subtotal Units		3
Total Units in the Major		18

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.

Associate in Arts (A.A.), Physical Sciences (Plan Code: 1540)

This Associate Degree will prepare students for an entry-level position as a technician. Appropriate course selection will also facilitate transfer in a related major.

Associate in Science (A.S.), Physical Sciences (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:

- 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.

REQUIRED COURSES　　　　　　　　UNITS

Complete THIRTEEN-FIFTEEN (13-15) units from the following courses:

ASTR: All courses
CHEM: Either CHEM 2, 3 or 1A (but limited to only one of these courses), any among CHEM 1B, CHEM 12A or CHEM 12B
ENVRS 1
PGEOG: all courses
GEOL: GEOL 1 or 1H or 2 & 2L, any other Geology course taught at LBCC
PHYS: PHYS 2A or 3A but not both, PHYS 2B or 3B but not both, PHYS 3C

Subtotal Units　　　　　　　　13-15

IN ADDITION, complete a Computer class: Computer Class- Any class which satisfied the computer portion of the Information Competency requirement for graduation. See the current General Education Course Pattern Guide for a complete listing of acceptable courses.

Subtotal Units　　　　　　　　1-4

IN ADDITION, complete FIVE-SIX (5-6) units from any Mathematics course which has a prerequisite of Intermediate Algebra (MATH 130) or higher

Subtotal Units　　　　　　　　5-6
Total Units in the Major　　　　　　　　19-25

NOTE: Courses are offered each semester excluding the following:

PHYS 2B is offered once each year, usually in the second semester.

PHYS 3C is offered once each year, usually in the second semester.

GEOL 3 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.

Associate in Arts in Philosophy for Transfer (A.A.-T.) (Plan Code: 5012B/C)

The Associate in Arts in Political Science for Transfer degree 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:

- 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.

REQUIRED CORE COURSE　　　　　　UNITS

| POLSC 1/1H | Introduction to Government/Honors | 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/Honors	3
POLSC 4/4H	World Politics/Honors	3
POLSC 10	Introduction to Political Science	3
STAT 1/1H	Elementary Statistics/Honors	4
Subtotal Units		9-10

IN ADDITION, complete TWO (2) courses from LIST B:

LIST B
Any course from List A not already used		3-4
POLSC 3	Issues of American Government	3
POLSC 9	The Const., Law & Society	3
HUMAN 7	American Pluralism & Identity	3

OR

SOCSC 7	American Pluralism & Identity	3
PUBAD 1	Introduction to Public Administration	3
Subtotal Units		6-7
Total Units in the major		18-19

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 at Long Beach City College introduces students to many of these subspecialties in preparation for upper division coursework at a four-year college or university.

Associate in Arts in Psychology for Transfer Degree (A.A.-T.), (Plan Code: 5000 B/C)

The Associate in Arts in Psychology for Transfer Degree 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:

• 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.

REQUIRED CORE COURSES		UNITS
STAT 1/1H	Elementary Statistics/Honors	4
PSYCH 1/1H	Introduction to Psychology/ Honors	3
PSYCH 2	Research Methods for Psychology	4
Subtotal Units		11

IN ADDITION, complete the LIST A course below:

LIST A		
PSYCH 6	Physiological Foundations of Psychology	3
Subtotal LIST A Units		3

IN ADDITION, complete ONE (1) course from LIST B:

LIST B		
PSYCH 11	Social Psychology	3
Subtotal LIST B Units		3

IN ADDITION, complete ONE (1) course from LIST C:

LIST C		
Any LIST A or LIST B course not already used		3
PSYCH 4	Personal and Social Development	3
PSYCH 10	Human Sexuality	3
OR		
HLED 10	Human Sexuality	3
Subtotal LIST C Units		3
Total Units in the Major		20

Public Health Science

Associate in Science in Public Health Science for Transfer Degree (A.S.-T.), (Plan Code: 5508B/C)

The Associate in Science in Public Health Science for Transfer degree (AS-T) 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:

• 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.

REQUIRED CORE COURSES		UNITS
HLED 3	Contemporary Health Problems	3
HLED 21	Introduction to Public Health	3
STAT 1	Elementary Statistics	4
OR		
STAT 1H	Honors Elementary Statistics	4
BIO 41	Contemporary Biology	3
OR		
BIO 41H	Honors Contemporary Biology	3
CHEM 1A	General Chemistry	5.5
PSYCH 1	Introduction to Psychology	3
OR		
PSYCH 1H	Honors Introduction to Psychology	3
ANAT 1	Human Anatomy	4
AND		
PHYSI 1	Human Physiology	5
Subtotal Units		30.5

LIST A: Select one course (THREE 3 Units):

ECON 2	Micro Economic Analysis	3
OR		
ECON 2H	Honors Micro Economic Analysis	3
ECON 1	Macro Economic Analysis	3
OR		

ECON 1H	Honors Macro Economic Analysis	3
F_N 20	Nutrition and Life	3
HLED 10	Human Sexuality	3
HLED 22	Health and Social Justice	3
HLED 24	Drugs, Health and Society	3
SOCIO 1	Introduction to Sociology	3
OR		
SOCIO 1H	Honors Introduction to Sociology	3
Total Units		33.5

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.

Associate in Arts Degree (A.A.), Radio/Television Broadcast News (Plan Code: 1251)

Students prepare for writing, editing and producing radio or television news and news feature programs. 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 communications, broadcast or journalism.

Program Student Learning Outcomes:

• Integrate and arrange script, graphics, B-roll, music, and sound bites into an industry-ready newscast segment.

• Critically assess the responsibilities of various creative and technical staff positions and evaluate the importance each to the production.

• Analyze the elements of pre-production, production, and post-production to create an industry ready news segment.

REQUIRED COURSES		UNITS
R_TV 1	Introduction to Broadcasting	3
R_TV 3	Using MacIntosh Comp Entertainment Indus.	2.5
R_TV 8	Introduction to Media Production	2.5
R_TV 13	Television Production	3

R_TV 70	Fieldwork in Radio/Television	3
Subtotal Units		14

REQUIRED COURSES FOR SPECIALITY

R_TV 14	Electronic Field Production	3
R_TV 25	Radio Activity	2.5
OR		
R_TV 35	Television Activity	2.5
R_TV 30	Broadcast Newswriting	2.5
R_TV 36	Broadcast News Production	2.5
Subtotal Units		10.5

IN ADDITION, complete SEVEN & ONE HALF (7.5) units from the following:

R_TV 2	Intro to Careers in Radio & Television	2
R_TV 4	Writing and Production Planning	3
R_TV 12	Television Lighting	2.5
R_TV 15	Advanced Television Production	2.5
R_TV 21	Radio Production	3
R_TV 34	Music Video Production	2.5
R_TV 37	Radio/Television Management and Sales	3
R_TV 216	Non-Linear Video & Film Editing	2.5

Other courses for area of specialization may be approved

Subtotal Units	7.5
Total Units in the Major	32

Certificate of Achievement, Radio/Television Broadcast News (Plan Code: 3251)

This Certificate of Achievement will prepare students for an entry-level position or skills for advancement in the fast growing field of Broadcast News and related information distribution elements of various industries.

Program Student Learning Outcomes:

- Integrate and arrange script, graphics, B-roll, music and soundbites into an industry ready newscast segment.

- Critically assess the responsibilities of various creative and technical staff positions and evaluate the importance of each to the production.

- Analyze the elements of pre-production, production, and post-production to create an industry ready news segment.

Complete the 32 units of required courses as listed in the Associate Degree requirements.

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.

Associate in Arts (A.A.) Degree, Radio/Television Performance (Plan Code: 1252)

Students prepare for performing in radio and television programs 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 a broadcast, film or performance program.

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 importance of each to the production.

REQUIRED COURSES		UNITS
R_TV 1	Introduction to Broadcasting	3
R_TV 3	Using MacIntosh Comp Entertainment Indus.	2.5
R_TV 8	Introduction to Media Production	2.5
R_TV 13	Television Production	3
R_TV 70	Fieldwork in Radio/Television	3
Subtotal Units		14

REQUIRED COURSES FOR SPECIALITY

R_TV 25	Radio Activity	2.5
OR		
R_TV 35	Television Activity	2.5
R_TV 34	Music Video Production	2.5
R_TV 36	Broadcast News Production	2.5
R_TV 40	On-Camera Performance	2.5
Subtotal Units		10

IN ADDITION, complete SEVEN & ONE HALF (7.5) units from the following:

R_TV 2	Intro to Careers in Radio & Television	2
R_TV 12	Television Lighting	2.5
R_TV 14	Electronic Field Production	3
R_TV 15	Advanced Television Production	2.5
R_TV 21	Radio Production	3
R_TV 30	Broadcast Newswriting	1.5
R_TV 37	Radio/Television Management and Sales	3

Other courses for area of specialization may be approved

Subtotal Units	7.5
Total Units in the Major	32

Certificate of Achievement, Radio/Television Performance (Plan Code: 3252)

This Certificate of Achievement will prepare students for an entry-level position and/or skills for advancement in a variety of performance opportunities including live, broadcast and recorded venues.

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.

REQUIRED COURSES—Complete the 32 units of required courses as listed in the Associate Degree requirements.

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 radio-television and multi-media productions.

Associate in Arts Degree, Radio/Television Producer (Plan Code: 1253)

Students prepare for producing radio or television programs 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 broadcast, film, computer animation or multimedia production.

Program Student Learning Outcomes:

• Demonstrate collaboration skills related to personnel and time lines 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.

REQUIRED COURSES		UNITS
R_TV 1	Introduction to Broadcasting	3
R_TV 3	Using MacIntosh Comp Entertainment Indus	2.5
R_TV 8	Introduction to Media Production	2.5
R_TV 13	Television Production	3
R_TV 70	Fieldwork in Radio/Television	3
Subtotal Units		14

REQUIRED COURSES FOR SPECIALITY

R_TV 4	Writing and Production Planning	3
R_TV 14	Electronic Field Production	3
R_TV 25	Radio Activity	3
OR		
R_TV 35	Television Activity	2.5
R_TV 34	Music Video Production	2.5
R_TV 36	Broadcast News Production	2.5
Subtotal Units		13.5

IN ADDITION, COMPLETE SEVEN & ONE HALF (7.5) units from the following:

R_TV 2	Intro to Careers in Radio & Television	2
R_TV 12	Television Lighting	2.5
R_TV 13	Television Production	3
R_TV 15	Advanced Television Production	2.5
R_TV 21	Radio Production	3
R_TV 30	Broadcast Newswriting	1.5
R_TV 34	Music Video Production	2.5
R_TV 37	Radio/Television Management and Sales	3
R_TV 40	On-Camera Performance	2.5
R_TV 216	Non-Linear Film & TV Editing	2.5
Subtotal Units		7.5
Total Units in the Major		35

Certificate of Achievement, Radio/Television Producer (Plan Code: 3253)

Program Student Learning Outcomes:

- Demonstrate collaboration skills related to personnel and time lines 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.

Complete the 35 units of required courses as listed in the Associate Degree requirements.

Certificate of Achievement, Radio/Television Multimedia Production (Plan Code: 3254)

This Certificate of Achievement will prepare students for an entry-level position or provide skills for advancement in a variety of venues including radio, television, film and related digital or computer technology (multimedia) in the communication, information and/or entertainment industries.

Program Student Learning Outcomes:

- Demonstrate collaboration skills related to personnel and time lines for an industry ready radio, television or multimedia segment.

- Critically assess the responsibilities or various creative and technical staff positions and evaluate the importance of each to the production.

REQUIRED COURSES		UNITS
R_TV 1	Introduction to Broadcasting	3
R_TV 3	Using MacIntosh Comp Entertainment Indus.	2.5
R_TV 8	Introduction to Media Production	2.5
R_TV 13	Television Production	3
R_TV 70	Fieldwork in Radio/Television	3
Subtotal Units		14

REQUIRED COURSES FOR SPECIALITY

ART 41	Introduction to Computergraphics	3
Subtotal Units		3

IN ADDITION, complete TEN (10) units from the following):

ART 43	Beginning Website Design	3
PHOT 43	Photoshop and Digital Image 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 21	Radio Production	3
R_TV 216	Non-Linear TV & Film Editing	2.5

Other courses for area of specialization may be approved by the Performing Arts department chair.

Subtotal Units	10
Total Units	27

Sociology

Sociology coursework at Long Beach City College introduces students to modern social problems, sociology of race and ethnicity, the social experience of Latinos, and issues of marriage and family life.

Associate in Arts in Sociology for Transfer Degree (A.A.-T.), (Plan Code: 5001B/C)

The Associate in Arts in Sociology for Transfer degree at Long Beach City College 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:

- Apply sociological imagination and sociological theories to contemporary analysis of public issues.

- Identify and evaluate sociological scientific research, including research design, research methods, data analysis and interpretation.

REQUIRED CORE COURSE	UNITS
SOCIO 1/1H Introduction to Sociology/Honors	3
Subtotal Units	3

IN ADDITION, complete TWO (2) courses from LIST A:

LIST A

SOCIO 2	Modern Social Problems	3
STAT 1/1H	Elementary Statistics	4
PSYCH 2	Research Methods for Psychology	4
Subtotal LIST A Units		7-8

IN ADDITION, complete TWO (2) courses from LIST B:

LIST B

Any LIST A course not used above	3-4
SOCIO 40 Sociology of the Family	3

SOCIO 11	Race & Ethnic Relations in the U.S.	3
PSYCH 11	Social Psychology	3
Subtotal LIST B Units		6-7

IN ADDITION, complete ONE (1) course from LIST C:

LIST C

Any LIST A or B course not used above		3-4
PSYCH 1	Introduction to Psychology	3
ANTHR 2	Cultural Anthropology	3
GEOG 2	Elements of Cultural Geography	3
Subtotal LIST C Units		3-4
Total Units in the Major		19-20

Theatre Arts: General & Acting Academy

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.

Associate in Arts in Theatre Arts for Transfer Degree (A.A.-T) (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 Outcome:

• Develop a basic knowledge and experience of live performances synthesizing lower-division level principles and theories of acting, production techniques, and creativity.

REQUIRED CORE COURSES		UNITS
TART 25	Introduction to Theatre	3
TART 1	Acting 1-Introduction to Acting	3.5
TART 49AD	Rehearsal and Performance	2.5
OR		

TART 39AD	Theatre Practicum	1
Subtotal Units		9

LIST A: Select three courses:

LIST A

TART 2	Acting 2- Technique and Characterization	3.5
TART 42	Introduction to Stage Lighting	3
TART 43	Introduction to Stage Costume	3
TART 55	Introduction to Stage Make-up	3
TART 40	Stagecraft	3

Select one of the following Required Core courses not already used:

TART 49AD	Rehearsal and Performance	2.5
TART 39AD	Theatre Practicum	1
Subtotal Units		9-9.5
Total Units		18-18.5

Associate in Arts (A.A.), Theatre-General (Plan Code: 1271)

This field of concentration 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:

• 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.

REQUIRED COURSES		UNITS
TART 1	Acting-1 Introduction to Acting	3.5
TART 25	Introduction to Theatre	3
TART 39AD	Theatre Practicum	1
TART 49AD	Rehearsal and Performance	2.5
TART 50	Major Production Performance	2.5
TART 51	Theatre Forum	1
Subtotal Units		13.5

Select a minimum of NINE (9) units from the following:

TART 2	Acting 2- Technique & Characterization	3.5
TART 40	Stage Craft	3

TART 42	Introduction to Stage Lighting	3
TART 43	Introduction to Stage Costume	3
Subtotal Units		9-9.5

Select a minimum of FOUR (4) units from the following:

TART 1B	Acting 1-Movement	2
TART 1C	Acting 1-Voice	2
TART 1D	Acting 1-Improvisation	2
Subtotal Units		4
Total Units in the Major		26.5-27

Associate of Arts Degree in Theatre-Acting Academy (A.A.), (Plan Code: 1272)

Upon successful completion of the following courses, the acting student will have earned an Associate of 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 Outcome:

- Develop a basic knowledge and experience of live performances synthesizing lower-division level principles and theories of acting, production techniques, and creativity.

FIRST SEMESTER

REQUIRED COURSES		UNITS
TART 1	Acting 1-Introduction to Acting	3.5
TART 25	Introduction to Theatre	3
TART 39AD	Theatre Practicum	1
TART 49AD	Rehearsal and Performance	2.5
TART 51	Theatre Forum	1
TART 55	Stage Makeup	3
Subtotal Units		14

SECOND SEMESTER

REQUIRED COURSES		UNITS
TART 1B	Acting 1-Movement	2
TART 1C	Acting 1-Voice	2
TART 1D	Acting 1-Improvisation	2
TART 2	Acting 2- Technique & Characterization	3.5
TART 39AD	Theatre Practicum	1
OR		
TART 49AD	Rehearsal and Performance	2.5

| TART 51 | Theatre Forum | 1 |
| Subtotal Units | | 11.5-13 |

THIRD SEMESTER

REQUIRED COURSES		UNITS
DANCE 3	Musical Theatre Dance	2
OR		
DANCE 20	Jazz Dance 1	2
TART 2A	Acting 2-The Spoken Text	2
TART 2C	Acting 2-Movement, Mime & Mask	2
TART 3A	Acting 3-Scene Study	3.5
TART 50	Major Production Performance	2.5
Subtotal Units		12

FOURTH SEMESTER

REQUIRED COURSES		UNITS
TART 2D	Acting 2-Movement, Mime & Mask	2
TART 3B	Acting 3-Scene Study	3.5
OR		
TART 4	Acting-Workshop Style	3.5
TART 49AD	Rehearsal and Performance	2.5
TART 50	Major Production Performance	2.5
TART 205	Auditions for Theatre and Film	3
Subtotal Units		13.5
Total Units		51-52.5
Total Degree Units		60 Units minimum

Certificate of Accomplishment, Vocational Media – Commercials (Plan Code: 4035)

Upon completion of the following courses the student will have a broad based and factual knowledge of the world of "Show Business" and how to pursue gainful employment.

REQUIRED COURSES		UNITS
TART 1 or ANY COMPARABLE LEVEL Acting 1 course		3.5
TART 201	Show Business Careers – How to Start	1.5
TART 204	Marketing Yourself for Show Business	1.5
TART 205	Audition for Theatre and Film	3.5
OR		
TART 206A	Audition and Interview Skills – Beginning	1.5
AND		
TART 206B	Audition and Interview Skills - Advanced	1.5
TART 208A	Breaking into Commercials - Beginning	1.5
TART 208B	Breaking into Commercials - Advanced	1.5
Total Units		13

Certificate of Accomplishment, Vocational Media – Film Acting (Plan Code: 4034)

Upon completion of the following courses the student will have fact based and practical tools to engage the world of "Show Business" for gainful employment.

REQUIRED COURSES		UNITS
TART 1 or ANY COMPARABLE LEVEL Acting 1 course		3.5
TART 201	Show Business Careers – How to Start	1.5
TART 204	Marketing Yourself for Show Business	1.5
TART 205	Audition for Theatre and Film	3.5
OR		
TART 206A	Audition and Interview Skills – Beginning	1.5
AND		
TART 206B	Audition and Interview Skills - Advanced	1.5
TART 212A	Acting in Film - Beginning	1.5
TART 212B	Acting in Film - Advanced	1.5
Total Units		13

Certificate of Accomplishment, Vocational Media – Voice-Over (Plan Code: 4036)

Upon completion of the following courses the students will gained the knowledge at a beginning level for Additional Dialog Recording (A.D.R.), dubbing, and narration.

REQUIRED COURSES		UNITS
TART 1 or ANY COMPARABLE LEVEL Acting 1 course		3.5
TART 201	Show Business Careers – How to Start	1.5
TART 204	Marketing Yourself for Show Business	1.5
TART 205	Audition for Theatre & Film	3.5
OR		
TART 206A	Audition and Interview Skills – Beginning	1.5
AND		
TART 206B	Audition and Interview Skills - Advanced	1.5
TART 210A	Voice-Over Techniques - Beginning	1.5
TART 210B	Voice-Over Techniques - Advanced	1.5
Total Units		13

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.

Associate in Science (A.S.), Web Development (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:

- Create websites by employing several web design tools and programming languages.

- Demonstrate and apply effective web development skills for a variety of industries and organizational situations.

REQUIRED COURSES		UNITS
COSA 50	Intro to IT Concepts & Applications	4
COSP 7	Programming Concepts and Methodologies	4
COSP 38	Database Concepts	4
COSW 10	Beginning Website Development	4
COSW 20	Dynamic HTML Web Construction	4
COSW 30	Web Development with PHP/MySQL	4
COSW 200	Introduction to JavaScript and JQuery	4
COSW 240	Intro to Content Management Systems	3
Total Units in the Major		31

Certificate of Achievement, Web Development (Plan Code: 3128)

The certificate 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.

- Demonstrate and apply effective web development skills for a variety of industries and organizational situations.

REQUIRED COURSES—Complete the 31 units of required courses as listed in the Associate Degree requirements.

Certificate of Accomplishment, Android App Developer (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).

REQUIRED COURSES		UNITS
Take one sequence of:		
CS 21	Introduction to Computer Science-Java	4
OR		
CS 11	Introduction to Computer Science- C++1	4
COSP 230	Android App Development in Java	3
Total Units		7

Certificate of Accomplishment, PHP Web Programmer Certificate (Plan Code: 4129)

Students will learn how to build robust web applications with PHP and MySQL.

Program Student Learning Outcome:

- Design, run, and analyze new and existing SQL programs according to commonly practiced industry standards.

REQUIRED COURSES		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 and JQuery	4
Total Units		16

Certificate of Accomplishment, Web Developer (Plan Code: 4131)

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 tools and programming languages.

- Demonstrate and apply effective web development skills for a variety of industries and organizational situations.

REQUIRED COURSES		UNITS
COSW 10	Beginning Website Development	4
COSW 20	Dynamic HTML Web Construction	4
COSW 200	Introduction to JavaScript and JQuery	4
Subtotal Units		12

Choose 4 units from the following courses:

COSP 201	Intro to Mobile App Development	1
COSW 30	Database Programming with PHP/MySQL	3
COSW 230	Ruby on Rails Web Development	3
COSW 240	Intro to Content Management Systems	3
Subtotal Units		4
Total Units		16

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.

Associate in Science, Welding Technology (A.S.) (Plan Code: 2988)

The Associate in Science degree in Welding Technology is designed to prepare students for a variety of entry-level 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. There are eight courses in both the AS Welding degree.

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.

REQUIRED COURSES UNITS

WELD 50	Introduction to Welding	4
WELD 212	Introduction to Shielded Metal Arc Welding	4
WELD 213	Intro to Semi-Automatic Welding	4
WELD 214	Introduction to Gas Tungsten Arc Welding	4
MTFAB 50	Introduction to Metalworking	4
MTFAB 220C	Power Metalworking Machine Operations	4
MTFAB 260	Blueprint Reading for Meatal Fabrication	3
MTFAB 270	Metallurgy	3
Total Units		30

Certificate of Achievement, Welding Technology (Plan Code: 3988)

The Certificate of Achievement in Welding Technology is designed to prepare students for a variety of entry-level 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. There are eight courses in both the Welding Certificate of Achievement.

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.

REQUIRED COURSES UNITS

WELD 50	Introduction to Welding	4
WELD 212	Introduction to Shielded Metal Arc Welding	4
WELD 213	Intro to Semi-Automatic Welding	4
WELD 214	Introduction to Gas Tungsten Arc Welding	4
MTFAB 50	Introduction to Metalworking	4
MTFAB 220C	Power Metalworking Machine Operations	4
MTFAB 260	Blueprint Reading for Meatal Fabrication	3
MTFAB 270	Metallurgy	3
Total Units		30

Certificate of Accomplishment, Advanced Arc Welding (SMAW and FCAW) (Plan Code: 4986)

The Welding Technology Certificate of Accomplishment in Advanced Arc Welding will emphasize advance welding skills in the SMAW (Shielded 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.
Program Student Learning Outcome:

- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using various arc welding processes.

REQUIRED COURSES UNITS

WELD 213	Intro to Semi-Automatic Welding	4
WELD 483	Gas Metal Arc/Flux Core Arc Welding	2
WELD 415	SMAW Flat/Horz Open Root Groove Welds	2
WELD 416	SMAW Vert & O/H Open Root Groove Welds	2

And 6 (SIX) additional units from:

WELD 221	Arc Welding Structural Certification	3
MTFAB 260	Blueprint Reading for Metal Fabrication	3
MTFAB 270	Metallurgy	3
Total Units		16

Certificate of Accomplishment, Gas Tungsten Arc Welding (GTAW) (Plan Code: 4989)

The Welding Technology Certificate of Accomplishment in Gas Tungsten Arc Welding (GTAW) 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 Outcome:

- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.

REQUIRED COURSES   UNITS

WELD 214	Introduction to Gas Tungsten Arc Welding	4
WELD 480	Welding (Inert Gas)	2
WELD 482	Gas Tungsten ARC Welding Basic Joints	2
MTFAB 260	Blueprint Reading for Metal Fabrication	3
Total Units		11

Certificate of Accomplishment, Shielded Metal Arc Welding (SMAW) (Plan Code: 4991)

The Welding Technology Certificate of Accomplishment in Shielded Metal Arc Welding (SMAW) 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.

Program Student Learning Outcome:

- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using the SMAW (Shielded Metal Arc Welding) process.

REQUIRED COURSES   UNITS

WELD 212	Introduction to Shielded Metal Arc Welding	4
WELD 221	Arc Welding Structural Certification	3
MTFAB 260	Blueprint Reading for Metal Fabrication	3
Subtotal Units		10

And 4 (FOUR) additional units from:

WELD 410	Welding (ARC)	2
WELD 413	SMAW Flat/Horz Groove Welds with Backing	2
WELD 414	SMAW Vert and OV/HD Grv Welds w/ Backing	2
Subtotal Units		4
Total Units		14

Courses

Accounting (ACCTG)

ACCTG 1A (C-ID ACCT 110)   **5.0 units**
Principles of Accounting
90 hours lecture
Recommended Preparation: ACCTG 200A or one year of bookkeeping
Grading: letter grade

The course presents the study of methods and techniques used in analyzing, recording and summarizing those procedures used in preparing a balance sheet along with the statements of income, retained earnings and cash flow for a corporation. Further, this course describes and illustrates financial accounting principles including classification of accounting activities, recording of financial transactions, along with the presentation of the four basic financial statements for internal and external users with an emphasis on the corporate form business entity. Transferable to UC or CSU; see counselor for limitations.

ACCTG 1B (C-ID ACCT 120)   **5.0 units**
Principles of Accounting
90 hours lecture
Prerequisite: ACCTG 1A
Grading: letter grade

Topics in this course include accounting theory and practice for manufacturing, departmental, and cost accounting techniques; performance evaluation; profit reporting and analysis; interpretation of financial statements and budgets; product pricing and performance evaluation; capital investment analysis; and business ethics. This course provides students with information and techniques used by management in evaluating the daily operations and related costs of a business, in planning future operations, making decisions, and developing overall business strategies. Transferable to UC or CSU; see counselor for limitations.

ACCTG 200A   **3.0 units**
Introduction to Accounting
54 hours lecture
Grading: letter grade

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, and 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 205   **3.0 units**
Fundamentals of Tax
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 228   **2.0 units**
Computerized Gen Ledger Account Systems
36 hours lecture, 18 hours laboratory
Prerequisite: ACCTG 1A or ACCTG 200A
Grading: letter grade

This course provides students with experience using a commercial general ledger accounting program.

ACCTG 229   **3.0 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 230   **2.0 units**
Quickbooks Accounting
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   **3.0 units**
Introduction Administration of Justice
54 hours lecture
Grading: letter grade

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 UC or CSU; see counselor for limitations.

ADJUS 3 (C-ID AJ 122)   **3.0 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

ADJUS 4 (C-ID AJ 120)   **3.0 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 UC or CSU; see counselor for limitations

ADJUS 5   **3.0 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 UC or CSU; see counselor for limitations

ADJUS 6 (C-ID AJ 124)   **3.0 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

ADJUS 8 (C-ID AJ 140)   **3.0 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

ADJUS 10   **3.0 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

ADJUS 14   **3.0 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

ADJUS 16   **3.0 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

ADJUS 17   **3.0 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

ADJUS 18   **3.0 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

ADJUS 19   **3.0 units**
Fingerprint Classif & Identification
54 hours lecture
Grading: letter grade

This course provides an introduction to the science of fingerprint pattern recognition, comparison and identification. This course focuses 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

ADJUS 20 (C-ID AJ 200)   3.0 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

ADJUS 40   3.0 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

ADJUS 45   3.0 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

ADJUS 253   3.0 units
Understanding Domestic Violence
54 hours lecture
Grading: letter grade

The course offers insights into the causes, behaviors and problems associated with domestic violence. It describes and investigates the reasons behind violent behavior and the toll taken on victims. Laws relating to domestic abuse, and mandated reporter's responsibilities, alternative recommendations to abusive relationships and various sources for assistance are covered.

ADJUS 255   3.0 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 to Administration of Justice majors, and others with a specific interest in forensic methods.

ADJUS 269   3.0 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.

Advanced Manufacturing Tech (ADMT)

ADMT 50   3.0 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

ADMT 200   3.0 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 251   **2.0 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   **2.0 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 253   **2.0 units**
Advanced Manufacturing, Capstone
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

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- 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.

Nursing, Associate Degree Nursing - RN (ADN)

ADN 11A   **2.5 units**
Introduction to Nursing
45 hours lecture
Prerequisite: Hospital agency requires CPR certification for health care providers. ANAT 1, PHYSI 1, BIO 2, and ENGL 1
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

ADN 11AL   **1.5 units**
Introduction to Nursing Lab
81 hours laboratory
Prerequisite: ANAT 1, PHYSI 1, BIO 2 and ENGL 1. 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

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

ADN 11BL — 1.5 units
Health Deviations 1 Lab
81 hours laboratory
Prerequisite: ADN 11A and ADN 11AL. 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

ADN 12A — 2.5 units
Health Deviations 2
45 hours lecture
Prerequisite: ADN 11B and ADN 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

ADN 12AL — 1.5 units
Health Deviations 2: Lab
81 hours laboratory
Prerequisite: ADN 11B and 11BL. Compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 12A. You must first enroll in the corequisite course before you attempt to enroll in this class.
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

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

ADN 12BL — 1.5 units
Health Deviations 3: Lab
81 hours laboratory
Prerequisite: ADN 12A and 12AL. Compliance with all clinical agency health and safety policies is required the first day of the course.
Corequisite: ADN 12B. You must first enroll in the corequisite course before you attempt to enroll in this course.
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

ADN 20A   1.0 unit
Transition to Second Level Nursing
18 hours lecture
Prerequisite: ANAT 1, PHYSI 1, BIO 2, ENGL 105 or ENGL 1 or ESL 34 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

ADN 21B   2.5 units
Mental Health
45 hours lecture
Prerequisite: ADN 12B, ADN 12BL or ADN 20A
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

ADN 21BL   3.0 units
Mental Health Lab
162 hours laboratory
Prerequisite: ADN 12B and ADN 12BL or ADN 20A. 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

ADN 22B   2.5 units
Advanced Nursing II Role Transition
45 hours lecture
Prerequisite: ADN 45A and ADN 45AL
Corequisite: ADN 22B
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

ADN 22BL   3.0 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

ADN 31A   1.0 unit
Trends in Nursing A
18 hours lecture
Corequisite: ADN 21A, ADN 21AL, ADN 21B and ADN 21BL
Grading: letter grade or pass/no pass

This course is designed for students to study the trends and issues which effect 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

ADN 31B 1.0 unit
Trends in Nursing B
18 hours lecture
Prerequisite: ADN 31A
Corequisite: ADN 22A, ADN 22AL, 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

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 selfcare 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

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

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 self-care requisites as it relates to ill children. The content involves the study of illness in children.
Transferable to CSU

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 on-campus 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

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

ADN 45AL   **1.5 - 3.0 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. You must first enroll in the
corequisite course before you attempt to enroll in this
course.
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

ADN 200   **0.5 unit**
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 201   **0.5 unit**
Nursing Skills Adjunct Laboratory
27 hours laboratory
Grading: pass/no pass

This course allows self-paced, individualized
instruction in first semester basic bedside
nursing skills with supervised practice to improve
performance.

ADN 202   **0.5 unit**
Nursing Skills Adjunct Laboratory
27 hours laboratory
Grading: pass/no pass

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 201.

ADN 203   **0.5 unit**
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 204   **0.5 unit**
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 212   **2.0 units**
Clinical Practicum I
108 hours laboratory
Prerequisite: ADN 11A and ADN 11B. 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 212A. 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 221   **2.0 units**
Clinical Practicum II
108 hours laboratory
Prerequisite: ADN 12A and ADN 12B. 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 222   2.0 units
Clinical Practicum III
108 hours laboratory
Prerequisite: ADN 21A and ADN 21B. 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 22AD. 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 225   3.0 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 VN 225 are equivalent courses.

ADN 321A   1.5 units
Women's Health & Advanced Obstetrics
27 hours lecture
Prerequisite: ADN 20A and CPR certification for health care providers.
Grading: letter grade or pass/no pass

This is a 4 week course is designed to fulfill the women's health and advanced obstetrics nursing requirement for the thirty-unit option only. The

major focus is nursing care of the adult client in the gynecological surgical units and high-risk obstetrical units, including care of the high-risk infant. It emphasizes the educative supportive role of the nurse.

ADN 321AL   1.5 units
Women's Health & Adv Obstetrics Lab
90 hours laboratory
Prerequisite: ADN 20A and CPR certification for health care providers.
Corequisite: ADN 31A and ADN 321A
Grading: letter grade or pass/no pass

This course applies the course content in a live nursing situation. It includes on-campus lab practice, simulation, clinical experience, and testing of required skills in perinatal units, and newborn nursery.

ADN 430   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 NCLEX-RN. 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   0.0 unit
Health Care Learning Center
270 hours laboratory
Corequisite: Current enrollment in a health care program course.
Grading: LBCC Non-Graded Course

This is a non-credit course designed for enhanced assistance for skill attainment in health care programs.

ADN 610   0.0 unit
Nursing Skills Refresher Laboratory
13 hours laboratory
Grading: LBCC Non-Graded Course

This course is designed to provide students with individual and small-group 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   **0.5 unit**
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.

Allied Health (AH)

AH 60   **3.0 units**
Medical Terminology
54 hours lecture
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

AH 61   **2.0 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

AH 220   **2.0 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 223   **1.0 unit**
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 225   **0.5 unit**
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 276 1.0 unit
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.

AH 285 1.0 unit
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 Defibrillator training, and assessment of vital signs and their significance in patient care.

Anatomy (ANAT)

ANAT 1 (C-ID BIOL 110) 4.0 units
Human Anatomy
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

This course is the study of the structure of the human body. This course provides the basic knowledge and lab skills to meet the needs of pre-nursing, physical education, physical therapy, and allied health majors. Dissection of a cat is required.
Transferable to UC or CSU; see counselor for limitations

ANAT 41 5.0 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 UC or CSU; see counselor for limitations

Anthropology (ANTHR)

ANTHR 1 3.0 units
Physical Anthropology
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 UC or CSU; see counselor for limitations

ANTHR 1H 3.0 units
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 UC or CSU; see counselor for limitations

ANTHR 1L 2.0 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 UC or CSU; see counselor for limitations

ANTHR 2 (C-ID ANTH 120)   **3.0 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 UC or CSU; see counselor for limitations

ANTHR 2H (C-ID ANTH 120)   **3.0 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 UC or CSU; see counselor for limitations

ANTHR 3 (C-ID ANTH 150)   **3.0 units**
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 UC or CSU; see counselor for limitations

ANTHR 3H (C-ID ANTH 150)   **3.0 units**
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 UC or CSU; see counselor for limitations

ANTHR 4   **3.0 units**
Linguistic Anthropology
54 hours lecture
Recommended Preparation: ENGL 1
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 UC or CSU; see counselor for limitations

ANTHR 10   **3.0 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 UC or CSU; see counselor for limitations

ANTHR 11 5.0 units
Physical Anthropology Lecture & 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 UC or CSU; see counselor for limitations

ANTHR 20 3.0 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

ANTHR 30 4.0 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 CSU

Architectural Design (ARCHT)

ARCHT 60 8.0 units
Architectural Design
108 hours lecture, 108 hours laboratory
Recommended Preparation:
One year of high school drafting or DRAFT 201
Grading: letter grade

This course is an introductory architectural class utilizing traditional, computer aided drafting (CAD) and/or building information modeling (BIM) to document design solutions both graphically and through model building techniques. The class prepares students for careers in the field of architecture and other related fields such as interior and environmental design. Students apply elements of design and characteristics of style to create a complete set of preliminary architectural drawings (floor plan, elevation, roof plan, sections and details) for a single story residential structure per applicable standards. ARCHT 60 is a required class leading to an AS or varied certificates.
Transferable to CSU

ARCHT 61 4.0 units
Architectural Design
54 hours lecture, 54 hours laboratory
Recommended Preparation:
One year of high school drafting or DRAFT 201
Grading: letter grade

This course is an introductory architectural class utilizing computer aided drafting (CAD) and/or building information modeling (BIM) 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 (floor plan, roof plan, and site plan) for a single story residential structure per applicable standards. ARCHT 61 is one half of ARCHT 60, is

transferable and leads to a certificate in architectural drafting. Completing ARCHT 61 and ARCHT 62 is equivalent to ARCHT 60.
Transferable to CSU

ARCHT 62   **4.0 units**
Architectural Design
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 61 or DRAFT 201
Grading: letter grade

This course is an introductory architectural class utilizing computer aided drafting (CAD) and/or building information modeling (BIM) 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 (elevation, schedules, sections and details) for a single story residential structure per applicable standards. ARCHT 62 is one half of ARCHT 60, is transferable and leads to a certificate in architectural drafting. Completing ARCHT 61 and ARCHT 62 is equivalent to ARCHT 60.
Transferable to CSU

ARCHT 64   **8.0 units**
Architectural Design
108 hours lecture, 108 hours laboratory
Prerequisite: ARCHT 60 or ARCHT 62
Grading: letter grade

This is an intermediate level computer aided architecture course for transfer or occupational students. It is a drafting and design course where students will create 2D and 3D architectural designs, 2D construction drawings and build physical and digital models. Students will utilize freehand sketches and the latest 2D and 3D software (i.e. AutoCAD, Sketch-up). Drawings include: site, floor and roof plans, sections, elevations, schedules, foundation plan and limited details. An opportunity to enter a design competition and build a portable structure may exist in the spring semester.
Transferable to CSU

ARCHT 65   **4.0 units**
Architectural Design
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 62 or ARCHT 60
Grading: letter grade

This is the first semester of two intermediate level architecture courses for the transfer, occupational or returning student. It is a drafting and design course where students will create 2D and 3D architectural designs, 2D construction drawings and build physical models. The student will use sketches and the latest AutoCAD software products. Drawings include: site plan, floor plan(s), roof plan & elevations. (Units and content are one half of ARCHT 64).
Transferable to CSU

ARCHT 66   **4.0 units**
Architectural Design
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 65
Grading: letter grade

This is the second semester of two intermediate level architecture courses for the transfer, occupational or returning student. It is a drafting and design course focused on developing further the drawing skills learned in ARCHT 65, with an introduction to 3D drawing systems. Students will create 2D and 3D architectural designs, 2D construction drawings and build digital models utilizing sketches and the latest 2D & 3D software (i.e. AutoCAD, sketch-up). Drawings include: site, floor & roof plans, elevations, sections, schedules, foundation plan and limited details. (Units and content are one half of ARCHT 64).
Transferable to CSU

ARCHT 70A   **8.0 units**
Architectural Design
108 hours lecture, 108 hours laboratory
Prerequisite: ARCHT 64 or ARCHT 66
Grading: letter grade

Formerly ARCHT 70AB. This is an advanced level computer aided architecture course (2 semesters) for transfer or occupational students. It is a drafting and design course that utilizes the latest AutoCAD products, freehand sketching and various 3D software products. Students will create complex 2D and 3D architectural designs, complete 2D building plans and build physical and digital models. Drawings include: architectural, structural, electrical, mechanical and construction details. An opportunity to enter a design competition and build a portable structure may exist in the spring semester.
Transferable to CSU

ARCHT 71A **4.0 units**
Architectural Design
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 64 or ARCHT 66
Grading: letter grade

Formerly ARCHT 71AD. This is an advanced level computer aided architecture course for transfer, occupational or continuing student. It is a drafting and design course that utilizes the latest AutoCAD products, freehand sketching and various 3D software products. Students will create complex 2D and 3D architectural designs, complete 2D building plans and build physical and digital models. Drawings include: architectural site, floor, roof, elevation, section and construction details. (Units and content are equal to one-half of ARCHT 70).
Transferable to CSU

ARCHT 230 **4.0 units**
Building Information Modeling, Beginning
54 hours lecture, 54 hours laboratory
Recommended Preparation:
ARCHT 60 or ARCHT 61 or familiarity with Architectural concepts.
Grading: letter grade or pass/no pass

Formerly ARCHT 230AD. 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 231 **4.0 units**
Building Information Modeling, Int.
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 230
Grading: letter grade or pass/no pass

Formerly ARCHT 231AD.   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 the development of a high rise commercial structure project.

ARCHT 232 **4.0 units**
Building Information Modeling, Adv.
54 hours lecture, 54 hours laboratory
Prerequisite: ARCHT 231
Grading: letter grade or pass/no pass

Formerly ARCHT 232AD.   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 Conceptual Design and BIM Management and the analysis of a BIM project per applicable Leadership in Energy and Environmental Design requirements, LEED, codes, and national standards.

ARCHT 240 **3.0 units**
Introduction to Green Design
54 hours lecture
Grading: letter grade

This course is an introduction to the LEED (Leadership in Energy and Environmental Design) Core Concepts and preparation for the LEED Green Associate Exam. The course covers the LEED rating system which includes: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources and Indoor Environmental Quality. This course is presented as an up-to-date understanding of the most current green building principles and practices.

ARCHT 241 **3.0 units**
Introduction to LEED
54 hours lecture
Grading: letter grade

This course will present an overview of LEED (Leadership in Energy and Environmental Design). The LEED rating system will be covered including: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources and Indoor Environmental Quality. This course will provide preparation and a closer look to LEED Interior Design and Construction (LEED ID+C) accreditation.

ARCHT 360M1   1.5 units
Basic CAD for Architecture
18 hours lecture, 36 hours laboratory
Recommended Preparation:
One year high school drafting or DRAFT 201.
Grading: letter grade

This course is an introductory architectural class
utilizing computer aided drafting (CAD) and/or
building information modeling (BIM) software such
as AutoCAD, Revit or Sketchup. The course focuses
on developing the basic architectural knowledge and
skills to create a floor plan for a single story residential
structure. ARCHT 360M1 is one half of ARCHT 61
and leads to a certificate in architectural drafting.
Completion of ARCHT 360M1 and ARCHT 360M2 is
equivalent to ARCHT 61.

ARCHT 360M2   1.5 units
Architecture Design CAD
18 hours lecture, 36 hours laboratory
Recommended Preparation:
One year of high school drafting or ARCHT 360M1.
Grading: letter grade

This course is an entry level computer aided drafting
(CAD) course that uses the most recent version of
CAD. The focus is on developing basic architectural
knowledge and drawing skills. The student will
develop two dimensional (2D) CAD production
drawings and be introduced to 3 dimensional (3D)
drawing conventions. ARCHT 360M2 is one half of
ARCHT 61 and leads to a certificate or associates
degree in architectural drafting.

Art (ART)

ART 1 (C-ID ARTH 110)   3.0 units
Art and Civilization
54 hours lecture
Recommended Preparation:
Qualification through the English Assessment Process
at an ENGL 1 level or completion of ENGL 105 or ESL 34
and READ 82.
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.
Students are required to complete 2 hours of
Supplemental Learning Assistance activities in
designated Success Centers over the course of the
semester.
Transferable to UC or CSU; see counselor for limitations

ART 1H   3.0 units
Honors Art and Civilization
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Recommended Preparation:
Qualification through the English Assessment Process
at an ENGL 1 level or completion of ENGL 105 or ESL 34
and READ 82.
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.
Students are required to complete 2 hours of
Supplemental Learning Assistance activities in
designated Success Centers over the course of the
semester.
Transferable to UC or CSU; see counselor for limitations

ART 2   3.0 units
Art and Civilization
54 hours lecture
Recommended Preparation:
Qualification through the English Assessment Process
at an ENGL 1 level or completion of ENGL 105 or ESL 34
and READ 82.
Grading: letter grade or pass/no pass

This course is an historical approach to painting,
sculpture, and architecture from Renaissance to
modern times, emphasizing the relationship of art to
concurrent philosophical, political, and social ideas.
Discussions include key artists and their techniques.
ART 1 is NOT a prerequisite. The course is appropriate
for art majors and non-art majors.
Transferable to UC or CSU; see counselor for limitations

ART 2H 3.0 units
Honors Art and Civilization
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Recommended Preparation:
Qualification through the English Assessment Process
at an ENGL 1 level or completion of ENGL 105 or ESL 34
and READ 82.
Grading: letter grade or pass/no pass

This course is an historical approach to painting,
sculpture, and architecture from Renaissance to
modern times, emphasizing the relationship of art to
concurrent philosophical, political, and social ideas.
Discussions include key artists and their techniques.
ART 1 is NOT a prerequisite.
Transferable to UC or CSU; see counselor for limitations

ART 3 3.0 units
Modern and Contemporary Art
54 hours lecture
Recommended Preparation:
Qualification through the English assessment process
at an ENGL 105 or ESL 34 and READ 82 or met the
college proficiency for English and Reading.
Grading: letter grade or pass/no pass

This course surveys modern art from its mid-19th
century beginnings to contemporary trends.
Painting, sculpture, architecture and new art forms
are explored in their broader cultural context.
Transferable to UC or CSU; see counselor for limitations.

ART 3H 3.0 units
Honors Modern and Contemporary Art
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Recommended Preparation:
Qualification through the English assessment process
at an ENGL 105 or ESL 34 and READ 82 or met the
college proficiency for English and Reading.
Grading: letter grade or pass/no pass

This course surveys modern art from its mid-19th
century beginnings to contemporary trends.
Painting, sculpture, architecture and new art forms
are explored in their broader cultural context.
Transferable to UC or CSU; see counselor for limitations

ART 4 (C-ID ARTH 140) 3.0 units
African, Oceanic, Native American Art
54 hours lecture
Recommended Preparation:
Qualification through the English assessment process
at an ENGL 105 or ESL 34 and READ 82 or met the
college proficiency for English and Reading.
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, PowerPoints, videos
and music. The relationship of these areas to the
developments within modern Western art also will be
discussed.
Transferable to UC or CSU; see counselor for limitations

ART 4H 3.0 units
Honors African, Oceanic, Native American Art
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Recommended Preparation:
Qualification through the English assessment process
at an ENGL 105 or ESL 34 and READ 82 or met the
college proficiency for English and Reading.
Grading: letter grade or pass/no pass

This course is a survey of the painting, sculpture,
architecture and crafts of sub-Saharan Africa,
Australia, Melanesia, Polynesia and Native North
America. These traditions will be experienced
through lectures, PowerPoints, videos and music. The
relationship of these areas to the developments within
modern Western art also will be discussed.
Transferable to UC or CSU; see counselor for limitations

ART 5 (C-ID ARTH 130) 3.0 units
History of Asian Art
54 hours lecture
Recommended Preparation: Qualification through
the English assessment process at an ENGL 105 or ESL
34 and READ 82 or met the college proficiency for
English and Reading.
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. The historical development of the arts is
examined within their broader cultural context.
Transferable to UC or CSU; see counselor for limitations

ART 9 3.0 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 UC or CSU; see counselor for limitations

ART 10 3.0 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 UC or CSU; see counselor for limitations

ART 11 3.0 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 UC or CSU; see counselor for limitations

ART 11H 3.0 units
Honors Latin American Art and Architecture
54 hours lecture
Prerequisite: Qualification for the Honors Program.
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 UC or CSU; see counselor for limitations

ART 12 3.0 units
Gallery and Exhibition Design
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 30 and ART 31
Grading: letter grade

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

ART 15 (C-ID ARTS 110) 3.0 units
Beginning Drawing
36 hours lecture, 72 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 UC or CSU; see counselor for limitations

ART 16 (C-ID ARTS 205) 3.0 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 UC or CSU; see counselor for limitations

ART 17 3.0 units
Illustration I
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 15
Grading: letter grade or pass/no pass

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

ART 18   **3.0 units**
Illustration II
36 hours lecture, 72 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

ART 19 (C-ID ARTS 200)   **3.0 units**
Life Drawing
36 hours lecture, 72 hours laboratory
Prerequisite: ART 15
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

ART 23 (C-ID ARTS 210)   **3.0 units**
Beginning Painting
36 hours lecture, 72 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 UC or CSU; see counselor for limitations

ART 24   **3.0 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 UC or CSU; see counselor for limitations

ART 25   **3.0 units**
Watercolor, Advanced
36 hours lecture, 72 hours laboratory
Prerequisite: ART 24
Grading: letter grade or pass/no pass

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.
Transferable to UC or CSU; see counselor for limitations

ART 26   **3.0 units**
Figure Painting
36 hours lecture, 72 hours laboratory
Prerequisite: One Semester of ART 19
Recommended Preparation: ART 23
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

ART 27   **3.0 units**
Intermediate Painting
36 hours lecture, 72 hours laboratory
Prerequisite: ART 23
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

ART 28   **3.0 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

ART 30   **3.0 units**
Fundamentals of Art/Volume, Plane & Form
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

This course is a foundational studio experience designed to provide a basic understanding of the elements and principles of three-dimensional design. Transferable to UC or CSU; see counselor for limitations

ART 31 (C-ID ARTS 100)   **3.0 units**
Fundamentals of Art/Composition & Color
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

This course is an introduction to the elements and principles of two- dimensional 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 UC or CSU; see counselor for limitation

ART 32   **3.0 units**
Intermediate Design
36 hours lecture, 72 hours laboratory
Prerequisite: ART 30 or ART 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 UC or CSU; see counselor for limitations

ART 33   **1.0 unit**
Jewelry/Metalwork Practicum
54 hours laboratory
Corequisite:
ART 34 or 35 or 36 or 37 or 38 or 50 or 51 or 52 or 60 or 61 or 62 or 63
Recommended Preparation: ART 30 and 31
Grading: letter grade or pass/no pass

Formerly ART 33AD. This course provides on-campus lab practice and the application of course content for introductory jewelry/metalwork courses. It is designed to assist the student in the exploration and development of an individual approach to studio projects within the area of jewelry and metalwork. Transferable to CSU

ART 34   **3.0 units**
Applied Design/Crafts
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

ART 35   **3.0 units**
Jewelry/Metalsmithing 1
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

ART 36 4.0 units
Jewelry/Metalsmithing 2
36 hours lecture, 126 hours laboratory
Prerequisite: One semester of 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

ART 37 4.0 units
Jewelry/Metalsmithing 3
36 hours lecture, 126 hours laboratory
Prerequisite: One semester of 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

ART 38 4.0 units
Jewelry/Metalsmithing 4
36 hours lecture, 126 hours laboratory
Prerequisite: One semester of ART 35
Grading: letter grade or pass/no pass

This course is a continuation of studies to techniques and concepts introduced in ART 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

ART 39 1.0 unit
Intermediate Jewelry/Metalwork Practicum
54 hours laboratory
Prerequisite: ART 35
Corequisite: ART 36, ART 37 or ART 38
Grading: letter grade or pass/no pass

This course provides on campus lab practice and the application of course content for jewelry/metalwork courses. Must be taken concurrently with ART 36, ART 37 or ART 38.
Transferable to CSU

ART 41 3.0 units
Introduction to Computergraphics
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

This course provides a broad overview of the fundamental concepts involved in computer graphics and digital art production for beginners. Topics include design foundations, visual composition strategies and fine art aesthetics in the use of digital art production tools. Historical background and emerging media trends in digital art are discussed and applied to the various uses of digital media as a tool for creative expression.
Transferable to CSU

ART 42 3.0 units
Intro/3D & Multimedia Computergraphics
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 30
Grading: letter grade or pass/no pass

This course serves as an introduction to computer graphic production in the areas of three-dimensional and time based electronic media. It emphasizes the unique characteristics of three and four-dimensional realities as presented in electronic media. Students will explore the distinct visual characteristics of virtual dimensions in both time and space.
Transferable to UC or CSU; see counselor for limitations

ART 43 3.0 units
Beginning Website Design
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or pass/no pass

In this course students learn to apply graphic design theory to a variety of communication needs. The

unique design issues associated with non-linear communication are addressed. Students apply these principles to the creation of actual websites through hands-on use of a variety of software applications. This course is intended for art and non-art majors.
Transferable to CSU

ART 44 3.0 units
Introduction to Graphic Design
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or pass/no pass

This course serves as an overview of visual communications, branding and the commercial arts. Students will develop skills in design software and hardware while learning the fundamentals of graphic design for both digital and print media. Through applied projects, students will enhancing their ability to coordinate type, image and symbol.
Transferable to CSU

ART 45 3.0 units
Computer Art for Drawing and Painting
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or pass/no pass

Digital image creation is explored using vector and raster based software applications such as Adobe Illustrator and Photoshop. Students learn the appropriate use of image creation software and hardware. Images are developed for both commercial and fine art applications.
Transferable to UC or CSU; see counselor for limitations

ART 46 3.0 units
Computer Art & Design in 3D Modeling
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31 and ART 42
Grading: letter grade or pass/no pass

Students digitally construct three-dimensional objects and learn to deal with abstract objects in virtual three-dimensional space. Specific relationships will be made between electronic modeling and the visual arts, in particular, sculpture, animation, illustration, and other areas of computer graphics.
Transferable to UC or CSU; see counselor for limitations

ART 47 3.0 units
Computer Animation and Multimedia
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31 and ART 42
Grading: letter grade or pass/no pass

This course introduces the skills and software used to create digital multimedia and animation. Students will learn the theories of computer-based animation and interactive multimedia design. Students will also learn how to digitally create stand alone, as well as interactive multimedia/animation, projects.
Transferable to UC or CSU; see counselor for limitations

ART 48 3.0 units
Computer Art & Design for TV and Video
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation: ART 31
Grading: letter grade or pass/no pass

Students learn to develop digital content for video requirements on the computer. Students use non-linear editing and compositing of clips to create professional quality productions.
Transferable to CSU

ART 49 3.0 units
Special Studies-Computer Art and Design
36 hours lecture, 72 hours laboratory
Prerequisite: ART 41
Recommended Preparation:
Four courses from ART 43, ART 44, ART 45, ART 46, ART 47 and ART 48
Grading: letter grade or pass/no pass

This course is for art majors in computer art and design who have completed a series of computer art classes and are prepared to do advanced work in a specific area. It will allow students to develop personal skills for their chosen specialty in the computer art field. Students work independently on projects formulated with faculty assistance.
Transferable to CSU

ART 50 3.0 units
Ceramics I
36 hours lecture, 72 hours laboratory
Recommended Preparation: ART 30 and ART 31
Grading: letter grade or pass/no pass

Students will explore basic hand and wheel methods of forming, decorating and glazing three-dimensional ceramic forms. As students develop a personal awareness and appreciation of the creative process, they will use clay as a medium of aesthetic expression.
Transferable to UC or CSU; see counselor for limitations

ART 51   **3.0 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 UC or CSU; see counselor for limitations

ART 52   **3.0 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 UC or CSU; see counselor for limitations

ART 53   **3.0 units**
Ceramics IV
36 hours lecture, 72 hours laboratory
Prerequisite: ART 52
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 UC or CSU; see counselor for limitations

ART 55   **3.0 units**
Intermediate Graphic Design
36 hours lecture, 72 hours laboratory
Prerequisite: ART 31
Grading: letter grade or pass/no pass

This course serves as an overview of graphic design and its various components, including typography, illustration, photography and layout. The history of graphic design, as well as the relationship to advertising agencies, corporations, publishers, typographers and printers is covered. Students will develop skills in design software and hardware use while enhancing their ability to coordinate type, image and symbol.
Transferable to CSU

ART 56   **1.5 units**
Introduction to Typography
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

This course is for all students considering work in the field of graphic and communication design. The study of lettering and typographic form is explored from historic, theoretic and aesthetic views. Students learn the appropriate use of specific families of type.
Transferable to CSU

ART 60   **3.0 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 UC or CSU; see counselor for limitations

ART 61   **4.0 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 UC or CSU; see counselor for limitations

ART 62   **4.0 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

ART 63   **4.0 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

ART 70   **3.0 units**
Printmaking, Silkscreen
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

ART 71   **3.0 units**
Printmaking, Intaglio
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

ART 72   **3.0 units**
Advanced Printmaking
36 hours lecture, 72 hours laboratory
Prerequisite: One Semester of 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 UC or CSU; see counselor for limitations

ART 80   **3.0 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 UC or CSU; see counselor for limitations

ART 81   **3.0 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 UC or CSU; see counselor for limitations

ART 90   **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 42 or ART 44 or ART 51 or ART 61 or ART 62 or ART 63 or ART 70 or ART 71
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 UC or CSU; see counselor for limitations

ART 91   **3.0 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 42 or ART 44 or ART 51 or ART 61 or ART 62 or ART 63 or ART 70 or ART 71
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

ART 292   **3.0 units**
Professional Skills for Artists
36 hours lecture, 72 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 the skills necessary for portfolio presentation as a student, professional artist or art director. Lectures and demonstrations will include photographing artwork, documentation of artwork, matting, framing, resume and artist statement writing, portfolio development and portfolio presentation. Class lectures will also include information on schools, exhibitions, criticism, ethical and contractual issues.

Astronomy (ASTR)

ASTR 1   **3.0 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 UC or CSU; see counselor for limitations

ASTR 1H   **3.0 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 UC or CSU; see counselor for limitations

ASTR 1L   **2.0 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 UC or CSU; see counselor for limitations

Automotive Technology (AUTO)

AUTO 200   **3.0 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 201   **1.0 unit**
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 202   **1.0 unit**
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 203   **1.0 unit**
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 211   **3.0 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   **3.0 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   **3.0 units**
Automotive Manual Transmission
36 hours lecture, 54 hours laboratory
Recommended Preparation:
High school Auto or AUTO 200
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   **3.0 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   3.0 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 216   3.0 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   3.0 units
Automotive Air Conditioning
36 hours lecture, 54 hours laboratory
Recommended Preparation: AUTO 200
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 218   3.0 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 219   3.0 units
Automotive Light Diesel Engines
36 hours lecture, 54 hours laboratory
Recommended Preparation:
High School Auto or AUTO 200
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 220   3.0 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   3.0 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   **3.0 units**
Intro to Hybrid & Electric Vehicles
45 hours lecture, 36 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 271   **3.0 units**
Introduction to Alternative Fuel Systems
45 hours lecture, 36 hours laboratory
Recommended Preparation: AUTO 200
Grading: letter grade or pass/no pass

Formerly AMECH 491 and ATT 491. 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   **3.0 units**
Light Duty Electric Vehicles
45 hours lecture, 36 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 281   **3.0 units**
Light Duty Hybrid Vehicles
45 hours lecture, 36 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 282   **3.0 units**
Light Duty Alternative Fuels
45 hours lecture, 36 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 283   **3.0 units**
Light Duty EV Powertrain Diagnostics
45 hours lecture, 36 hours laboratory
Recommended Preparation: AUTO 200
Grading: letter grade

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 292   3.0 units
Heavy Duty Alternative Fuels
45 hours lecture, 36 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 8.9L 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 600   0.0 unit
Introduction to Automotive Technology
36 hours lecture, 54 hours laboratory
Grading: LBCC Non-Graded Course

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 601   0.0 unit
Automotive Lubrication Service
18 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

Formerly AMECH 801, ATT 801. This course prepares students with skills needed for performing oil changes, lubrication, under hood services and vehicle inspections.

AUTO 602   0.0 unit
Automotive Tire Service
18 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

Formerly AMECH 802, ATT 802. This course prepares students with skills needed for doing tires rotation, repair, replacement, balancing and vehicle inspections.

AUTO 603   0.0 unit
Automotive Brake Inspection
18 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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.

Basic Adult Education (BAE)

BAE 601A   0.0 unit
Basic Skills Development I
270 hours laboratory
Grading: LBCC Non-Graded Course

This is a non-credit course designed to assist students in acquiring the knowledge and skills necessary for college and career readiness. Students will participate in a self-paced, flexible, open-entry/exit course that provides structured and supportive modularized instruction. This course emphasizes development of basic reading, writing, math and college and career preparation skills for students who (1) are or plan to enroll in credit courses and programs, (2) are preparing to take exams or certifications for academic or employment programs, or (3) are returning and/or adult students wishing to prepare for academic success. The course is the first in a series of 2 courses leading to a Certificate in Basic Skills for College and Career Readiness.

BAE 601B   0.0 unit
Basic Skills Development II
270 hours laboratory
Grading: LBCC Non-Graded Course

This course is part of a non-credit program designed to improve basic skills for students whose abilities range from pre-high school through pre-college level. The course emphasizes the development of basic reading, writing and math skills for students who: (1) are enrolled, or plan to enroll, in regular courses and need to improve or refresh their basic educational skills; (2) are preparing to take exams or need to develop basic skills for employment or special educational/vocational programs or college/university entrance; (3) wish to review or complete their secondary education; 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 Completion in Basic Skills for the Workplace.

Business, Communications (BCOM)

BCOM 15   3.0 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

BCOM 20 (C-ID BUS 115)   3.0 units
Business Writing
54 hours lecture
Prerequisite: ENGL 1
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

BCOM 25   3.0 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

BCOM 222   3.0 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 260   1.0 unit
Business Telephone Procedures
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 the telephone and all telephone-related technologies found in today's work environment.

BCOM 262   1.0 unit
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   3.0 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 622   0.0 unit
The Job Search Process
18 hours lecture
Grading: LBCC Non-Graded Course

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 self-assessments, create a career plan, and discover who they are as future employees.

BCOM 623   0.0 unit
Job Search Tools
18 hours lecture
Grading: LBCC Non-Graded Course

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 624   0.0 unit
The Interview Process
18 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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.

Biology (BIO)

BIO 1A (C-ID BIOL 135)   5.0 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 UC or CSU; see counselor for limitations

BIO 1B (C-ID BIOL 135)   5.0 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 UC or CSU; see counselor for limitations

BIO 2   5.0 units
General Microbiology
54 hours lecture, 108 hours laboratory
Prerequisite: ANAT 1 or BIO 60 or BIO 1A or ANAT 41
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 UC or CSU; see counselor for limitations

BIO 5   4.0 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 non-science major. Not open to students registered in or with credit in BIO 1A.
Transferable to UC or CSU; see counselor for limitations

BIO 11 3.0 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 UC or CSU; see counselor for limitations

BIO 20 4.0 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 UC or CSU; see counselor for limitations

BIO 20H 4.0 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 UC or CSU; see counselor for limitations

BIO 22 3.0 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

BIO 25 3.0 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 UC or CSU; see counselor for limitations

BIO 28 2.0 units
Field Natural History of the Mountains
23 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

This course introduces students to the physical and biological aspects of mountain ecosystems, using lecture, laboratory, and at least two weekend field trips. An emphasis is placed on life zones and the identification of their representative plants and animals.
Transferable to CSU

BIO 30 4.0 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 UC or CSU; see counselor for limitations

BIO 31   2.0 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

BIO 37   2.0 units
Field Natural Hist: South Calif. Deserts
23 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

This natural history course utilizes lecture, laboratory, and field trips to acquaint students with the basic physical and biological features of the desert environment. Plants and animals of the desert ecosystem are covered with an emphasis on their adaptations to the environment.
Transferable to CSU

BIO 38   2.0 units
Field Natural History: Newport Bay
23 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

This natural history course utilizes lecture, laboratory, and field trips to study the estuarine wetland habitats of Newport Bay. Students will become acquainted with the basic physical, biological, historical, and political background of the bay. The common plants and animals will be studied with an emphasis on adaptations.
Transferable to CSU

BIO 41   3.0 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, basic physiology and anatomy of body systems, 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 UC or CSU; see counselor for limitations

BIO 41H   3.0 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, basic physiology and anatomy of body systems, 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 UC or CSU; see counselor for limitations

BIO 41L   1.0 unit
Contemporary Biology Laboratory
54 hours laboratory
Corequisite: BIO 41 or BIO 41H
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 UC or CSU; see counselor for limitations

BIO 41LH   1.0 unit
Honors Contemporary Biology Lab
54 hours laboratory
Prerequisite: Qualification for the Honors program.
Corequisite: BIO 41 or BIO 41H
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. Eligibility for the Honors program is required for enrollment.
Transferable to UC or CSU; see counselor for limitations

BIO 60   **4.0 units**
Human Biology 1
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 prerequisite 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 UC or CSU; see counselor for limitations

BIO 60L   **1.0 unit**
Human Biology 1 Laboratory
54 hours laboratory
Prerequisite: BIO 60 (may be taken concurrently)
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 UC or CSU; see counselor for limitations

BIO 61   **3.0 units**
Human Biology 2
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 UC or CSU; see counselor for limitations

Computer Aid Design (CAD)

CAD 50   **2.0 units**
Mechanical Drafting, Introduction
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly DRAFT 51A. CAD 50 is an engineering documentation class covering dimensioning and tolerancing, orthographic projection, pictorial views, auxiliary views, and section views. Attention to manufacturing processes will be practiced on all drawings particularly for both additive and subtractive manufacturing. Freehand lettering, sketching and drawing instruments for manual applications, computer aided drafting software techniques and transfer to computer aided manufacturing software programs will be taught. Individualized and teamwork drawing projects will be emphasized.
Transferable to CSU

CAD 51   **2.0 units**
Mechanical Drafting, Intermediate
18 hours lecture, 54 hours laboratory
Recommended Preparation: CAD 50
Grading: letter grade or pass/no pass

Formerly DRAFT 51B. CAD 51 will cover dimension information on drawings using ANSI 14.5 geometric tolerance standards. Discussion and application of tolerance standards will be followed on all finished projects. Engineering designs will include welding drawings, screw threads, fasteners, keys, key ways, springs, gears, splines, cams and bearings. Advanced orthographic detail and assembly drawings will be developed and produced by the individual student or in student teams. Some projects will include development of 3D models.
Transferable to CSU

CAD 52   **2.0 units**
CAD/CAM
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly DRAFT 52A. CAD 52 covers the successful transfer of manufacturable design parts to Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Numerical Control (NC) machines. Concepts studied will include interactive geometry construction, tool motion, machine functions, repetitive programming, graphic output

and graphic editing. Students will process programs from designed parts using interactive graphics computer systems.
Transferable to CSU

CAD 60   **3.0 units**
Geometric Dimensioning and Tolerancing
54 hours lecture
Recommended Preparation: CAD 50
Grading: letter grade or pass/no pass

Formerly DRAFT 60. Geometric Dimensioning and Tolerances (GD&T) is a course designed for Manufacturing Technology students, Drafting Technology students, and professional upgrade training. The course covers a review of conventional dimensioning (non geometric tolerancing), clearance fits, tolerancing fundamentals, maximum material condition (MMC), least material condition (LMC), metric and inch dimensioning. GD&T conventions covered are: dimensioning and geometric tolerancing symbols, datums, material condition symbols, tolerances of form and profile, tolerances of orientation and runout, and location tolerances.
Transferable to CSU

CAD 202   **2.0 units**
AutoCAD Fundamentals
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly DRAFT 202. This entry-level AutoCAD 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 Drafting (CAD). CAD training will utilize a recent version AutoCAD in the Windows environment. This course introduces CAD fundamentals: user interface, basic draw and edit commands, template drawings, dimensioning, electronic drawing sheets, file management, printing and plotting for CAD users. Exercises cover drawings for mechanical, civil and architectural applications.

CAD 220   **2.0 units**
Introduction to CATIA
18 hours lecture, 54 hours laboratory
Recommended Preparation: DRAFT 201 or CAD 50 or Industry Drafting or High School Drafting classes
Grading: letter grade or pass/no pass

This course is the first in a series of three courses preparing students for careers as computer aided drafting operators in various industries utilizing CATIA parametric design software. The class introduces students to the fundamental operations of CATIA software concentrating on the user interface and the creation of industry standard detail parts and assemblies based on 2D profiles (sketches) in a Windows environment. The course may serve as a preparation for students intending to take industry certification tests CATIA PART DESIGN SPECIALIST and CATIA ASSEMBLY DESIGN SPECIALIST created by Dessault Systems.

Creative Arts (CART)

CART 41   **3.0 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 UC or CSU; see counselor for limitations

Child & Adult Development - Early Childhood Ed (CDECE)

CDECE 1   **1.0 unit**
The Developing Professional
18 hours lecture
Grading: letter grade or pass/no pass

This course focuses on professional development in Early Childhood Education and explores various types of programs and opportunities for specific occupations. This course also provides students with an opportunity to conduct a job search, investigate the interviewing process, improve communication skills and build a plan for professional competency development.
Transferable to CSU

CDECE 19   **3.0 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

CDECE 31   **2.0 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

CDECE 34   **3.0 units**
Children's Literature DS3
54 hours lecture
Grading: letter grade

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. Transferable to CSU

CDECE 40   **3.0 units**
Infant Development & Educaring D4
54 hours lecture
Prerequisite: CDECE 45 or CDECE 47
Grading: letter grade

This course is a study of the infant, pre-birth to 18 months of age. Topics will include: the role of the adult in designing, evaluating and implementing the educare (education and care) of infants in center-based programs, family home care and parental care, based on and respectful of, the infant's unique abilities and needs. The course will also cover developmental theories, program quality standards, laws and regulations (Title 22), the role of the primary caregiver, curricula, culturally sensitive care, as well as early recognition and intervention for infants with special needs. Information about the health, nutrition and safety components of infant care is included as well. This course meets the Department of Social Services Classification Indicator DS4. Transferable to CSU

CDECE 41   **3.0 units**
Toddler Development & Educaring D4
54 hours lecture
Prerequisite: CDECE 45 or CDECE 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

CDECE 45 (C-ID CDEV 100)   **3.0 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 CSU

CDECE 47 (C-ID PSY 180)   3.0 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 UC or CSU; see counselor for limitations

CDECE 48 (C-ID CDEV 100)   3.0 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 UC or CSU; see counselor for limitations

CDECE 50 (C-ID ECE 130)   3.0 units
Intro to Curriculum for Young Children
54 hours lecture
Prerequisite: CDECE 45 or CDECE 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.

CDECE 53 (C-ID ECE 120)   3.0 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

CDECE 54   3.0 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

CDECE 55   3.0 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. Students develop skills to effectively sing, play simple musical instruments and use movement activities with young children.
Transferable to CSU

CDECE 57   3.0 units
Science & Math in Early Childhood D3
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

CDECE 58   **3.0 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

CDECE 59   **3.0 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

CDECE 60A   **3.0 units**
Admin of Child Development Programs D6
54 hours lecture
Prerequisite: CDECE 45 or CDECE 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

CDECE 60B   **3.0 units**
Advanced Supervision of ECE D6
54 hours lecture
Prerequisite: CDECE 45 or CDECE 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

CDECE 61 (C-ID ECE 230)   **3.0 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

CDECE 66 (C-ID ECE 200)   **3.0 units**
Observation and Assessment DS3
36 hours lecture, 54 hours laboratory
Prerequisite: CDECE 45 or CDECE 47
Recommended Preparation:
CDECE 48 and CDECE 50
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

CDECE 68 (C-ID ECE 210)   3.0 units
Practicum D3
36 hours lecture, 72 hours laboratory
Prerequisite: CDLL 52 and CDECE 1, 19, 48, 50, 53, 61, 66 and proof of current state mandated immunizations and negative TB status and fingerprint clearance are required to participate. Instructor approval required
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. 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

CDECE 259   3.0 units
Challenging Behaviors in Early Childhood
54 hours lecture
Recommended Preparation:
CDECE 45 or CDECE 47 or CDECE 59
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, feeling vocabularies, 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.

Child & Adult Development - Family Development (CDF)

CDF 210A   3.0 units
Skills/Strat. for Family Workers Pt. 1
54 hours lecture
Grading: letter grade or pass/no pass

This course is part one of a two part series. The course is designed to prepare students and workers to assist families with the values, knowledge, and skills needed to empower families to achieve selfreliance. Focus will be on the principles of family development, family empowerment skills, self-support for family workers, effective communication with families, and cultural competency.

CDF 210B   3.0 units
Skills/Strat. for Family Workers Pt. 2
54 hours lecture
Grading: letter grade or pass/no pass

This course is part two of a two part series. The course is designed to prepare students and workers to assist families with the values, knowledge, and skills needed to empower families to achieve selfreliance. Part two focuses on strength-based assessment, resource development, service coordination, collaboration and networking, home visitations, team building, goal setting, and family conference facilitation.

Child & Adult Development - Family Day Care (CDFDC)

CDFDC 212A   3.0 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   3.0 units
Family Child Care Management B
54 hours lecture
Grading: letter grade

This course assists persons planning to become or 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 & Adult Development - Learning Lab (CDLL)

CDLL 52   **3.0 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

CDLL 52B   **2.0 units**
Fieldwork/Preschool Techniques
18 hours lecture, 72 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 appropriate for child development majors, early childhood education majors and parents. It is designed to be a continuation of CDLL 52A. Proof of a negative TB test is required for participation and observation in the children's program. This course provides the student with 72 hours of supervised field work experience in ECE as defined by California Commission on Teacher Credentialing. Transferable to CSU

CDLL 603   **0.0 unit**
LBCC Child Development Centers Participation
108 hours laboratory
Grading: LBCC Non-Graded Course

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 & Adult Development - Special Education (CDSED)

CDSED 5   **3.0 units**
Community Resources/Special Education
54 hours lecture
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

CDSED 67   **3.0 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 variations in development of children with special needs ages birth through eight and the resulting impact on families. 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

CDSED 69   **3.0 units**
Special Education Practicum
36 hours lecture, 54 hours laboratory
Prerequisite: CDSED 67, 5, 70 and CDECE 45 or 47 and Proof of current state mandated immunizations and negative TB status and fingerprint clearance are required to participate. Instructor approval required.
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

CDSED 70   **3.0 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

Chemistry (CHEM)

CHEM 1A (C-ID CHEM 120)   **5.5 units**
General Chemistry
72 hours lecture, 90 hours laboratory
Prerequisite:
CHEM 2 or Qualifying through the LBCC Chemistry assessment process and MATH 130, 130B, 140, or Qualifying through the LBCC Math assessment process, or one year of high school intermediate algebra with a B or better in the 2nd semester.
Recommended Preparation:
One year high school Chemistry.
Grading: letter grade or pass/no pass

This 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 UC or CSU; see counselor for limitations

CHEM 1B (C-ID CHEM 120)   **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 UC or CSU; see counselor for limitations

CHEM 2   **4.5 units**
Elementary Chemistry
72 hours lecture, 36 hours laboratory
Prerequisite: MATH 110 or MATH 110B or MATH 880 or Qualification through the LBCC assessment process for Math or one year high school Elementary Algebra with a grade of B or better as reflected in the second semester grade.
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 1A-B. 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 UC or CSU; see counselor for limitations

CHEM 3 (C-ID CHEM 102)   **5.0 units**
Intro to Gen, Organic & Biochemistry
72 hours lecture, 54 hours laboratory
Prerequisite: MATH 110 or MATH 110B or MATH 880.
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 UC or CSU; see counselor for limitations

CHEM 4 (C-ID CHEM 140)   **4.0 units**
Survey of Chemistry and Physics
54 hours lecture, 54 hours laboratory
Prerequisite: MATH 110 or MATH 110A or MATH 110B or higher level math class
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 for PHYS 4.
Transferable to UC or CSU; see counselor for limitations

CHEM 12A (C-ID CHEM 150/CHEM 160)   **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 UC or 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 UC or CSU; see counselor for limitations

Foreign Language, Chinese (CHIN)

CHIN 1   **5.0 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. They will develop elementary competency in listening, speaking, reading and writing. The course will present everyday situations and topics in the context of Chinese cultural traditions. It is not recommended for native speakers.
Transferable to UC or CSU; see counselor for limitations

CHIN 2   **5.0 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). It is designed to further develop students' competency in speaking, listening, reading, and writing. Topics will be placed in the contemporary context in the Chinese world.
Transferable to UC or CSU; see counselor for limitations

Computer Academy CISCO Networking (CISCO)

CISCO 250   **2.0 units**
Communications Cabling Installation
18 hours lecture, 27 hours laboratory
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 251   **2.0 units**
Introduction to Networking
18 hours lecture, 54 hours laboratory
Grading: letter grade

This is the first course in a sequence of four to prepare students to pass the certification exam required to become a Cisco Certified Networking Associate (CCNA). The course includes introductions to networking devices, IP Addressing, routing, switching, media and design, topology, cabling, electricity, electronics and network management. The instruction is based on the Cisco Networking Academy curriculum.

CISCO 252   **2.0 units**
Routing and Switching Essentials
18 hours lecture, 54 hours laboratory
Prerequisite: CISCO 251

Grading: letter grade
This is the second course in a sequence of four to prepare students to pass the certification exam required to become a Cisco Certified Networking Associate (CCNA). The course includes OSI layers 1-7, local vs. wide area networks, TCP/IP, IP addressing, routing, router components and configuration of the Cisco IOS, routing protocols and access control lists. The instruction is based on the Cisco Networking Academy curriculum.

CISCO 253   **2.0 units**
Scaling Networks
18 hours lecture, 54 hours laboratory
Prerequisite: CISCO 252
Grading: letter grade

This is the third course in a sequence of four to prepare students to pass the certification exam required to become a Cisco Certified Networking Associate (CCNA). The course includes EIGRP and OSPF routing, LAN switching, VLAN and LAN design. The instruction is based on the Cisco Networking Academy curriculum.

CISCO 254   **2.0 units**
Connecting Networks
18 hours lecture, 54 hours laboratory
Prerequisite: CISCO 253
Grading: letter grade

This is the fourth course in a sequence of four to prepare students to pass the certification exam required to become a Cisco Certified Networking Associate (CCNA). The course includes IP address conservation, VLSM, wide area network design, configuration of PPP, ISDN and Frame relay protocols. The instruction is based on the Cisco Networking Academy curriculum.

Communication Studies (COMM)

COMM 10 (C-ID COMM 110)   **3.0 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 UC or CSU; see counselor for limitations

COMM 10H (C-ID COMM 110)   **3.0 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 CSU

COMM 20 (C-ID COMM 130)   **3.0 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

COMM 25   **3.0 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 UC or CSU; see counselor for limitations

COMM 30   **3.0 units**
Elements of Group Communication
54 hours lecture
Grading: letter grade or pass/no pass

Formerly Speech Communication 30 (SP30), Small Group Communication theories, principles, and strategies are examined and applied to facilitate the achievement of group goals in a variety of contexts. Problem-solving, critical thinking, and team-building strategies are emphasized.
Transferable to UC or CSU; see counselor for limitations

COMM 31   **3.0 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

COMM 40   **3.0 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 CSU

COMM 45   **3.0 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 CSU

COMM 50 (C-ID COMM 170)   **3.0 units**
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 UC or CSU; see counselor for limitations

COMM 60 (C-ID COMM 120)   **3.0 units**
Elements of Argumentation and Debate
54 hours lecture
Grading: letter grade or pass/no pass

Formerly Speech Communication 60 (SP 60), the nature, functions, forms, and contexts of argumentation and debate are explored and applied to both formal and informal classroom debates. An added appreciation for the role of advocacy and reasoning in a free society is examined. Transferable to UC or CSU; see counselor for limitations

Construction Technology (CONST)

CONST 200 7.0 units
Construction Pre-Apprenticeship
108 hours lecture, 72 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 0.5 unit
Forklift Fundamentals
9 hours lecture, 9 hours laboratory
Grading: pass/no pass

Formerly FORK 801. This course will cover the safety and operation of the forklift, including basic 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.

CONST 215 2.0 units
Blueprint Reading for Construction Trade
54 hours lecture
Grading: letter grade or pass/no pass

Formerly 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.

CONST 230 3.0 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 235 3.0 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 3.0 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 245 3.0 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 250   **2.0 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   **2.0 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 260   **2.0 units**
Home Remodeling-Interior Construction
18 hours lecture, 54 hours laboratory
Grading: letter grade

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 265   **2.0 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 270   **3.0 units**
Cost Estimating
54 hours lecture
Recommended Preparation: CONST 215
Grading: letter grade or pass/no pass

Formerly 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.

CONST 275   **3.0 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 600   **0.0 unit**
Construction Pre-Apprenticeship
108 hours lecture, 72 hours laboratory
Grading: LBCC Non-Graded Course

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 605   **0.0 unit**
Forklift Fundamentals
9 hours lecture, 9 hours laboratory
Grading: LBCC Non-Graded Course

Forklift Safety and Operation training will provide basic safety and operation of the forklift including lifting principles, load rating, stability, and operation techniques.

CONST 606 — 0.0 unit
Workplace Competency Skills
18 hours lecture
Grading: LBCC Non-Graded Course

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 615A — 0.0 unit
Home Remodeling-Tiling
9 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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 615B — 0.0 unit
Home Remodeling-Drywall
9 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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 615C — 0.0 unit
Home Remodeling-Painting
9 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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.

Computer & Office Studies, APPL. Software (COSA)

COSA 1 — 1.0 unit
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

COSA 2 — 3.0 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 UC or CSU; see counselor for limitations

COSA 4 — 1.0 unit
Using Computers as a Tool for Learning
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

Formerly CPAS 1. This course provides an introduction to the computer and software products helpful in performing classroom tasks. Students are given the opportunity to develop computer skills that will enhance their ability to effectively complete course work. This course satisfies the information competency requirement. This course satisfies the technology portion of the information competency requirement.
Transferable to CSU

COSA 5   **3.0 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

COSA 10   **3.0 units**
Microsoft Word for Windows
54 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

Formerly CAOTC 39A and COSA 10AD. 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.
Transferable to CSU

COSA 15   **3.0 units**
Microsoft Excel for Windows
54 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

Formerly CAOTC 41E and COSA 15AD. 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

COSA 20   **3.0 units**
Microsoft PowerPoint for Windows
54 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

Formerly CAOTC 44D and COSA 20AD. This class provides a thorough exploration of presentation graphics software. Through hands-on practice, students learn to combine text and graphic images to develop computerized slide shows, transparencies, charts, and printed materials for group presentations. Students also create presentations with animations and audio, publish presentations for web and CD, use work group collaboration features, and integrate with other programs. In the research component students create presentations based on information gathered from electronic sources. This course satisfies the technology component of the Information Competency graduation requirement. 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 CSU

COSA 25   **3.0 units**
Microsoft Access for Windows
54 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

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

COSA 30   **3.0 units**
Introduction to Computers
54 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

Formerly CAOTC 34. This is a computer literacy course designed to familiarize the learner with a variety of computer tools and computer concepts with emphasis on utilizing Office Suite programs. This course provides an introduction to the use of computers, common software programs, peripherals, and social media. Students are instructed in the use of a word processor, spreadsheet, presentation tools, and internet applications. This course satisfies the technology component of the Information

Competency graduation requirement. 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

COSA 35   3.0 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 hands-on 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

COSA 50 (C-ID ITIS 120)   4.0 units
Intro to IT Concepts & Applications
72 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

Formerly CBIS 6A. 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.
Transferable to UC or CSU; see counselor for limitations

COSA 210   3.0 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 Project Management. Popular project management software will be introduced. In addition, the class will focus on the methods and techniques for managing projects as well as preparing students for the CompTIA's IT Project+ certification.

COSA 214   2.0 units
Records Management and Filing
36 hours lecture
Grading: letter grade or pass/no pass

Formerly CAOTO 214. Students in this course are introduced to the expanding area of records and information management and technologies, which integrate the computer with other automated records systems. They examine the Association of Records Managers and Administrators (ARMA International) filing standards to alphabetically store and retrieve physical and electronic systems. This includes alphabetic, subject, numeric, and geographic storage methods.

COSA 215   3.0 units
Microsoft Outlook for Windows
54 hours lecture
Recommended Preparation: COSA 1
Grading: letter grade or pass/no pass

Formerly CAOTC 215A and COSA 215AD. This course provides comprehensive instruction in desktop management using Microsoft Outlook. Topics include how to send and receive e-mail, manage contacts, plan and track tasks, schedule the calendar, and integrate Outlook with other applications and the internet. Upon successful completion of this course, students will be given a voucher to sit for the Microsoft Office Specialist (MOS) industry certification exam.

COSA 601   0.0 unit
Computer Information Competency
18 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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 610   0.0 unit
Microsoft Word, Introductory
18 hours lecture
Grading: LBCC Non-Graded Course

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 611 0.0 unit
Microsoft Word, Intermediate
18 hours lecture
Grading: LBCC Non-Graded Course

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 612 0.0 unit
Microsoft Word, Advanced
18 hours lecture
Grading: LBCC Non-Graded Course

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 615 0.0 unit
Microsoft Excel, Introductory
18 hours lecture
Grading: LBCC Non-Graded Course

This course covers beginning spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables.

COSA 616 0.0 unit
Microsoft Excel, Intermediate
18 hours lecture
Grading: LBCC Non-Graded Course

This course covers intermediate spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables.

COSA 617 0.0 unit
Microsoft Excel, Advanced
18 hours lecture
Grading: LBCC Non-Graded Course

This course covers advanced spreadsheet concepts using Microsoft Excel including formatting, formulas and functions, charts, linked worksheets, and pivot tables.

COSA 620 0.0 unit
Microsoft PowerPoint, Introductory
18 hours lecture
Grading: LBCC Non-Graded Course

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 621 0.0 unit
Microsoft PowerPoint, Intermediate
18 hours lecture
Grading: LBCC Non-Graded Course

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 622 0.0 unit
Microsoft PowerPoint, Advanced
18 hours lecture
Grading: LBCC Non-Graded Course

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 625 0.0 unit
Microsoft Access, Introductory
18 hours lecture
Grading: LBCC Non-Graded Course

This course covers basic database concepts using Microsoft Access including creating and modifying tables, running queries, generating reports, and creating forms.

COSA 626 0.0 unit
Microsoft Access, Intermediate
18 hours lecture
Grading: LBCC Non-Graded Course

This course covers intermediate database concepts using Microsoft Access including creating and modifying tables, running queries, generating reports, and creating forms.

COSA 627
Microsoft Access, Advanced
18 hours lecture
Grading: LBCC Non-Graded Course

0.0 unit

This course covers advanced database concepts using Microsoft Access including creating and modifying tables, running queries, generating reports, and creating forms.

COSA 628
Microsoft Outlook, Introductory
18 hours lecture
Grading: LBCC Non-Graded Course

0.0 unit

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 629
Microsoft Outlook, Intermediate
18 hours lecture
Grading: LBCC Non-Graded Course

0.0 unit

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 630
Microsoft Outlook, Advanced
18 hours lecture
Grading: LBCC Non-Graded Course

0.0 unit

This class provides instruction in advanced functions of Microsoft Outlook. Through hands-on practice, students learn to share and manage multiple calendars, import and export contacts, archive and adjust security options, and customize Outlook components.

COSA 650
Intro. to IT Concepts & Applications
72 hours lecture
Recommended Preparation: COSA 601
Grading: LBCC Non-Graded Course

0.0 unit

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.

Computer & Office Studies, Work Experience (COSE)

COSE 271WE
Work Experience-Comp & Office Studies
72 hours laboratory
Prerequisite: Prior approval by COS department faculty & compliance with work experience regulations as designed in the college catalog.
Grading: letter grade or pass/no pass

1.0 -4.0 units

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, Keyboarding (COSK)

COSK 200
Keyboarding and Document Production
54 hours lecture
Grading: letter grade or pass/no pass

3.0 units

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 209
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

1.0 unit

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 233
1.0 unit
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 633
0.0 unit
Computer Keyboarding Skills
18 hours lecture, 18 hours laboratory
Grading: LBCC Non-Graded Course

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
4.0 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

COSN 10
4.0 units
Networking Fundamentals
72 hours lecture
Grading: letter grade or pass/no pass

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, communications protocols, network topologies, transmission media, security, and assessment of career opportunities in networking. 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

COSN 200
3.0 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 205
4.0 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 210   4.0 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.

COSN 215   4.0 units
LINUX Networking and Security
72 hours lecture
Recommended Preparation: COSN 205 or COSN 210
Grading: letter grade or pass/no pass

Formerly CBIS 235B and 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 225   3.0 units
Microsoft Windows Client
54 hours lecture
Recommended Preparation: COSN 10
Grading: letter grade or pass/no pass

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   4.0 units
Microsoft Windows Server
72 hours lecture
Recommended Preparation: COSN 225
Grading: letter grade or pass/no pass

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 250   3.0 units
Cloud Computing in Amazon Web Services
54 hours lecture
Recommended Preparation: COSA 50
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 251   3.0 units
Database Essentials in Amazon Web Services
54 hours lecture
Recommended Preparation: COSN 50
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 252   3.0 units
App Development in Amazon Web Services
54 hours lecture
Recommended Preparation: COSN 50
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, load-balance 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 253   **3.0 units**
Security in Amazon Web Services
54 hours lecture
Recommended Preparation: COSN 50
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 299   **4.0 units**
Security and Networking Capstone
72 hours lecture
Prerequisite: COSS 271 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 605   **0.0 unit**
Computer Hardware Fundamentals
72 hours lecture
Recommended Preparation: COSA 650
Grading: LBCC Non-Graded Course

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.

Computer & Office Studies, Programming (COSP)

COSP 7 (C-ID COMP 112)   **4.0 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 UC or CSU; see counselor for limitations

COSP 8   **4.0 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, object oriented 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 UC or CSU; see counselor for limitations

COSP 10   **4.0 units**
Introduction to C# Programming
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

COSP 36   **4.0 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

COSP 38   **4.0 units**
Database Concepts
72 hours lecture
Recommended Preparation: COSA 50
Grading: letter grade or pass/no pass

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

COSP 201   **1.0 unit**
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. The student will learn how to design and develop an app and use will 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 230   **3.0 units**
Android App Development in Java
54 hours lecture
Prerequisite: CS 21 or CS 11
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 236   **2.0 units**
Introduction to Microsoft SQL & T-SQL
36 hours lecture
Recommended Preparation: COSP 38
Grading: letter grade or pass/no pass

This course is designed to introduce students to data analysis using the Transact-SQL (Structured Query Language) database query language in a Microsoft SQL (Structured Query Language) Server environment. Topics covered include simple and complex query skills, Microsoft-specific T-SQL (Structured Query Language) programming constructs, stored procedures and triggers, user-defined functions, cursors, and views.

COSP 237   **2.0 units**
Introduction to Oracle SQL & PL/SQL
36 hours lecture
Recommended Preparation: COSP 38
Grading: letter grade or pass/no pass

This course offers students an introduction to the Oracle DBMS. The class covers the concepts of both relational and object relational databases through the Oracle 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 PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications.

COSP 238   **3.0 units**
Database Cloud Technologies
54 hours lecture
Recommended Preparation: COSP 38
Grading: letter grade or pass/no pass

This class will introduce the topics of data centers, DBMS virtualization, cloud data storage and

programming models. This class reviews the motivating factors, benefits, challenges, and service models of cloud databases. Topics include, concepts behind cloud data center design and management, use of virtualization as a key cloud technique for offering software, computation and storage services, presentation of real use cases such as Amazon EC2, and cloud storage concepts including data distribution, durability, consistency and redundancy.

Computer & Office Studies, Security (COSS)

COSS 270   1.0 unit
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 271   3.0 units
Network Security Fundamentals
54 hours lecture
Recommended Preparation: COSN 10 and COSS 270
Grading: letter grade or pass/no pass

Formerly CBIS 271. Network Security Fundamentals provides a comprehensive overview of network security and prepares students to take the CompTIA Security + certification exam. This course covers general security concepts, communication network security, infrastructure security, cryptography basics, operational/organizational security, and computer forensics.

COSS 272   3.0 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   4.0 units
Ethical Hacking and Countermeasures
72 hours lecture
Recommended Preparation: COSS 271
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.

Computer & Office Studies, Web Develop (COSW)

COSW 10   4.0 units
Beginning Website Development
72 hours lecture
Recommended Preparation: COSA 50
Grading: letter grade or pass/no pass

Formerly CBIS 207AD and CBIS 211AD and COSW 10AD. This course introduces the fundamental skills needed to design, develop and publish websites using industry standard software. Students will create websites using 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 and forms, using CSS for layout and design, creating responsive websites and working with content management systems. Students should have completed a basic computer concepts course such as COSA 1 as preparation for this course. Transferable to CSU

COSW 20   4.0 units
Front End Website Development
72 hours lecture
Recommended Preparation: COSW 10
Grading: letter grade

Formerly CBIS 207E. This course develops knowledge in modern front-end 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

COSW 30   4.0 units
Web Development with PHP/MySQL
72 hours lecture
Recommended Preparation: COSP 38 and COSW 10
Grading: letter grade or pass/no pass

This course covers PHP & MySQL, one of the most popular technology combinations for developing interactive Web sites. It is designed to provide 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.

COSW 200   4.0 units
Introduction to JavaScript and jQuery
72 hours lecture
Recommended Preparation: COSA 50
Grading: letter grade or pass/no pass

This course provides an overview of client-side programming using JavaScript, variables, arrays, functions, event handlers, objects, form validation, cookies, and the DOM. Introduces Web 2.0 technologies, Ajax (Asynchronous JavaScript and XML and JSON), and it is an introduction to using popular libraries including jQuery.

COSW 230   3.0 units
Ruby on Rails Web Development
54 hours lecture
Prerequisite:
COSW 20, CS 11, CS 21, COSP 8, COSP 10 or COSP 38
Grading: letter grade or pass/no pass

Formerly CBIS 430. This course is an introduction to using Ruby on Rails (or RoR) a dynamic web development framework. Students will be taught programming in Ruby language and MySQL management. Installation, development, testing, and the structure of the Ruby on Rails framework will be covered. This course is intended for web developers

and others interested in getting a quick start in this technology.

COSW 240   3.0 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 Drupal, WordPress, or Joomla. This course introduces fundamental concepts of CMS administration including installation, setup, management of user accounts, and security. Students will plan site design, organize navigation, integrate with social media, and publish diverse web content.

Counseling/Guidance (COUNS)

COUNS 1   1.0 unit
Orientation for College Success
18 hours lecture
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. Students are required to complete 3 hours of supplemental learning activities through a Success Center.
Transferable to UC or CSU; see counselor for limitations

COUNS 2   3.0 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

COUNS 7 3.0 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

COUNS 48 1.0 unit
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 self-description as it impacts career choices.
Transferable to CSU

COUNS 49 2.0 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 self-confidence for academic success.
Transferable to CSU

COUNS 49A 1.0 unit
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 self assessment and interpretation.
Transferable to CSU

COUNS 50 3.0 units
Career Planning: A Life-Long Process
54 hours lecture
Grading: 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. Through the study of various career planning and decision-making approaches, the course is design to explore the importance of how psycho-social, physical and affective factors impact their own cognitive processes. Using self-evaluation instruments and self-discovery processes, students develop life-long learning skills which help them focus on pathways for academic and career satisfaction.
Transferable to CSU

COUNS 800 1.0 unit
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 employment skills required to succeed in the world of work. The goal is for students to enhance their potential competencies in the workplace necessary for finding employment and keeping it. Course topics include personality assessment on strengths and weaknesses, recognizing strengths and self- worth, developing job search skills, and developing a career or employment search portfolio.

COUNS 855   0.5 unit
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 unit
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.

Computer Science (CS)

CS 11 (C-ID COMP 122)   4.0 units
Introduction to Computer Science- C++
72 hours lecture
Prerequisite: MATH 110 or MATH 110B or first year high school algebra of a grade of C or better
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 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 UC or CSU; see counselor for limitations

CS 12   4.0 units
Advanced Computer Science-C++
72 hours lecture
Prerequisite: CS 11
Grading: letter grade

This is the second course in C++ course offerings, which includes further explanation of 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 UC or CSU; see counselor for limitations

CS 21 (C-ID COMP 122)   4.0 units
Introduction to Computer Science-Java
72 hours lecture
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 UC or CSU; see counselor for limitations

CS 22 (C-ID COMP 132)   3.0 units
Data Structures and Algorithms
54 hours lecture
Prerequisite: CS 21 or CS 11
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 UC or CSU; see counselor for limitations

CS 51 (C-ID COMP 142)   4.0 units
Introduction to Computer Architecture
72 hours lecture
Prerequisite: COSP 8 or CS 11 or CS 21
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. Students are expected to have already completed a programming course CS21 and MATH 50. Transferable to UC or CSU; see counselor for limitations

CS 61 (C-ID COMP 152)   **4.0 units**
Discrete Structures
72 hours lecture
Prerequisite: COSP 8 or CS 11 or CS 21
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

Culinary Arts (CULAR)

CULAR 20   **3.0 units**
App. Food Serv. Sanit in Hotel/Rstr. Mgmt.
54 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

CULAR 202   **5.0 units**
Intro to Culinary Skills & Principles
45 hours lecture, 144 hours laboratory
Corequisite: CULAR 20 and TB Clearance
Grading: letter grade

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.

CULAR 211   **4.5 units**
Intermed. Culinary Skills & Principles
36 hours lecture, 144 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A)
Grading: letter grade

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.

CULAR 212   **5.5 units**
Classical Cuisine
45 hours lecture, 180 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A) and (CULAR 211 or CULAR 213B)
Grading: letter grade

In this course students are introduced to the techniques, ingredients, methods, and spices unique to Classical European Cuisine. Classic principles and techniques in preparing course meals are practiced and emphasized.

CULAR 215   **1.5 units**
Buffets and Catering
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 OR CULAR 213A) and (CULAR 211 or CULAR 213B)
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.

CULAR 216   3.0 units
World Cuisines: American Regional
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A)
Grading: letter grade

American Regional cuisine 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.

CULAR 217   2.0 units
Vegetarian & Specialty Cuisine
18 hours lecture, 54 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A)
Grading: letter grade

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.

CULAR 218   3.0 units
World Cuisines: Asian
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A)
Grading: letter grade

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.

CULAR 219   3.0 units
World Cuisines: Mediterranean
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A)
Grading: letter grade

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.

CULAR 222A   4.0 units
Advanced Restaurant Operations
72 hours lecture
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A)and (CULAR 211 or CULAR 213B)
Corequisite: CULAR 218 and CULAR 219
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.

CULAR 222B   4.0 units
Advanced Restaurant Practicum
216 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 202 or CULAR 213A) and (CULAR 211 or CULAR 213B)
Corequisite: CULAR 218 and CULAR 219
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.

CULAR 225   2.0 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 230   **3.0 units**
Baking & Pastry Skills for CUL Students
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 202 or CULAR 213A and CULAR 20 and TB Clearance
Corequisite: CULAR 20 and TB Clearance
Grading: letter grade

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, ice creams, sauces, and chocolate culminating in plated desserts.

CULAR 241   **5.0 units**
Intro to Baking & Pastry Skills/Princ
36 hours lecture, 162 hours laboratory
Prerequisite: CULAR 20 and TB Clearance
Corequisite: CULAR 20 and TB Clearance
Grading: letter grade

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 dough, cookies, quick breads, sweet dough, laminated dough, batters, and creams.

CULAR 242   **5.0 units**
Intermed. Baking and Pastry Skills/Princ
36 hours lecture, 162 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204)
Grading: letter grade

This course provides a continued study of the principles and techniques of baking and pastry. It covers the different mixing, baking, icing, and decorating technique for a variety of cakes, tarts, and desserts. These include mousses, chocolate, ice cream, cooked creams, buttercreams, meringues, ganaches, génoise, sponges, and jocondes.

CULAR 243A   **4.0 units**
Advanced Bakery Operations
72 hours lecture
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205) and (CULAR 206 or CULAR 246) and CULAR 258 and CULAR 259
Corequisite: CULAR 243B
Grading: letter grade

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.

CULAR 243B   **4.0 units**
Advanced Bakery Practicum
216 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205) and (CULAR 206 or CULAR 246) and CULAR 258 and CULAR 259
Corequisite: CULAR 243A
Grading: letter grade

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.

CULAR 246   **3.0 units**
Specialty Cakes & French Pastries
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205)
Grading: letter grade

This course expands on basic pastry skills to produce a variety of intricate cakes, 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, different assembly and decorating techniques.

CULAR 247 3.0 units
Cake Decorating
36 hours lecture, 72 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205)
Grading: letter grade

This course covers advanced skills for cake making and decorating, including preparation of sponges, fondants, icings, fillings, designs and arrangements, writing and lettering, coloring, cake borders, modeling chocolate, and gumpaste flowers.

CULAR 250 1.5 units
Culinary Skills for Baking Students
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance
Corequisite: CULAR 20 and TB Clearance
Grading: letter grade

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.

CULAR 252 1.5 units
Frozen Desserts
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and CULAR 241 or CULAR 204
Grading: letter grade

This course introduces the student to the concepts of frozen desserts. It covers the principles and techniques involved in making and processing ice cream, gelato, sorbet, granitas, frozen soufflés, parfaits, and bombes.

CULAR 253 1.5 units
Chocolate Confections, Deco & Showpieces
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205)
Grading: letter grade

This course explores the hands-on techniques of working with chocolate. It covers chocolate tempering, the creation of a variety of candy confections including hand-shaped, piped and cut ganaches, nut-centered, and crystalline sugar. It also covers chocolate decoration, coloration, painting, molding, modeling, piping, and the assembly of edible chocolate showpieces.

CULAR 254 1.5 units
Sugar Confections, Deco & Showpieces
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205)
Grading: letter grade

This hands-on course provides a study of sugar-based confections, candies, decorations, and edible showpieces. It covers the creation of a variety of candy confections including caramel candies, pâte de fruit, and toffee. It also covers pastillage, cast, blown, and pulled sugar, and the assembly of edible sugar showpieces.

CULAR 255 1.5 units
Plated Desserts
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204) and (CULAR 242 or CULAR 205)
Grading: letter grade

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.

CULAR 256 1.5 units
Holiday Desserts
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204)
Grading: letter grade

This course explores the baking traditions that are closely associated with the Fall/Winter holidays. It covers traditional and modern variations of recipes and techniques from different countries in the old and the new world, such as Stollen, King's Cake, Yule Log, Panettone, and Fruit Cake.

CULAR 258 1.5 units
Artisan Breads
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR 241 or CULAR 204).
Grading: letter grade

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.

CULAR 259   **1.5 units**
Viennese Pastries
18 hours lecture, 36 hours laboratory
Prerequisite: CULAR 20 and TB Clearance and (CULAR
241 or CULAR 204).
Grading: letter grade

This course provides an in-depth study of the
principles, recipes, techniques, tools, equipment,
materials, and ingredients used for the preparation
of Viennese Pastries, baked goods which are made in
a similar manner to bread but with ingredients that
give them a heavier, sweeter quality closer to pastry.

Dance (DANCE)

DANCE 1   **3.0 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 UC or CSU; see counselor for limitations

DANCE 2   **2.0 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 UC or CSU; see counselor for limitations

DANCE 3   **2.0 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 11 or 12A or 13 or 14 or 15 or 16 or 17 or 18A or
18B 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 UC or CSU; see counselor for limitations

DANCE 5   **2.0 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 UC or CSU; see counselor for limitations

DANCE 6   **2.0 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 UC or CSU; see counselor for limitations

DANCE 8   **2.0 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. The course may include
elements of yoga, Pilates, Gyrokinesis®, and dance.
Transferable to UC or CSU; see counselor for limitations

DANCE 12A   **2.0 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 CSU

DANCE 12B 2.0 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

DANCE 13 2.0 units
Turns
27 hours lecture, 27 hours laboratory
Prerequisite: DANCE 26 or DANCE 20 or DANCE 14
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 UC or CSU; see counselor for limitations

DANCE 14 2.0 units
Modern Dance 1
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, physical strength, and artistry.
Transferable to UC or CSU; see counselor for limitations

DANCE 15 2.0 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 UC or CSU; see counselor for limitations

DANCE 16 2.0 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 UC or CSU; see counselor for limitations

DANCE 17 2.0 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 UC or CSU; see counselor for limitations

DANCE 18A 2.0 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 UC or CSU; see counselor for limitations

DANCE 18B   2.0 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

DANCE 19   3.0 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 21st centuries.
Transferable to UC or CSU; see counselor for limitations

DANCE 20   2.0 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 UC or CSU; see counselor for limitations

DANCE 21   2.0 units
Jazz Dance 2
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 20
Grading: letter grade or pass/no pass

Formerly DANCE 21AB. 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 UC or CSU; see counselor for limitations

DANCE 24   2.0 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

DANCE 26   2.0 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 UC or CSU; see counselor for limitations

DANCE 27   2.0 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

DANCE 28   2.0 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

DANCE 29   **2.0 units**
Ballet 4
27 hours lecture, 27 hours laboratory
Recommended Preparation: DANCE 28
Grading: letter grade or pass/no pass

Formerly DANCE 11AB. 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 UC or CSU; see counselor for limitations

DANCE 31   **2.0 units**
Choreography I
27 hours lecture, 27 hours laboratory
Prerequisite: One semester of DANCE 20, DANCE 10, DANCE 14 or Audition.
Grading: letter grade or pass/no pass

Formerly DANCE 31AB. 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 UC or CSU; see counselor for limitations

DANCE 32   **2.0 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 UC or CSU; see counselor for limitations

DANCE 33   **2.0 units**
Dance Choreography Workshop
27 hours lecture, 27 hours laboratory
Prerequisite: DANCE 10, DANCE 20 or DANCE 14 or Audition 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 UC or CSU; see counselor for limitations

DANCE 41   **2.5 units**
Dance Performance
144 hours laboratory
Corequisite: DANCE 2, 3, 5, 6, 8, 12A, 12B, 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 UC or CSU; see counselor for limitations

DANCE 41/1   **0.5 unit**
Dance Performance
36 hours laboratory
Corequisite: DANCE 2, 3, 5, 6, 8, 12A, 12B, 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

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 UC or CSU; see counselor for limitations

DANCE 41/2   **1.0 unit**
Dance Performance
72 hours laboratory
Corequisite: DANCE 2, 3, 5, 6, 8, 12A, 12B, 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

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 UC or CSU; see counselor for limitations

DANCE 41/3   **2.0 units**
Dance Performance
108 hours laboratory
Corequisite: DANCE 2, 3, 5, 6, 8, 12A, 12B, 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

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 UC or CSU; see counselor for limitations

DANCE 45   **2.5 units**
Musical Theatre Dance Performance
144 hours laboratory
Corequisite: One of the Following- DANCE 2 or 3 or 5 or 6 or 8 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18A or 18B or 20 or 21 or 24 or 26 or 28 or 29 or 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

DANCE 46   **2.0 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

Digital Media Arts (DMA)

DMA 201   **3.0 units**
Intro to Digital Media Arts
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

This course is a survey course introducing students to the fundamental applications of digital media systems and technologies as creative tools. The course also explores how digital media impacts our cultural, business and personal lives and transforms our experience of communication. Topics will include: imaging, graphic design, animation, visual effects and motion graphics, web design, transmedia storytelling, interactive media, gaming, sound design and recording, video production and post production.

Diagnostic Medical Imaging (DMI)

DMI 10   **3.0 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

DMI 11   **1.0 unit**
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

DMI 12   **3.0 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 Non- Vascular intervention are also discussed within the scope of this course.
Transferable to CSU

DMI 14   **3.0 units**
Trends and Self-Assessment in Rad Tech
54 hours lecture
Prerequisite: DMI 15 or current C.R.T. (Certified Radiologic Technologist).
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

DMI 15   **3.0 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

DMI 20   **3.0 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

DMI 21   **2.0 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

DMI 24   **3.0 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

DMI 30   **3.0 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

DMI 31   **3.0 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

DMI 40A   **2.5 units**
Clinical Radiology
144 hours laboratory
Prerequisite: DMI 10 and DMI 20 and health evaluation
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

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

DMI 40C   **6.0 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

DMI 40D   **11.0 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

DMI 40E   **11.0 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

DMI 60   **3.0 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

DMI 61   **2.0 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

DMI 222   0.5 unit
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 401   3.0 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 402   3.0 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 403   3.0 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 404   3.0 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 406   **3.0 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 407   **3.0 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   **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.
Transferable to CSU

Drafting & Mechanical Design (DRAFT)

DRAFT 52B   **3.0 units**
Descriptive Geometry
36 hours lecture, 72 hours laboratory
Prerequisite: CAD 52
Grading: letter grade

This course will include information on the fundamentals of descriptive geometry used on points, edges, and surfaces. Drawings will use straight line and plane relationships in creating flat surfaces and curved lines and planes to generate surfaced intersections and developments. Vector geometry and graphic solutions are addressed.
Transferable to CSU

DRAFT 201   **4.0 units**
Introduction to Drafting
54 hours lecture, 54 hours laboratory
Recommended Preparation: COMIS 1 or knowledge of computers and MATH 120 or basic geometry
Grading: letter grade or pass/no pass

This is an entry-level course offered as a preparation for architectural design, mechanical drafting and interior design students with no previous graphic training. This course provides instruction in the fundamental principles and techniques of traditional drafting and computer aided drafting (CAD), including drafting equipment (manual and CAD), sketching, lettering, line type and line weight, orthographic projection, isometrics and dimensioning. The CAD training will utilize the latest software technology, such as AutoCAD, in the Windows environment and will introduce the following CAD fundamentals: user interface, basic draw and edit commands, template

drawings, dimensioning, electronic drawing sheets, file management, printing and plotting and the Windows operating system for CAD users. Exercises will cover drawings for both mechanical and architectural applications.

DRAFT 203   **4.0 units**
AutoCAD II, Advanced Concepts
54 hours lecture, 54 hours laboratory
Prerequisite: DRAFT 201 or CAD 202
Grading: letter grade or pass/no pass

Formerly DRAFT 203AD. This course is an intermediate level course 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.

DRAFT 204   **4.0 units**
3D Visualization/Animation
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

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. Successful completion of the three modules in Draft204 culminates in a Certificate of Achievement – 3D 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-liner editing is introduced. DRAFT 204 is the final class in a series of three leading to a Certificate of Completion – CAD Professional – Architectural or Mechanical Applications. 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.

DRAFT 210   **1.5 units**
3D Printing Fundamentals I (FDM)
18 hours lecture, 36 hours laboratory
Recommended Preparation: DRAFT 201 or CAD 50 or any 3D Digital Modeling software experience
Grading: letter grade or pass/no pass

This course introduces students to the field of 3D Digital Manufacturing and Design by providing training in the setup and operation of a Fused Deposition Modeling (FDM) 3D printer system. Students will receive introductory instruction on various 3D CAD and Parametric Design software packages used to create digital 3D models for printing. This class will enhance the employability skills of students preparing for careers such as Engineering, Engineering Technology, Product Design, Jewelry Design and Maquette Model Design for Animation and Architecture.

DRAFT 211   **1.5 units**
Laser Cutting Fundamentals
18 hours lecture, 36 hours laboratory
Recommended Preparation: DRAFT 201 or CAD 50 or any 3D Digital Modeling software experience
Grading: letter grade or pass/no pass

This course introduces students to the field of Digital Manufacturing and Design by providing training in the setup and operation of a CO2 Laser. Laser processes covered in the class are: cutting, marking, imaging and engraving. Students will receive introductory instruction on digital drawing software packages used to create digital graphics for printing and imaging with an introduction to appropriate materials. This class will enhance the employability skills of students preparing for careers such as Engineering Technology, Product Design, Jewelry Design and Model Design for Architecture and other industries. The class includes time for student project work.

DRAFT 221   **3.0 units**
Intermediate CATIA
36 hours lecture, 72 hours laboratory
Recommended Preparation: CAD 220 or DRAFT 298D or TEC 60
Grading: letter grade or pass/no pass

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.

DRAFT 222   **3.0 units**
Advanced CATIA
36 hours lecture, 72 hours laboratory
Recommended Preparation: DRAFT 221 or DRAFT 298E or TEC 60
Grading: letter grade or pass/no pass

This course is the third course in a series of three preparing students for careers as computer aided drafting operators in various industries utilizing CATIA parametric design software. The class introduces students to advanced levels of the operations of CATIA software concentrating on sheet metal, surface modeling, drawing tools in a Windows environment. The course may serve as a preparation for students intending to take the industry certification test for a CATIA Surface Design Specialist created by Dessault Systems.

DRAFT 230   **3.0 units**
Introduction to SolidWorks Level 1
36 hours lecture, 72 hours laboratory
Recommended Preparation: DRAFT 201 or CAD 50 or Industry Drafting experience or High School Drafting classes
Grading: letter grade or pass/no pass

This course is the first in a series of three preparing students for careers as computer aided drafting (CAD) operators in various industries utilizing SolidWorks parametric design software. The class introduces students to the fundamental operations of SolidWorks software concentrating on the user interface and the creation of industry standard detail parts and assembly drawings based on 2D profiles (sketches) in a Windows environment. The course may serve as a preparation for students intending to take an industry certification test Certified SolidWorks Associate (CSWA) created by Dessault Systems.

DRAFT 231   **3.0 units**
Intermediate SolidWorks Level 2
36 hours lecture, 72 hours laboratory
Recommended Preparation: DRAFT 230 or DRAFT 298F or TEC 60
Grading: letter grade or pass/no pass

This course is the second in a series of three preparing students for careers as computer aided drafting operators in various industries utilizing SolidWorks parametric design software. The class introduces students to intermediate levels of the operations of SolidWorks software concentrating on the creation of complex industry standard detail parts drawings and assemblies in a Windows environment. The course will prepare students to take an industry certification test, Certified SolidWorks Professional (CSWP), created by Dessault Systems.

DRAFT 232   **3.0 units**
Advanced SolidWorks Level 3
36 hours lecture, 72 hours laboratory
Recommended Preparation: DRAFT 231 or DRAFT 298G or TEC 60
Grading: letter grade or pass/no pass

This course is the third in a series of three preparing students for careers as computer aided drafting operators in various industries utilizing SolidWorks parametric design software. The class introduces students to advanced levels of the operations of SolidWorks software concentrating on sheet metal, weldments, surface modeling, mold tools, drawing tools and FEA (Finite Element Analysis) in a Windows environment. The course will prepare students to take an industry certification test, Certified SolidWorks Expert (CSWE), created by Dessault Systems.

Economics (ECON)

ECON 1 (C-ID ECON 202)   **3.0 units**
Macro Economic Analysis
54 hours lecture
Prerequisite: MATH 130 or MATH 130A and MATH 130B or one year of high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the math assessment 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 UC or CSU; see counselor for limitations

ECON 1H (C-ID ECON 202)   3.0 units
Honors Macro Economic Analysis
54 hours lecture
Prerequisite: Qualification for Honors Program and MATH 130 or MATH 130A and MATH 130B
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 UC or CSU; see counselor for limitations

ECON 2 (C-ID ECON 201)   3.0 units
Micro Economic Analysis
54 hours lecture
Prerequisite: MATH 130 or MATH 130A and MATH 130B or one year of high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the math assessment 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 UC or CSU; see counselor for limitations

ECON 2H (C-ID ECON 201)   3.0 units
Honors Micro Economics Analysis
54 hours lecture
Prerequisite: Qualification for Honors Program and MATH 130 or MATH 130A and MATH 130B
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 UC or CSU; see counselor for limitations

ECON 3   3.0 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 CSU

ECON 4   3.0 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 UC or CSU; see counselor for limitations

ECON 5   3.0 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 UC or CSU; see counselor for limitations

Education (EDUC)

EDUC 10   1.0 unit
Introduction to Teaching and Learning
18 hours lecture
Recommended Preparation: Eligibility for READ 82 or reading proficiency met and eligibility for English 1.
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

EDUC 20 (C-ID EDUC 200)   3.0 units
Intro to Elementary Classroom Teaching
54 hours lecture
Recommended Preparation: READ 82 or Qualification through the LBCC assessment process for Reading and Eligibility for ENGL 1.
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 (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 UC or CSU; see counselor for limitations

Electricity (ELECT)

ELECT 41   2.0 units
Technical Applications of Minicomputers
18 hours lecture, 54 hours laboratory
Grading: letter grade

The course will consist of an introduction to the various software programs used in the electrical 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 AutoCad, Word, Excel, Visio, Constructor, and web based communication and information research.
Transferable to CSU

ELECT 202   3.0 units
Electrical Mathematics
54 hours lecture
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, percents, graphing, measurement, and pre-algebra to better understand how to solve electrical formulas.

ELECT 204 4.0 units
First Semester Fundamentals of DC Electricity
54 hours lecture, 54 hours laboratory
Prerequisite: ELECT 202
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 209 4.0 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 212 4.0 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 214 4.0 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 225 4.0 units
Algebra and Trigonometry for Technicians
72 hours lecture
Prerequisite:
MATH 805 or MATH 815 or ELECT 202 or Qualification through the LBCC assessment process for Math
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 227 2.0 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 2.0 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   **2.0 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 231   **2.0 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   **3.0 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   **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 245   **3.0 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 246   **2.0 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 work place practices and the selection of proper personal protective equipment will be covered.

ELECT 247   **1.0 unit**
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   **3.0 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 253   **2.0 units**
OSHA Standards for Construction Safety
36 hours lecture
Grading: pass/no pass

This course was listed as T_I 203A for academic year 2013-2014 only. This course covers OSHA policies, procedures, and standards, as well as construction safety and health principles. Topics include scope and application of the OSHA construction 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 Construction Outreach Training Completion Card.

ELECT 256   **1.0 unit**
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 262   **3.0 units**
Solar 1-Grid-Tied Solar Photovoltaics
45 hours lecture, 27 hours laboratory
Prerequisite: ELECT 209
Recommended Preparation: ELECT 261
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   **3.0 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 265   **2.0 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 266   **2.0 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 267   **2.0 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   **2.0 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 271   **3.0 units**
Electrical Cost Estimating 1
54 hours lecture
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 275   **1.0 unit**
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 277   **3.0 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   **3.0 units**
Traffic Signal Systems 1
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 283   **3.0 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 284   **3.0 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 285   **2.0 units**
Traffic Signal Inspection and Safety
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   **2.0 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   **2.0 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 is included. Mandatory safety awareness assessment will be conducted early in the course.

ELECT 435B   **2.0 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, ladder logic, wiring, timing and programming. GE Fanuc PLCs and GE Proficy software are utilized.

ELECT 435C   **3.0 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.

Emergency Medical Technology (EMT)

EMT 251   **4.0 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   **2.0 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 252   **1.0 unit**
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.

English (ENGL)

ENGL 1 (C-ID ENGL 100)   **4.0 units**
Reading and Composition
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for English 1 or ENGL 105 or ENGL 105AX or ESL 34
Grading: letter grade

In this course, students read and analyze college-level texts in order to write researched, thesis-based essays.
Transferable to UC or CSU; see counselor for limitations

ENGL 1H (C-ID ENGL 100)   **4.0 units**
Honors Reading and Composition
72 hours lecture
Prerequisite: Qualification for the Honors program. Qualification through the LBCC assessment process for English, or ENGL 105 or ENGL 105AX or ESL 34
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 UC or CSU; see counselor for limitations

ENGL 2 (C-ID ENGL 120)   **4.0 units**
Introduction to Literature/Composition
72 hours lecture
Prerequisite: ENGL 1 or ENGL 1H
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 UC or CSU; see counselor for limitations

ENGL 2H (C-ID ENGL 120)   **4.0 units**
Honors Introduction to Literature/Comp.
72 hours lecture
Prerequisite: ENGL 1 or ENGL 1H and Qualification for the Honors program
Grading: letter grade or pass/no pass

This course is an honors introduction to analysis of and writing about literature, focusing 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 UC or CSU; see counselor for limitations

ENGL 3   **4.0 units**
Argumentative and Critical Writing
72 hours lecture
Prerequisite: ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 3H   **4.0 units**
Honors Argumentative & Critical Writing
72 hours lecture
Prerequisite: Qualification for the Honors Program and ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 4 (C-ID ENGL 110)   **4.0 units**
Critical Analysis of Literature
72 hours lecture
Prerequisite: ENGL 1, ENGL 1H or Qualification through the LBCC assessment process for English
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 UC or CSU; see counselor for limitations

ENGL 4H   **4.0 units**
Honors Critical Analysis of Literature
72 hours lecture
Prerequisite: ENGL 1 or ENGL 1H 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 UC or CSU; see counselor for limitations

ENGL 6   **3.0 units**
Production of Literary Publications
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

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

ENGL 7   **3.0 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

ENGL 24   **4.0 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

ENGL 26 (C-ID ENGL 200)   **3.0 units**
Creative Writing 1
54 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 32   **3.0 units**
Masterpieces/Asian Literature (in English)
54 hours lecture
Prerequisite: Eligibility for ENGL 1
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 for those who seek to understand the workings of the eastern mind in its unique historical, cultural and philosophical context.
Transferable to UC or CSU; see counselor for limitations

ENGL 33   **4.0 units**
Mythology
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 33H   **4.0 units**
Honors Mythology
72 hours lecture
Prerequisite: Qualification for the Honors Program and ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 34 4.0 units
Literature for Children and Young Adults
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 CSU

ENGL 35 3.0 units
Interpreting the Short Story
54 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 36 3.0 units
The Novel
54 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 37 3.0 units
Science Fiction, Fantasy and Horror
54 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 38 3.0 units
The Bible as Lit: The Old Testament
54 hours lecture
Prerequisite: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This college-level course provides an examination and analysis of the narratives, poetry, and structure of the Old Testament, emphasizing a literary point of view. The course is designed for students interested in broadening their understanding of the literary characteristics, the cultural, and historical contexts of various books of the Old Testament.
Transferable to UC or CSU; see counselor for limitations

ENGL 39 3.0 units
The Bible as Lit: Apocrypha/New Testament
54 hours lecture
Prerequisite: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This college-level course provides an examination and analysis of the narratives, poetry, parables, and letters of the New Testament and Apocrypha, emphasizing a literary point of view. The course is designed for students interested in broadening their understanding of the literary characteristics and cultural and historical contexts of the books of the New Testament and the Apocrypha.
Transferable to UC or CSU; see counselor for limitations

ENGL 41 4.0 units
American Literature I
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 42   **4.0 units**
American Literature II
72 hours lecture
Prerequisite: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This course is a survey of American literature from the Civil War to the present.
Transferable to UC or CSU; see counselor for limitations

ENGL 43A   **4.0 units**
Introduction to Shakespeare
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 43B   **4.0 units**
Introduction to Shakespeare
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 44   **4.0 units**
World Literature I
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 44H (C-ID ENGL 140)   **4.0 units**
Honors World Literature I
72 hours lecture
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 45 (C-ID ENGL 145)   **4.0 units**
World Literature II
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 45H (C-ID ENGL 145)   **4.0 units**
Honors World Literature II
72 hours lecture
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 46 (C-ID ENGL 160)   **4.0 units**
Survey of British Literature I
72 hours lecture
Prerequisite: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This course will focus on readings in the literature of the British Isles, with emphasis on English literature, Irish literature, and the works of other commonwealth nations, from the early medieval period to the last

quarter of the eighteenth century. Coursework will emphasize the appreciation of historical, philosophical, political, social, and aesthetic concepts inherent in the works and their milieus.
Transferable to UC or CSU; see counselor for limitations

ENGL 47 (C-ID ENGL 165)   4.0 units
Survey of British Literature II
72 hours lecture
Prerequisite: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This course is a study of English literature from the late 18th (the time of the French Revolution) to the early 21st century. English literature is defined as literature written in English, though not by Americans and, thus, includes writers from such countries as South Africa, Ireland, Canada, and Australia, New Zealand.
Transferable to UC or CSU; see counselor for limitations

ENGL 48   3.0 units
Modern & Contemporary Literature
54 hours lecture
Prerequisite: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This class is a study of imaginative literature written from the late 19th through the early 21st 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 UC or CSU; see counselor for limitations

ENGL 48H   3.0 units
Honors Modern/Contemporary Literature
54 hours lecture
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This class is a study of imaginative literature written from the late 19th through the early 21st 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 UC or CSU; see counselor for limitations

ENGL 49   3.0 units
Film and Literature
54 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

ENGL 49H   3.0 units
Honors Film and Literature
54 hours lecture
Prerequisite: Qualification for the Honors Program and Eligibility for ENGL 1
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. As an honors course, English 49H will require more in-depth analysis of course materials and a higher standard for student work.
Transferable to UC or CSU; see counselor for limitations

ENGL 50A   3.0 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 UC or CSU; see counselor for limitations

ENGL 50B 3.0 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

ENGL 50C 3.0 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

ENGL 50D 3.0 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

ENGL 51A 3.0 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 UC or CSU; see counselor for limitations

ENGL 51B 3.0 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

ENGL 51C 3.0 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

ENGL 51D   3.0 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

ENGL 52A   3.0 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 UC or CSU; see counselor for limitations

ENGL 52B   3.0 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

ENGL 52C   3.0 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

ENGL 52D   3.0 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

ENGL 53A   3.0 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 UC or CSU; see counselor for limitations

ENGL 105   4.0 units
Fundamentals of Writing
72 hours lecture
Prerequisite: Qualification through the LBCC
assessment process for English, or ENGL 801B
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 105AX   5.0 units
Accelerated Fundamentals of Writing
90 hours lecture
Recommended Preparation: Qualification through
the LBCC Assessment process
Grading: letter grade or pass/no pass

This course focuses on expository and argumentative
writing, standard written English, critical reading, and
success strategies for students whose assessment
indicates below-transfer level placement. The course
provides scaffolded, collaborative, individualized
activities and one-to-one feedback from a writing
instructor. The course prepares students for entrance
into ENGL1. During the semester, students are
required to complete 3 hours of supplemental
activities in a Success Center.

ENGL 600   0.0 unit
Great Works of Literature
54 hours lecture
Grading: LBCC Non-Graded Course

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 627   0.0 unit
Writing for Publication or Pleasure
54 hours lecture
Grading: LBCC Non-Graded Course

This course gives especially older adult students
experience with the creative and critical processes in
creative writing.

ENGL 801A   4.0 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   4.0 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 896   2.0 units
Reading and Composition Skills Support
36 hours lecture
Corequisite: ENGL 1
Grading: pass/no pass

Formerly EWRC 896AD. 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,
individualized activities, and one-to-one feedback
from a writing instructor to supplement the skills and
support necessary to complete ENGL 1 concurrently
during a single semester.

Engineering (ENGR)

ENGR 3A   **3.0 units**
Engineering Graphics
36 hours lecture, 72 hours laboratory
Prerequisite: MATH 120 or one year High School
Geometry
Recommended Preparation: One semester of DRAFT
201 or high school mechanical drawing or drafting
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 computers to prepare and study engineering
drawings and solving engineering space problems by
orthographic methods will be emphasized.
Transferable to UC or CSU; see counselor for limitations

ENGR 3B   **3.0 units**
Engineering Graphics
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 UC or CSU; see counselor for limitations

ENGR 11   **3.5 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

ENGR 17   **3.0 units**
Electrical Engineering Circuits
54 hours lecture
Prerequisite: MATH 70 and PHYS 3B
Corequisite: MATH 70 and PHYS 3B
Grading: letter grade

This course provides an introduction to electrical
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 UC or CSU; see counselor for limitations

ENGR 17L   **1.0 unit**
Electrical Engineering Circuits Lab
54 hours laboratory
Prerequisite: ENGR 17 (may be taken concurrently)
Grading: letter grade

This course provides a laboratory study of electrical
circuits and instrumentation to accompany the
lecture course.
Transferable to UC or CSU; see counselor for limitations

ENGR 35   **3.0 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 three-dimensional
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 UC or CSU; see counselor for limitations

ENGR 50   **1.0 unit**
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 UC or CSU; see counselor for limitations

ENGR 54   **3.5 units**
Computer Methods
54 hours lecture, 36 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. C++ is the primary programming language. The course also introduces MATHEMATICA and MATLAB software with applications from Engineering , Science and Mathematics.
Transferable to UC or CSU; see counselor for limitations

Environmental Science (ENVRS)

ENVRS 1   **3.0 units**
Energy for the Future
54 hours lecture
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 UC or CSU; see counselor for limitations

English as a Second Language (ESL)

ESL 33X   **5.0 units**
College English with Computers for ESL
90 hours lecture
Prerequisite: ESL 56 or ESL 56X or Qualification through the LBCC assessment process for ESL.
Recommended Preparation: READ 882
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 34.

ESL 34X   **5.0 units**
College English/Computers for ESL Students
90 hours lecture
Prerequisite: ESL 33 or ESL 33X or Qualification through the LBCC assessment process for ESL
Recommended Preparation: READ 882
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 and English 82. 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.

ESL 54X   **5.0 units**
Effective Writing with Computers for ESL
90 hours lecture
Prerequisite: One semester of 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   **5.0 units**
College Writing with Computers for ESL
90 hours lecture
Prerequisite: ESL 147 or ESL 54 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 146   **5.0 units**
Comprehensive Grammar I
90 hours lecture
Prerequisite: ESL 645 or one semester of 845 or Qualification through the LBCC assessment process for English or ESL
Recommended Preparation: ESL 860/861/862/863 per LBCC assessment process
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 147   **5.0 units**
Comprehensive Grammar II
90 hours lecture
Prerequisite: One semester ESL 146
Recommended Preparation: ESL 860/861/862/863 per LBCC assessment process
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 602A   **0.0 unit**
Reading Skills for ESL Students 1
27 hours lecture
Grading: LBCC Non-Graded Course

This first course in a series of seven 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   **0.0 unit**
Reading Skills for ESL Students 2
27 hours lecture
Recommended Preparation: ESL 602A
Grading: LBCC Non-Graded Course

This second course in a series of seven 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   **0.0 unit**
Reading Skills for ESL Students 3
27 hours lecture
Recommended Preparation: ESL 602B
Grading: LBCC Non-Graded Course

This third course in a series of seven 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 0.0 unit
Reading Skills for ESL Students 4
27 hours lecture
Recommended Preparation: ESL 602C
Grading: LBCC Non-Graded Course

This fourth course in a series of seven 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 0.0 unit
Reading Skills for ESL Students 5
27 hours lecture
Recommended Preparation: ESL 602D
Grading: LBCC Non-Graded Course

This fifth course in a series of seven 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 0.0 unit
Reading Skills for ESL Students 6
27 hours lecture
Recommended Preparation: ESL 602E
Grading: LBCC Non-Graded Course

This sixth course in a series of seven 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 0.0 unit
Fundamentals of English Grammar 1
54 hours lecture
Recommended Preparation: ESL 645
Grading: LBCC Non-Graded Course

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 0.0 unit
Fundamentals of English Grammar 2
54 hours lecture
Recommended Preparation: ESL 610A
Grading: LBCC Non-Graded Course

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 612 0.0 unit
Reading for Information and Pleasure
27 hours lecture
Prerequisite: ESL 645 or ESL 845
Grading: LBCC Non-Graded Course

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 613 0.0 unit
Conversation
27 hours lecture
Prerequisite: ESL 645 or ESL 845
Grading: LBCC Non-Graded Course

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 614 0.0 unit
Composition for ESL Students
27 hours lecture
Prerequisite: ESL 645 or ESL 845
Grading: LBCC Non-Graded Course

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 615 0.0 unit
Accent Reduction
108 hours lecture
Prerequisite: ESL 645 or ESL 845
Grading: LBCC Non-Graded Course

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 618 0.0 unit
Vocabulary Development
54 hours lecture
Recommended Preparation: ESL 645
Grading: LBCC Non-Graded Course

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 0.0 unit
Literacy for English Language Learners 1
27 hours lecture
Grading: LBCC Non-Graded Course

The first course in a two-course sequence to develop literacy skills of English language learners.

ESL 629 0.0 unit
Literacy for English Language Learners 2
27 hours lecture
Recommended Preparation: Placement into this class is via ESL department assessment
Grading: LBCC Non-Graded Course

The second course in a two-course sequence to develop literacy skills of English language learners.

ESL 630 0.0 unit
Reading for Citizenship 1
54 hours lecture
Recommended Preparation: Placement is determined via assessment by ESL department faculty
Grading: LBCC Non-Graded Course

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 631 0.0 unit
Reading for Citizenship 2
54 hours lecture
Recommended Preparation: Placement is determined via assessment by ESL department faculty
Grading: LBCC Non-Graded Course

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   **0.0 unit**
Reading for Citizenship AX
72 hours lecture
Recommended Preparation: Placement is determined via assessment by ESL department faculty
Grading: LBCC Non-Graded Course

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 640   **0.0 unit**
English for Everyday 0
108 hours lecture
Grading: LBCC Non-Graded Course

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 641   **0.0 unit**
English for Everyday 1
108 hours lecture
Prerequisite: ESL 640 or ESL 840 or Qualification through the LBCC assessment process for ESL
Grading: LBCC Non-Graded Course

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 642   **0.0 unit**
English for Everyday 2
108 hours lecture
Prerequisite: ESL 641 or one semester of ESL 841 or Qualification through the LBCC assessment process for ESL
Grading: LBCC Non-Graded Course

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 643   **0.0 unit**
English for Everyday 3
108 hours lecture
Prerequisite: ESL 642 or one semester of ESL 842 or Qualification through the LBCC assessment process for ESL
Grading: LBCC Non-Graded Course

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 644   **0.0 unit**
English for Everyday 4
108 hours lecture
Prerequisite: ESL 643 or one semester of ESL 843 or Qualification through the LBCC assessment process for ESL
Grading: LBCC Non-Graded Course

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 645   **0.0 unit**
English for Everyday 5
108 hours lecture
Prerequisite: ESL 644 or ESL 844 or Qualification through the LBCC assessment process for ESL
Grading: LBCC Non-Graded Course

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 670   0.0 unit
Listen/Speak for Work for ESL Level 1
90 hours lecture
Prerequisite: ESL 644 or ESL 844 or Qualification through the LBCC assessment process for ESL
Recommended Preparation: Students are strongly advised to enroll in ESL 670 and ESL 671X in the same semester
Grading: LBCC Non-Graded Course

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 671X   0.0 unit
Read/Write for Work for ESL Level 1
90 hours lecture
Prerequisite: ESL 644 or ESL 844 or Qualification through the LBCC assessment process for ESL
Recommended Preparation: Students are strongly advised to enroll in ESL 670 and ESL 671X in the same semester
Grading: LBCC Non-Graded Course

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 672   0.0 unit
Listen/Speak for Work for ESL Level 2
90 hours lecture
Prerequisite: ESL 670
Recommended Preparation: Students are strongly advised to enroll in ESL 672 and ESL 673X in the same semester
Grading: LBCC Non-Graded Course

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 673X   0.0 unit
Read/Write for Work for ESL Level 2
90 hours lecture
Prerequisite: ESL 671X
Recommended Preparation: Students are strongly advised to enroll in ESL 674 and ESL 675X 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 674   0.0 unit
Listen/Speak for Work for ESL Level 3
90 hours lecture
Prerequisite: ESL 672
Recommended Preparation: Students are strongly advised to enroll in ESL 674 and ESL 675X in the same semester
Grading: LBCC Non-Graded Course

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 675X   0.0 unit
Read/Write for Work for ESL Level 3
90 hours lecture
Prerequisite: ESL 673X
Recommended Preparation: Students are strongly advised to enroll in ESL 674 and ESL 675X in the same semester
Grading: LBCC Non-Graded Course

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 810A   1.0 unit
Fundamentals of English Grammar
54 hours laboratory
Recommended Preparation: ESL 645/845 or Equivalent skills as determined by ESL placement process
Grading: pass/no pass

Formerly ESL 810. This course is designed for ESL students in the reading (ESL 860-861) and/or writing (ESL 54/56, ENGL 801 A /B) 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 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 1.0 unit
Fundamentals of English Grammar 2
54 hours laboratory
Recommended Preparation: ESL 810A
Grading: pass/no pass

This course is designed for ESL students in the reading (ESL 862-863/READ 82) and/or writing (ESL 33/34, ENGL 105, 1) classes. 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 815 2.0 units
Accent Reduction
108 hours laboratory
Recommended Preparation: ESL 645 or ESL 845
Grading: pass/no pass

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 860 5.0 units
Reading & Vocabulary 1
90 hours lecture
Prerequisite: ESL 147 or qualification through the LBCC assessment process for ESL
Grading: pass/no pass

This course is an initiation to academic English reading, focusing on the foundational skills necessary to decode and comprehend academic discourse, including an introduction to morphology and syntax. Recommended for non-native speakers of English.

ESL 861 5.0 units
Reading & Vocabulary 2
90 hours lecture
Prerequisite: ESL 860 or READ 880 or qualification through the LBCC assessment process for Reading
Grading: pass/no pass

This course focuses on reading skills including comprehension, vocabulary development and strategies for fluent reading of academic texts. More emphasis is placed on morphological and syntactical structures in addition to semantic cues. Recommended for non-native speakers of English.

ESL 862 5.0 units
Reading & Vocabulary 3
90 hours lecture
Prerequisite: ESL 861 or qualification through the LBCC assessment process for Reading
Grading: pass/no pass

This course develops essential reading concepts, focusing on reading improvement strategies, vocabulary enrichment, interpretation of extra-textual information, and English language development. Exposure to longer text selections provides opportunities for applying academic reading skills.

ESL 863 5.0 units
Reading & Vocabulary 4
90 hours lecture
Prerequisite: ESL 862 or Qualification through the LBCC assessment process for Reading
Grading: pass/no pass

In this course, students will continue learning academic reading skills presented in ESL 860, 861, and 862. The emphasis is on critical reading of expository prose and the acquisition of advanced

comprehension skills and strategies necessary for success in content courses, including advanced paragraph and essay comprehension, critical reading, and rhetorical patterns. This course provides instruction in the strategies necessary for academic college reading with an emphasis on the application of comprehension, vocabulary and critical reading skills in academic texts. Recommended for non-native speakers of English.

English as a Second Language, Learning Center (ESLLC)

ESLLC 699   **0.0 unit**
Basic Skills for ESL Students
54 hours laboratory
Grading: LBCC Non-Graded Course

This course provides individualized programmed instruction for non-native 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.

Engineering Technology (ETEC)

ETEC 10   **1.0 unit**
Introduction to Engineering Technology
18 hours lecture
Grading: letter grade or pass/no pass

Formerly TEC 10. This course explores the varied branches of engineering technology, the functions of an engineer technologist, and the differences between a traditional engineering pathway and an 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 and design, current issues in society, and ethics as related to engineering technology. Students will be introduced to communication skills pertinent to engineering technology professions. Transferable to UC or CSU; see counselor for limitations

ETEC 20   **2.5 units**
Introduction to Engineering and Design
36 hours lecture, 36 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 CSU

ETEC 30   **2.5 units**
Principles of Engineering Technology
36 hours lecture, 36 hours laboratory
Recommended Preparation: MATH 110 or MATH 110B or MATH 880
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, project based 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 CSU

ETEC 40   **2.5 units**
Electronics for Engineering Technology
36 hours lecture, 36 hours laboratory
Recommended Preparation: MATH 110, 110B or 880
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

ETEC 60   3.0 units
Material Science for Engineering Tech
54 hours lecture
Grading: letter grade or pass/no pass

Engineering Technology 60 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

English, Writing Reading Center (EWRC)

EWRC 890   0.5 unit
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 891   0.5 unit
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   0.5 unit
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   0.5 unit
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   1.0 unit
Developmental Writing
7 hours lecture, 34 hours laboratory
Prerequisite: ENGL 105, 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.

EWRC 899   0.5 unit
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.

Family & Consumer Studies (FACS)

FACS 50   **3.0 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

FACS 64   **3.0 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

Fashion (FD)

FD 3   **2.0 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

FD 5   **2.0 units**
Intro/Manufacturing for Design/Merchan
36 hours lecture
Grading: letter grade or pass/no pass

This course serves as an introduction to garment manufacturing in the apparel industry; from the design concept through sourcing and pricing to the production of a clothing line. The course is required for fashion design and fashion merchandising majors.
Transferable to CSU

FD 9   **3.0 units**
Clothing Selection
54 hours lecture
Grading: letter grade or pass/no pass

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

FD 10   **3.0 units**
Textile Fibers and Fabrics
54 hours lecture
Grading: letter grade or pass/no pass

This course is a study of textile fibers and fabrics, their production/development, environmental impact, selection, use and care of wearing apparel and home furnishings. The course also covers current and future textile production and how appropriate performance characteristics are incorporated into materials and products. This course is required for all Fashion Design and Fashion Merchandising majors.
Transferable to UC or CSU; see counselor for limitations

FD 20   **3.0 units**
Introduction to the Fashion Industry
54 hours lecture
Grading: letter grade or pass/no pass

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

FD 22A 1.5 units
Merchandising for Profit I
27 hours lecture
Recommended Preparation: FD 20
Grading: letter grade or pass/no pass

This course covers the calculation, interpretation and analysis of the profit and loss statement. Basic pricing and repricing of merchandise and the importance of markup to profitable merchandising is explained and discussed. The course is typically offered for 8 weeks.
Transferable to CSU

FD 22B 1.5 units
Merchandising for Profit II
27 hours lecture
Recommended Preparation: FD 20
Grading: letter grade or pass/no pass

This course emphasizes quantitative merchandising techniques as applied to inventory and dollar control, discounts, dating procedures and shipping terms. The course is typically offered for 8 weeks.
Transferable to CSU

FD 23 3.0 units
Fashion/Merchandise Buying
54 hours lecture
Grading: letter grade or pass/no pass

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

FD 24 1.5 units
Beginning Sewing
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 24AB. This course covers the construction of simple garments using basic techniques of clothing construction. Principles and methods related to constructing both woven and knit fabrics will be covered.
Transferable to CSU

FD 25 1.5 units
Intermediate Sewing
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 25AB. This course focuses on intermediate clothing construction techniques as they apply to both woven and knit fabrics. Typical projects include a tailored shirt or blouse, fitted slacks with a waistband and knit shirts with neckline variations.
Transferable to CSU

FD 26 2.0 units
Advanced Sewing
18 hours lecture, 54 hours laboratory
Recommended Preparation:
One semester of FD 24 and FD 25
Grading: letter grade or pass/no pass

Formerly FD 26AB. This course uses advanced construction techniques in working with complex patterns and difficult fabrics. The student must consider proper selection of line and design for his/her figure, as well as fabric and equipment for professional clothing construction.
Transferable to CSU

FD 27 1.5 units
Production Sewing
18 hours lecture, 36 hours laboratory
Recommended Preparation: FD 24
Grading: letter grade or pass/no pass

Formerly FD 27AB. This course focuses on the principles and methods of stitching and garment construction on power industrial machines as applied to the production methods of the garment manufacturing industry. Occupational certificate is awarded upon completion of eight units.
Transferable to CSU

FD 29 2.0 units
Tailoring
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 29AB. This course covers the principles of tailoring techniques and finishes as applied to men's or women's clothing.
Transferable to CSU

FD 32 3.0 units
History of Fashion
54 hours lecture
Grading: letter grade or pass/no pass

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 costume as a social record and how costume has influenced lifestyle, culture and contemporary fashions. The course emphasizes costume, its effects and relationships to political, social and economic conditions.
Transferable to CSU

FD 36A   **1.5 units**
Pattern Drafting I: Basic Block
18 hours lecture, 27 hours laboratory
Recommended Preparation:
FD 24 or Beginning sewing skills
Grading: letter grade or pass/no pass

This is a beginning course in pattern drafting. The students will develop a basic block pattern for the commercial dress form or individual figure.
Transferable to CSU

FD 36B   **1.5 units**
Pattern Drafting II: Pattern Manipulation
18 hours lecture, 27 hours laboratory
Recommended Preparation: FD 36A
Grading: letter grade or pass/no pass

This is an intermediate course in the manipulation of the basic blocks drafted for commercial dress forms or individual figure.
Transferable to CSU

FD 37A   **1.5 units**
Pattern Draping I: Basic Sloper
18 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass

This is a beginning course, which includes freehand methods of pattern making and creating the basic sloper in muslin on dress forms. Each muslin is turned into a paper pattern, cut and constructed to produce the finished garment.
Transferable to CSU

FD 37B   **1.5 units**
Pattern Draping II: Sloper Manipulations
18 hours lecture, 27 hours laboratory
Recommended Preparation: FD 37A
Grading: letter grade or pass/no pass

This is an intermediate course in the freehand methods (draping) of manipulating a basic sloper to create finished designs. Each muslin is turned into a paper pattern, cut and constructed to produce a finished garment.
Transferable to CSU

FD 38A   **3.0 units**
Fashion Design I
36 hours lecture, 54 hours laboratory
Recommended Preparation:
FD 214, FD 24, FD 25, FD 36B
Grading: letter grade or pass/no pass

This advanced course provides the opportunity for students to design, illustrate, pattern draft and construct full-scale sample designs for a portfolio or fashion showing.
Transferable to CSU

FD 38B   **3.0 units**
Fashion Design II
36 hours lecture, 54 hours laboratory
Recommended Preparation: FD 24, FD 25, FD 37B
Grading: letter grade or pass/no pass

This is an advanced course that provides an opportunity for students to design, illustrate, drape and construct full scale sample designs for a portfolio or fashion showing.
Transferable to CSU

FD 38C   **3.0 units**
Fashion Design III
36 hours lecture, 54 hours laboratory
Recommended Preparation: FD 38A and FD 38B
Grading: letter grade or pass/no pass

This is an advanced course that provides an opportunity to research, illustrate, develop patterns, design and merchandise a sportswear grouping and construct full-scale designs for a portfolio or fashion showing.
Transferable to CSU

FD 38D   **3.0 units**
Fashion Design IV
36 hours lecture, 54 hours laboratory
Recommended Preparation: FD 38A, FD 38B, FD 38C
Grading: letter grade or pass/no pass

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

FD 39A 1.0 unit
Garment Technical Packages
18 hours lecture, 9 hours laboratory
Grading: letter grade or pass/no pass

This course covers the development of offshore technical packages to include: garment knock-offs, pattern adjustment, appropriate fit, fabric qualities and package specifications.
Transferable to CSU

FD 40 1.5 units
Advanced and Production Pattern Drafting
18 hours lecture, 36 hours laboratory
Recommended Preparation: FD 36B
Grading: letter grade or pass/no pass

Formerly FD 40AB. This course surveys the problems of advanced pattern manipulation and production pattern as related to developing a commercial fit for original designs. Also covered are techniques of industrial procedures found in the garment industry and pattern grading.
Transferable to CSU

FD 41 2.5 units
Fashion Show Production
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 41AD. Students plan and implement a professional fashion show production from concept to runway. Information on the details of planning, budgeting and producing fashion oriented events, plus the opportunity for "hands-on" experience in producing an actual event will be provided.
Transferable to CSU

FD 45A 1.5 units
Digital Fashion Illustration
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 245AD. This beginning course is designed to teach students to effectively create mood/trend boards, technical flat sketches with fashion garment proportions, line sheets, color ways, recolorations and graphic placements, and tech packs. Students will gain experience in current fashion design computer software such as Adobe Illustrator and Photoshop.
Transferable to CSU

FD 45B 1.5 units
Advanced Digital Fashion Illustration
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 245AD. 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. 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

FD 200 1.0 unit
Fashion Prediction/Promotion: Crit View
18 hours lecture
Grading: letter grade or pass/no pass

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.

FD 213 1.0 unit
Textile Surface Design
9 hours lecture, 27 hours laboratory
Grading: letter grade

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.

FD 214 2.0 units
Quick Sketch Croquis Drawing
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 214AB. This is a beginning drawing class for both design and merchandising students that stresses the basic proportions of the female and male fashion figure. The course will cover figure proportion, body movement, action poses, head, hand, foot and leg studies, and various drawing styles and mediums for expressing the fashion figure.

FD 215   **2.0 units**
Fashion Sketching I
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD215AB. 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.

FD 216   **2.0 units**
Fashion Portfolio Development
18 hours lecture, 54 hours laboratory
Recommended Preparation: One semester of FD 214 and FD 215 and FD 245
Grading: letter grade or pass/no pass

Formerly 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.

FD 230   **0.5 unit**
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 Fashion Design course an opportunity for additional hours working in the Fashion Design Lab. 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.

FD 231   **0.5 unit**
Fashion Design Lab-Garment Closures
27 hours laboratory
Corequisite: FD 38A or FD 38B or FD 38C or FD 38D
Grading: pass/no pass

This course focuses on creating garment closures, facings and linings. Students will have access to specialized equipment in the fashion design lab. Students completing 27 hours of lab work during the semester will receive .5 unit of credit.

FD 240   **2.5 units**
Fashion Show Promotion and Management
36 hours lecture, 36 hours laboratory
Prerequisite: FD 41
Grading: letter grade or pass/no pass

Students learn concepts, practices and procedure related to promotion and management of a fashion event. Course work includes planning, budgeting, directing, and evaluating promotional activities such as visual merchandising, publicity, and personal and non-personal selling for a fashion event.

FD 244   **1.0 unit**
Computer Patternmaking
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 244AD. This course is designed to provide hands-on training utilizing the latest versions of apparel pattern making software technology, such as PDS 2000 (Pattern Design System by Gerber Technology). Industry techniques and methods for creating and manipulating apparel patterns are presented.

FD 258   **1.0 unit**
Swimwear
9 hours lecture, 27 hours laboratory
Recommended Preparation: FD 24
Grading: letter grade or pass/no pass

Formerly FD 258AD. This course instructs the student in the design, sewing, and fitting of swimwear. Special emphasis is given to 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.

FD 271WE   **1.0 - 4.0 units**
Work Experience - Fashion Design
72 hours laboratory
Grading: letter grade or pass/no pass

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

Film (FILM)

FILM 1 3.0 units
Introduction to Film Studies
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34 or qualify for ENGL 1 through the assessment process
Grading: letter grade or pass/no pass

This course serves as an introduction to the evaluation of film as an art form through an analysis and appreciation of its aesthetics, history, literature, creative techniques and expression of its societies and cultures, together with its influence on twentieth century values.
Transferable to UC or CSU; see counselor for limitations

FILM 2A 3.0 units
Film History I
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 invention to World War II. 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 Examine the work of several historically significant filmmakers.
Transferable to UC or CSU; see counselor for limitations

FILM 2B 3.0 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 UC or CSU; see counselor for limitations

FILM 10 3.0 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 basic film genres while also exploring their artistic, social, cultural, political and ideological contexts. The emphasis is on such types as the science-fiction film, western, gangster film, crime and detective thriller ("film noir"), musical, comedy, or horror film. The particular genre for study will change each semester, based upon the instructor's choice. Genre topics will be listed as a subheading in each semester's course schedule.
Transferable to UC or CSU; see counselor for limitations

FILM 11 3.0 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 UC or CSU; see counselor for limitations

FILM 20 3.0 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 UC or CSU; see counselor for limitations

FILM 21   **3.0 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 class provides intermediate film production experiences for the transfer film major. It includes editing, directing, scripting and producing, with special emphasis on pre- and post-production considerations.
Transferable to UC or CSU; see counselor for limitations

FILM 25   **3.0 units**
Introduction to Digital Cinematography
36 hours lecture, 72 hours laboratory
Prerequisite: FILM 20
Grading: letter grade or pass/no pass

This course provides 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 UC or CSU; see counselor for limitations

FILM 40   **3.0 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

Fire Science (FIRE)

FIRE 1   **3.0 units**
Fire Protection Organization
54 hours lecture
Grading: letter grade

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

FIRE 2   **3.0 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

FIRE 3   **3.0 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 maintenance of portable fire extinguishers.
Transferable to CSU

FIRE 4   **3.0 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

FIRE 5   3.0 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 fires characteristics and the effects of extinguishing agents and fire management methods are studied.
Transferable to CSU

FIRE 53   3.0 units
Fire Hydraulics
54 hours lecture
Grading: letter grade

This course provides a study of applied math and formula calculations of hydraulics in conjunction with the procedures of the fire service industry, and includes the application of mental hydraulic calculations.. The course will introduce students to basic components required when utilizing water supplies methods and procedures.
Transferable to CSU

FIRE 54   3.0 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

FIRE 57   3.0 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

FIRE 58   3.0 units
Intro to Fire Company Administration
54 hours lecture
Grading: letter grade

This is an introductory level class, which outlines a review of fire department organization and administration. Students will identify planning, organizing and supervising within the Fire department occupation, with an emphasis on the first line company officer's role, as a Fire Captain.
Transferable to CSU

FIRE 61   3.0 units
Rescue Practices
54 hours lecture
Grading: letter grade

This course is a study of rescue problems and techniques, including the use of rescue equipment, care of childbirth victims and newborns, the effects of toxic gases and chemicals, radiation hazards, respiration and resuscitation, and extrication.
Transferable to CSU

FIRE 62   3.0 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

FIRE 64   **3.0 units**
Hazardous Materials 2
54 hours lecture
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

FIRE 65   **3.0 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

FIRE 240   **0.5 unit**
Firefighter I Physical Agility
4 hours lecture, 16 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   **2.0 units**
Introduction to Floral Design: Fall Flowers
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass

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   **2.0 units**
Introduction to Floral Design: Spring Flowers
27 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass

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   **2.0 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

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   **2.0 units**
Intermediate Floral Design-Sympathy
27 hours lecture, 27 hours laboratory
Recommended Preparation: One semester of FLO 286A or FLO 286B
Grading: letter grade

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 2.0 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

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 288 2.0 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

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 289 3.0 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 0.5 unit
Floral Creativity and Competition
9 hours lecture, 18 hours laboratory
Recommended Preparation:
Intermediate floral design skills
Grading: letter grade or pass/no pass

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.

Foreign Language, French (FREN)

FREN 1 5.0 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.
Transferable to UC or CSU; see counselor for limitations

FREN 1C 5.0 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 UC or CSU; see counselor for limitations

FREN 2 5.0 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 UC or CSU; see counselor for limitations

FREN 2C   **5.0 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 UC or CSU; see counselor for limitations

FREN 3   **5.0 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 French-speaking cultures. There is continued listening and speaking practice, as well as development of reading and writing skills.
Transferable to UC or CSU; see counselor for limitations

FREN 4   **5.0 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 UC or CSU; see counselor for limitations

FREN 25A   **3.0 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 topic-related vocabulary, to improve fluency in the target language. Outside reading and reporting in the field of study are required.
Transferable to UC or CSU; see counselor for limitations

Food & Nutrition (F_N)

F_N 20 (C-ID NUTR 110)   **3.0 units**
Nutrition and Life
54 hours lecture
Grading: letter grade or pass/no pass

This course is an introduction to the basic physiological, psychological, social and biochemical principles related to human nutrition.
Transferable to UC or CSU; see counselor for limitations

F_N 21   **4.0 units**
Food Selection and Meal Preparation
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

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

F_N 26   **1.0 unit**
Nutrition for the Active Person
18 hours lecture
Grading: letter grade or pass/no pass

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 pre-game meals.
Transferable to CSU

F_N 224   **3.0 units**
Sanitation, Safety and Equipment
54 hours lecture
Grading: letter grade or pass/no pass

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 at the completion of the course. This certificate required for those working in a food service and healthcare industries and meets the California State Health Code.

F_N 225 — 3.0 units
Intro to Food Service/Work Organizations
54 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 227 — 3.0 units
Supervision and Training Techniques
54 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 228 — 3.0 units
Food Production Management
54 hours lecture
Grading: letter grade or pass/no pass

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 complete 3 hours throughout the course of the semester in a Multidisciplinary Success Center to complete activities and assignments that relate specifically to this course's content.

F_N 230A — 2.5 units
Clinical Field Experience I
18 hours lecture, 90 hours laboratory
Grading: pass/no pass

Formerly 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.

F_N 230B — 2.5 units
Clinical Field Experience I
18 hours lecture, 90 hours laboratory
Recommended Preparation: F_N 230A
Grading: pass/no pass

Formerly 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.

F_N 231 — 3.0 units
Menu Planning and Food Purchasing
54 hours lecture
Grading: letter grade

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.

F_N 232 — 3.0 units
Therapeutic Diets
54 hours lecture
Recommended Preparation: F_N 20 (may be taken concurrently)
Grading: letter grade

This course presents the principles of an indication for therapeutic diets in the treatment of diseases and disorders. Course content applies to dietetics programs in hospitals, convalescent and extended care facilities.

F_N 233 — 1.0 unit
Special Topics in Health Care Dietetics
18 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 234   3.0 units
Advanced Nutrition Care
54 hours lecture
Prerequisite: F_N 232
Grading: letter grade or pass/no pass

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.

F_N 235   3.0 units
Advanced Medical Nutrition Therapy
54 hours lecture
Prerequisite: F_N 232
Recommended Preparation: F_N 232
Grading: letter grade

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.

F_N 236   1.0 unit
Dietetic Professional Development Seminar
18 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 240A   3.0 units
Clinical Field Experience I
180 hours laboratory
Recommended Preparation:
Two semesters of F_N 230B
Grading: pass/no pass

Formerly 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.

F_N 240B   3.0 units
Clinical Field Experience II
180 hours laboratory
Recommended Preparation: F_N 240A
Grading: pass/no pass

Formerly 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.

F_N 250   2.0 units
Nutrition in Healthy Cooking
36 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 252A   1.5 units
Cake Decorating Techniques
18 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly 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.

F_N 252B   1.5 units
Cake Decorating for Special Occasions
18 hours lecture, 36 hours laboratory
Grading: letter grade

Topics in this course cover 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.

F_N 253 1.0 unit
ServSafe Certification
18 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 255C 1.0 unit
Nutrition for Adults and Aging
18 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 255D 1.0 unit
Vegetarian Lifestyle
18 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 256 2.0 units
Weight Control & Energy Balance
36 hours lecture
Grading: letter grade or pass/no pass

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.

F_N 260 1.0 unit
Cultural Foods
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

Formerly 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.

F_N 261 1.0 unit
Cooking for Wellness
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

Formerly 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.

F_N 262 1.0 unit
Cooking for Singles
18 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

Formerly 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.

Business, General (GBUS)

GBUS 5 (C-ID BUS 110) 3.0 units
Introduction to Business
54 hours lecture
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 UC or CSU; see counselor for limitations

GBUS 10 3.0 units
Personal Financial Management
54 hours lecture
Grading: letter grade

This course is designed to equip students with the financial literacy skills needed to effectively manage their personal finances and make sound lifelong financial decisions. Students will examine

their relationships with money and develop an understanding of the social, psychological, and physiological contexts that influence financial decisions. Students will learn the financial tools needed to analyze, plan and manage their financial resources at different life stages. Topics include budgeting, income tax, managing basic assets, home buying, managing credit, analyzing and managing investments, managing insurance, retirement planning, and estate planning.
Transferable to CSU

GBUS 25   **3.0 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

GBUS 215   **3.0 units**
Introduction to Business Ethics
54 hours lecture
Grading: letter grade or pass/no pass

This course will examine ethical issues in business using interdisciplinary approach or team teaching drawn from Management and Philosophy. 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 and ethical egoism. This course is not open for credit to students who have completed Philosophy 16.

Geography (GEOG)

GEOG 2 (C-ID GEOG 120)   **3.0 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 and migration, culture (religion and language), political.
Transferable to UC or CSU; see counselor for limitations

GEOG 5   **3.0 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 UC or CSU; see counselor for limitations

GEOG 10 (C-ID GEOG 155)   **3.0 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 UC or CSU; see counselor for limitations

GEOG 15F (C-ID GEOG 160)   **2.0 units**
Field Geography
18 hours lecture, 54 hours laboratory
Recommended Preparation: GEOG 2 or PGEOG 1 or GEOG 40 or GEOG 48
Grading: letter grade or pass/no pass

This class will expose geography majors and others to the techniques employed by geographers in the field. Classroom studies are combined with actual field studies in selected study areas. Field experiences are designed to apply basic geographic concepts and techniques in the study of diverse landscapes, natural and cultural, and the cultural and physical processes shaping them.
Transferable to CSU

GEOG 40   **3.0 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 UC or CSU; see counselor for limitations

GEOG 48 (C-ID GEOG 140)   **3.0 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 UC or 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 UC or 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 UC or CSU; see counselor for limitations

GEOL 2   **3.0 units**
General Geology, Physical
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 2L and a beginning course for geology majors.
Transferable to UC or CSU; see counselor for limitations

GEOL 2F   **1.0 unit**
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 UC or CSU; see counselor for limitations

GEOL 2L (C-ID GEOL 100)   1.5 units
General Geology, Physical Geology Lab
18 hours lecture, 36 hours laboratory
Prerequisite: GEOL 2 (may be taken concurrently)
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 UC or CSU; see counselor for limitations

GEOL 3   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 UC or CSU; see counselor for limitations

GEOL 3H   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 UC or CSU; see counselor for limitations

GEOL 4   2.0 units
Field Geology
27 hours lecture, 27 hours laboratory
Prerequisite:
GEOL 1, 2, 2L, 3, 3H or 5 (may be taken concurrently)
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 UC or CSU; see counselor for limitations

GEOL 5   3.0 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 you 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 UC or CSU; see counselor for limitations

GEOL 7   2.0 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

GEOL 10   4.0 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 UC or CSU; see counselor for limitations

GEOL 16 3.0 units
Field Techniques/Geol: So Calif Deserts
36 hours lecture, 54 hours laboratory
Prerequisite: GEOL 1, 1H, 2 or 5 (may be taken concurrently)
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

GEOL 17 2.0 units
Geology of Southern California Deserts
27 hours lecture, 27 hours laboratory
Prerequisite: GEOL 1, 2, or 5 (may be taken concurrently)
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 UC or CSU; see counselor for limitations

GEOL 18 3.0 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 UC or CSU; see counselor for limitations

GEOL 20 3.0 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

Foreign Language, German (GER)

GER 1 5.0 units
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 UC or CSU; see counselor for limitations

GER 2 5.0 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 UC or CSU; see counselor for limitations

History (HIST)

HIST 1A   3.0 units
History: Western (European) Civilization
54 hours lecture
Grading: letter grade

This course is a broad survey of European civilization
and its world significance from pre-history to the end
of the Thirty Years War, including Greece, Rome, the
Middle Ages, Renaissance and Reformation through
the Age of Discovery.
Transferable to UC or CSU; see counselor for limitations

HIST 1AH (C-ID HIST 170)   3.0 units
Honors History of Western European Civ
54 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade

This course is a broad survey of European civilization
and its world significance from pre-history to the end
of the Thirty Years War, including Greece, Rome, the
Middle Ages, Renaissance and Reformation through
the Age of Discovery.
Transferable to UC or CSU; see counselor for limitations

HIST 1B (C-ID HIST 180)   3.0 units
History: Western (European) Civilization
54 hours lecture
Grading: letter grade

This course, History of Western Civilization, traces
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 UC or CSU; see counselor for limitations

HIST 1BH   3.0 units
Honors History of Western European Civ
54 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade

This course, History of Western Civilization Honors,
traces 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 UC or CSU; see counselor for limitations

HIST 2B (C-ID HIST 150)   3.0 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 UC or CSU; see counselor for limitations

HIST 2C   3.0 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 UC or CSU; see counselor for limitations

HIST 2CH   3.0 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 UC or CSU; see counselor for limitations

HIST 5A   3.0 units
History of England and Great Britain
54 hours lecture
Grading: letter grade

This class is a survey of British history from antiquity
through the reign of Queen Anne (1714). The

course focuses on the political, social, religious and intellectual institutions of ancient and medieval English history, with a special emphasis given to the evolution of British political philosophy and law and its impact on European history.
Transferable to UC or CSU; see counselor for limitations

HIST 5B   3.0 units
History of England and Great Britain
54 hours lecture
Grading: letter grade

This Course is a survey of English history from the accession of George I of Hanover (1714) to the present with an emphasis on the creation and expansion of the British Empire, the Industrial Era, and the collapse of the European hegemony during World Wars I and II. Particular attention will be given to the postwar adjustment of the United Kingdom to the new set of realities that emerged in the second half of the 20th century, including Britain's relationship to the European Community.
Transferable to UC or CSU; see counselor for limitations

HIST 7   3.0 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 CSU

HIST 8A   3.0 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 UC or CSU; see counselor for limitations

HIST 8AH   3.0 units
Honors History of the Americas
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 UC or CSU; see counselor for limitations

HIST 8B   3.0 units
History of the Americas
54 hours lecture
Grading: letter grade

This course presents a comprehensive survey of the distinct national identities of the nations of the Western Hemisphere as they developed and matured during the nineteenth and twentieth centuries. The course focuses on a comparative analysis of North and South America as the new nations struggled with economic, political and social issues. This course is recommended for Spanish majors.
Transferable to UC or CSU; see counselor for limitations

HIST 8BH   3.0 units
Honors History of the Americas
54 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade

This course presents a comprehensive survey of the distinct national identities of the nations of the Western Hemisphere as they developed and matured during the late nineteenth century to present. The course focuses on a comparative analysis of North and South America as the new nations struggled with economic, political and social issues, as well as the international relations in the Western Hemisphere.
Transferable to UC or CSU; see counselor for limitations

HIST 9A   **3.0 units**
History of China
54 hours lecture
Recommended Preparation: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This class is a survey of Chinese history from antiquity to the present with an emphasis on the modern era. Emphasis is given to the evolution of traditional China, the Chinese way of life, the dynastic cycle, the impact of modernization, the imperial era, and the building of a new society and economic power during the 20th and 21st centuries.
Transferable to CSU

HIST 9B   **3.0 units**
History of Japan and Korea
54 hours lecture
Recommended Preparation: Eligibility for ENGL 1
Grading: letter grade or pass/no pass

This class is a survey of Japanese and Korean history from antiquity to the present with an emphasis on the modern era. Particular attention is given to the relationship of both countries to traditional China, the development of a unique way of life in each, and the impact of modernization and the imperial era on these two societies during the 19th, 20th and 21st centuries.
Transferable to CSU

HIST 9C   **3.0 units**
History of India and Southeast Asia
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 CSU

HIST 10 (C-ID HIST 130)   **3.0 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 UC or CSU; see counselor for limitations

HIST 10H (C-ID HIST 130)   **3.0 units**
Honors Hist/Early Am (Colonial-Reconstr)
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 10H and 11H need not be taken in sequence, if the student desires to take both courses.
Transferable to UC or CSU; see counselor for limitations

HIST 11 (C-ID HIST 140)   **3.0 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 21st century. HIST 10 and 11 need not be taken in sequence if the student desires to take both courses.
Transferable to UC or CSU; see counselor for limitations

HIST 11H   **3.0 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 11H need not be taken in sequence if the student desires to take both courses.
Transferable to UC or CSU; see counselor for limitations

HIST 18   3.0 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 UC or CSU; see counselor for limitations

HIST 25   3.0 units
History of American Woman
54 hours lecture
Grading: letter grade

This course is a survey of the history of women in America from the pre-colonial period to the present. Emphasis is on the relevant political, economic, intellectual, and social roles filled by American women.
Transferable to UC or CSU; see counselor for limitations

HIST 27A   3.0 units
History of the African-American 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 to the Civil War. 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 UC or CSU; see counselor for limitations

HIST 27B   3.0 units
Hist/African-American (Reconstr-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 twenty-first century.
Transferable to UC or CSU; see counselor for limitations

HIST 33   3.0 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 UC or CSU; see counselor for limitations

HIST 47   3.0 units
Facts, Evidence, and Explanation
54 hours lecture
Prerequisite: ENGL 1
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 CSU

HIST 48   **3.0 units**
History of California
54 hours lecture
Grading: letter grade or pass/no pass

This course is a comprehensive survey of California from pre-Columbian times to the present. It focuses on Amerindian cultures, the exploration, colonization and development of Hispanic California, the coming of the American and the political, economic and cultural development of California since its acquisition by the United States. This course is recommended for those planning a teaching career in California.
Transferable to UC or CSU; see counselor for limitations

Health Education (HLED)

HLED 3 (C-ID PHS 100)   **3.0 units**
Contemporary Health Problems
54 hours lecture
Grading: letter grade or pass/no pass

This course is designed to explore 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. This course is not open for credit to students registered in or with credit in HLED 2. Fulfills AA/AS degree requirements in Health Education.
Transferable to UC or CSU; see counselor for limitations

HLED 4   **3.0 units**
Women's Health Issues
54 hours lecture
Grading: letter grade or pass/no pass

This course proposes to help women attain an optimal state of health. The adoption of a healthy lifestyle will be examined through topics such as reproductive health issues, sexuality, mental wellness, positive body image and self-esteem, exercise, nutrition, weight management, disease prevention, substance use and addiction, and informed consumerism. Other topics include gender differences in health and mortality and the current status of research on women's health issues.
Transferable to UC or CSU; see counselor for limitations

HLED 5   **3.0 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 UC or CSU; see counselor for limitations

HLED 10 (C-ID PSY 130)   **3.0 units**
Human Sexuality
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34X or Qualification for ENGL 1 through the LBCC assessment process for English
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 UC or CSU; see counselor for limitations

HLED 21 (C-ID PHS 101)   **3.0 units**
Introduction to Public Health
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34x or Qualification for ENGL 1 through assessment 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 CSU

HLED 22 (C-ID PHS 102)　　　　**3.0 units**
Health and Social Justice
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34x or Qualification for ENGL 1 through assessment 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 CSU

HLED 24 (C-ID PHS 103)　　　　**3.0 units**
Drugs, Health and Society
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34X or Qualification for ENGL 1 through the LBCC assessment 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 CSU

Horticulture (HORT)

HORT 11A　　　　**3.0 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 this class' requirements.
Transferable to CSU

HORT 11B　　　　**3.0 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

HORT 11C　　　　**3.0 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

HORT 11D　　　　**3.0 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

HORT 15A   **2.0 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

HORT 15B   **2.0 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

HORT 19   **4.0 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

HORT 21   **3.0 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

HORT 26A   **4.0 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

HORT 26B   **4.0 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

HORT 30   **3.0 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

HORT 202 **4.0 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 223 **4.0 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 227 **2.0 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 323 **0.5 unit**
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, masonary, wood fences and gates and bidding.

HORT 430 **4.0 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/Social Work (HS)

HS 1 **3.0 units**
Introduction to Social Work
54 hours lecture
Grading: letter grade or pass/no pass

This course is designed to identify and analyze the history and development of the primary services in urban and rural communities in America. 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 beginning assessment and intervention phases are also examined. The skills and responsibilities of the Social Worker in resolution of psychosocial problems are examined.
Transferable to CSU

HS 7 **3.0 units**
Introduction to Victimology
54 hours lecture
Grading: letter grade

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

HS 15 **3.0 units**
Social Welfare: People with Disabilities
54 hours lecture
Grading: letter grade

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

HS 26   3.0 units
Introduction to Gerontology
54 hours lecture
Grading: letter grade or pass/no pass

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

HS 40A   3.0 units
Introduction to Addictive Behaviors
54 hours lecture
Grading: letter grade

This course is designed for individuals who wish to expand their overall knowledge of addictive behaviors. Topics covered include the basic causal relationship between alcoholism, drug abuse and addictive personalities. Students will be taught how to identify treatable issues, establish goals and objectives to treat these issues and practice implementing them to determine their effectiveness with both inpatient and outpatient populations. This course is designed to prepare students for level entry positions in the growing human services field.
Transferable to CSU

HS 40B   3.0 units
Introduction to Addictive Behaviors
54 hours lecture
Grading: letter grade

This course is designed for individuals who wish to expand their knowledge of addictive behaviors. Topics covered include basic theories of codependency and eating disorders, and the exploration of methods to identify, classify, intervene with and treat clients. This course is designed for persons who are preparing for careers in the rapidly growing human services field.
Transferable to CSU

HS 41   3.0 units
Introduction to Chemical Dependency
54 hours lecture
Grading: letter grade

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.

HS 43   3.0 units
Case Management: Treatment & Aftercare
54 hours lecture
Grading: letter grade

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.

HS 45   3.0 units
Stress Management for Case Managers
54 hours lecture
Grading: letter grade

This course examines the many psychological, social and environmental stresses commonly experienced by persons working in the helping fields. Specific ways to cope or more effectively manage these stressors will be presented. Material will include techniques to deal with individual, social & interpersonal issues.   The course is strongly recommended for individuals working as case managers in the helping fields. HS 45 is required for persons seeking CAADAC certification. This course in an elective for CAADE students. It is recommended

for persons wishing to work in other areas of the Human Services field.

HS 46   **3.0 units**
Physiology & Pharmacology of Drugs
54 hours lecture
Grading: letter grade

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.

HS 47   **3.0 units**
Intervention, Treatment & Recovery
54 hours lecture
Grading: letter grade

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.

HS 48   **3.0 units**
Group & Family Process
54 hours lecture
Grading: letter grade

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 role playing. 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

HS 50   **3.0 units**
Law and Ethics
54 hours lecture
Grading: letter grade

Topics covered include the applicable laws and ethics relating to case manager/client relationship in a treatment setting. Laws relating to confidentiality, patient rights, assessments, sharing of personal information and crisis intervention requirements will be presented. Learning how to deal with such issues as evaluating a person's potential for suicide, child & elder abuse and when individuals pose a serious potential to harm to others are also examined. This is a core course for Alcohol & Drug Studies majors who are pursuing a Career Certificate.

HS 71   **2.0 units**
Work Experience - Human Services
18 hours lecture, 74 hours laboratory
Corequisite: Concurrent enrollment in at least one additional course in the discipline
Grading: letter grade or pass/no pass

Formerly HS 71AD. This course prepares students to develop work experience objectives, career goals, job interviewing skills, how to write a resume and address employment issues encountered in the workplace. Field placements provide vocational experiences through direct work experiences in the Alcohol/Drug treatment and Human Services disciplines.
Transferable to CSU

HS 72A   **3.5 units**
Fieldwork Instruction and Seminar I
27 hours lecture, 108 hours laboratory
Prerequisite: HS 41 and 43 and 46 and 48 and 50 and 252
Grading: letter grade

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

HS 72B   **3.5 units**
Field Instruction and Seminar II
27 hours lecture, 108 hours laboratory
Prerequisite: HS 72A
Grading: letter grade

This course provides continued supervised field-instruction 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, industry-related 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.

HS 207   **3.0 units**
Development of Helping/Listening Skills
54 hours lecture
Grading: letter grade or pass/no pass

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, responding and personalizing assistance to clients. Small groups will be used to guide students through a learning sequence of listening and helping skills.

HS 242   **3.0 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.

HS 252   **3.0 units**
Co Occurring Disorders
54 hours lecture
Grading: letter grade

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.

HS 255   **3.0 units**
Alcohol & Drug Prevention & Education
54 hours lecture
Grading: letter grade

This course will review the essential components of effective Alcohol & Drug prevention programs. Prevention programs and activities appropriate for the community, school, parents, family, and worksites will be presented. Strategies such as education; public policies; media/information dissemination, ethnic, cultural, gender-specific approaches; and environmental risk reduction and alternatives will be presented and assessed for their application to different target populations.

HS 260   **3.0 units**
Domestic Violence Intervention Strategies
54 hours lecture
Grading: letter grade

This course is designed to provide a portion of the required academic training needed to prepare students to pursue the work experience required to qualify as a Certified Domestic Violence Counselor. Training shall include, but will not be limited to, the following: 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 victims.

Homeland Security Admin (HSA)

HSA 401   **3.0 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 402   3.0 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 403   3.0 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.

Humanities (HUMAN)

HUMAN 1   3.0 units
Comparative World Cultures
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 UC or CSU; see counselor for limitations

HUMAN 1H   3.0 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. These teams study 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 part of the Honors Curriculum. This course is not open for credit to students who have completed HUMAN 1, SOCSC 1, or SOCSC 1H.
Transferable to UC or CSU; see counselor for limitations

HUMAN 7   3.0 units
American Pluralism 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 UC or CSU; see counselor for limitations

Business, International (IBUS)

IBUS 1   3.0 units
Introduction to International Business
54 hours lecture
Grading: letter grade

This course offers an introduction to the global business macro-environment 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

IBUS 20   3.0 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

IBUS 52   3.0 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

IBUS 60   3.0 units
International Business Law
54 hours lecture
Recommended Preparation: LAW 18A
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

IBUS 75   3.0 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

Foreign Language, Italian (ITAL)

ITAL 1   5.0 units
Elementary Italian
90 hours lecture, 18 hours laboratory
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 UC or CSU; see counselor for limitations

ITAL 1C   5.0 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 UC or CSU; see counselor for limitations

ITAL 2   5.0 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 UC or CSU; see counselor for limitations

ITAL 2C 5.0 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 UC or CSU; see counselor for limitations

ITAL 4 5.0 units
Intermediate Italian
90 hours lecture
Prerequisite: ITAL 3
Grading: letter grade or pass/no pass

This course continues the review of Italian 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 CSU

Foreign Language, Japanese (JAPAN)

JAPAN 1 5.0 units
Elementary Japanese
90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

This course introduces the students to the four skills necessary for language acquisition: listening, speaking, reading and writing (hiragana and katakana systems). Students will learn the sound system and basic grammatical structures. It presents everyday situations and topics of the Japanese culture. It is not recommended for native speakers of Japanese.
Transferable to UC or CSU; see counselor for limitations

JAPAN 2 5.0 units
Elementary Japanese
90 hours lecture, 18 hours laboratory
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 UC or CSU; see counselor for limitations

JAPAN 3 5.0 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 in the four skills necessary for language acquisition: listening, speaking, reading and writing. Topics will be placed in the contemporary context in the Japanese world. This course is not recommended for native speakers of Japanese.
Transferable to UC or CSU; see counselor for limitations

JAPAN 4 5.0 units
Intermediate Japanese
90 hours lecture
Prerequisite: JAPAN 3
Grading: letter grade or pass/no pass

This course is the second semester of intermediate Japanese. It continues the review of Japanese grammar, emphasizing more advanced structures, and introducing additional kanji characters. Topics include expansion of vocabulary, development of reading and speaking ability and improvement of writing skills through the writing process.
Transferable to UC or CSU; see counselor for limitations

Journalism (JOURN)

JOURN 1A   3.0 units
Digital Design and Publication
54 hours lecture
Grading: letter grade or pass/no pass

In the course, students study and practice digital design and publication skills such as writing, editing, designing and producing websites, fliers, brochures, newsletters, small magazines and newspapers, using electronic publishing techniques.
Transferable to CSU

JOURN 1B   3.0 units
Digital Design and Publication
54 hours lecture
Grading: letter grade or pass/no pass

In this course, students study and practice advanced digital design publication skills such as writing, editing, designing and producing websites, fliers, brochures, newsletters, small magazines and newspapers using electronic publishing techniques.
Transferable to CSU

JOURN 5   4.0 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

JOURN 6   3.0 units
Magazine Writing
36 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly JOURN 6AD. Students will analyze principles of magazine publication and methods of researching, writing, editing, and producing magazines of every type. Students will receive practical training and instruction in researching, interviewing, writing, editing and proofreading. Students guide photographers to complete team assignments.
Transferable to CSU

JOURN 10 (C-ID JOURN 100)   3.0 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 UC or CSU; see counselor for limitations

JOURN 20 (C-ID JOURN 110)   4.0 units
Beginning Newswriting and Reporting
72 hours lecture
Prerequisite: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

JOURN 25   3.0 units
Free-Lance Writing
54 hours lecture
Grading: letter grade or pass/no pass

The course offers training in the writing and marketing of website, newspaper and magazine feature stories.
Transferable to CSU

JOURN 35 (C-ID JOURN 160)   3.0 units
Photojournalism
54 hours lecture
Grading: letter grade

Formerly JOURN 35AD. The 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

JOURN 36 3.0 units
Digital Photojournalism
54 hours lecture
Prerequisite: JOURN 35
Grading: letter grade

This course offers instruction in basic and advanced photojournalism techniques and practical experience in web, digital, social-media network, newspaper and magazine photography and audio recording. It is not open to students registered in or with credit in PHOT 35.
Transferable to CSU

JOURN 40 3.0 units
Social Media in Journalism
54 hours lecture
Grading: letter grade

Students learn and understand multiple aspects and principles of beginning Social Media in Journalism through discussion, analysis, review, research and practice of accuracy, ethics, timeliness, privacy, legal issues, security, development, technology, interaction with print publications, photojournalism, subscriptions, future formats, frequency, replies, anonymity, impact, audience, citizen journalism, feedback and other areas. Designed for all majors, the course utilizes critical thinking, writing, oral communication and mathematics to educate students about this rapidly growing and innovative area of communication that is shaping the field of Journalism.
Transferable to UC or CSU; see counselor for limitations

JOURN 80 (C-ID JOURN 130) 4.0 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

JOURN 81 4.0 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

JOURN 82 4.0 units
Multimedia Newsroom: Profiles
54 hours lecture, 54 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

JOURN 83 4.0 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

JOURN 86   4.0 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

JOURN 87   4.0 units
Multimedia Editors: Visuals
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

This courses 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

JOURN 88   4.0 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

Foreign Language, Khmer (KHMER)

KHMER 9   5.0 units
Khmer for Heritage Speakers
90 hours lecture
Recommended Preparation: Heritage Learner with at least low-intermediate 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 UC or CSU; see counselor for limitations

KHMER 10   5.0 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 Post-Angkorian periods. This course also includes extensive analysis of the Khmer writing system, conventions in spelling, and key vocabulary.
Transferable to UC or CSU; see counselor for limitations

Kinesiology, Adapted (KINA)

KINA 1   1.0 unit
PE for the Physically Limited
54 hours laboratory
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

self-awareness. All activities will be adapted to the interests, capabilities and limitations of each student.
Transferable to UC or CSU; see counselor for limitations

Kinesiology, General (KING)

KING 2 1.0 unit
Ultimate Frisbee
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 UC or CSU; see counselor for limitations

KING 2B 1.0 unit
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

KING 10 1.0 unit
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 UC or CSU; see counselor for limitations

KING 10B 1.0 unit
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 UC or CSU; see counselor for limitations

KING 14 1.0 unit
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 UC or CSU; see counselor for limitations

KING 14B 1.0 unit
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 UC or CSU; see counselor for limitations

KING 55 4.0 units
Lifeguard/Water Safety Training
54 hours lecture, 54 hours laboratory
Recommended Preparation:
Advanced swimming ability
Grading: letter grade

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 UC or CSU; see counselor for limitations

KING 65 1.0 unit
Martial Arts
54 hours laboratory
Grading: letter grade

Formerly KING 65AD. This 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, kata and forms, and kick/strike analysis.
Transferable to UC or CSU; see counselor for limitations

KING 65B   **1.0 unit**
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. 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, kata and forms, and kick/strike analysis.
Transferable to UC or CSU; see counselor for limitations

KING 66   **1.0 unit**
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 UC or CSU; see counselor for limitations

KING 66B   **1.0 unit**
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 UC or CSU; see counselor for limitations

KING 70   **1.0 unit**
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 UC or CSU; see counselor for limitations

KING 70B   **1.0 unit**
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 UC or CSU; see counselor for limitations

KING 74   **1.0 unit**
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 UC or CSU; see counselor for limitations

KING 76   **1.0 unit**
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, strategies, rules, stroke mechanics and techniques.
Transferable to UC or CSU; see counselor for limitations

KING 84   **1.0 unit**
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 UC or CSU; see counselor for limitations

KING 86   1.0 unit
Touch Football
54 hours laboratory
Grading: letter grade

Formerly KING 86AD. This course offers instruction in the rules, strategies, and proper techniques required for the game of touch football.
Transferable to UC or CSU; see counselor for limitations

KING 90   1.0 unit
Volleyball
54 hours laboratory
Grading: letter grade

Formerly KING 90AD. This course is designed to provide instruction of the basic fundamentals of volleyball including setting, passing, hitting, and team play.
Transferable to UC or CSU; see counselor for limitations

KING 90B   1.0 unit
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. 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 UC or CSU; see counselor for limitations

KING 92   1.0 unit
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 UC or CSU; see counselor for limitations

KING 92B   1.0 unit
Sand Volleyball
54 hours laboratory
Recommended Preparation: KING 92.
Grading: letter grade or pass/no pass

This course the continued study of and practice in sand volleyball. Topics included performance skill techniques, offensive strategies and defensive strategies, fitness. Emphasis will be placed on game and tournament play.
Transferable to UC or CSU; see counselor for limitations

KING 94   1.0 unit
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 UC or CSU; see counselor for limitations

Kinesiology, Intercollegiate Athletics (KINIA)

KINIA 1AD   3.0 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 UC or CSU; see counselor for limitations

KINIA 2AD   0.5 - 3.0 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 CSU

KINIA 3AD   **3.0 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 participate in intercollegiate competitive
basketball, which fulfills the legal requirement for a
physical education activity.
Transferable to UC or CSU; see counselor for limitations

KINIA 4AD   **0.5 - 3.0 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 CSU

KINIA 5AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 7AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 13AD   **3.0 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.
This course meets the physical fitness/wellness
requirement for Plan A of the General Education
pattern at LBCC.
Transferable to UC or CSU; see counselor for limitations

KINIA 15AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 19AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 21AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 23AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 27AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 29AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 33AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 35AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 37AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 39AD 3.0 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 UC or CSU; see counselor for limitations

KINIA 41AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 43AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 45AD   **3.0 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 UC or CSU; see counselor for limitations

KINIA 47AD   **3.0 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 UC or CSU; see counselor for limitations

Kinesiology, Physical Fitness (KINPF)

KINPF 3   **1.0 unit**
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 UC or CSU; see counselor for limitations

KINPF 4   **1.0 unit**
Deep Water Aerobics
54 hours laboratory
Grading: letter grade

Formerly KINPF 4AD. This course will provide instruction in the development of the fundamental elements of fitness through the application of deep water resistance and buoyancy. Progressive instruction includes the development of increasingly more strenuous exercises for cardiorespiratory fitness, muscular strength, endurance and flexibility.
Transferable to UC or CSU; see counselor for limitations

KINPF 6   **1.0 unit**
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 UC or CSU; see counselor for limitations

KINPF 8   **1.0 unit**
Circuit Weight Training
54 hours laboratory
Grading: letter grade

Formerly KINPF 8AD. In this course, students receive cardiovascular and strength fitness training in a circuit weight training setting. This course combines the muscle-building benefits of resistance training with a cardiovascular boost to help increase metabolism, build muscle and allow for complete body conditioning.
Transferable to UC or CSU; see counselor for limitations

KINPF 8B   **1.0 unit**
Circuit Weight Training
54 hours laboratory
Recommended Preparation: KINPF 8.
Grading: letter grade or pass/no pass

This course provides continued cardiovascular and strength fitness training in a circuit weight training setting. This course combines focus on the muscle-building benefits of resistance training with a cardiovascular boost to help increase metabolism, build muscle and allow for complete body conditioning.
Transferable to UC or CSU; see counselor for limitations

KINPF 10   **1.0 unit**
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 UC or CSU; see counselor for limitations

KINPF 10B   **1.0 unit**
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 UC or CSU; see counselor for limitations

KINPF 12   **1.0 unit**
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. Strength, posture, agility, and flexibility will be improved through the usage of Rip Training, Core Barre, Mat and Stability Ball Pilates training.
Transferable to UC or CSU; see counselor for limitations

KINPF 12B   **1.0 unit**
Core Conditioning
54 hours laboratory
Recommended Preparation: KINPF 12.
Grading: letter grade or pass/no pass

This course provides the continued understanding and practice of exercise using the anatomical core. Continued improvement of strength, posture, agility, and flexibility will be the focus while utilizing Rip Training, Core Barre, Mat and Stability Ball Pilates training.
Transferable to UC or CSU; see counselor for limitations

KINPF 14   **1.0 unit**
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 UC or CSU; see counselor for limitations

KINPF 17   **1.0 unit**
Jogging
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 UC or CSU; see counselor for limitations

KINPF 17B   1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 18   1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 18B   1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 21   1.0 unit
Low Impact Cardio
54 hours laboratory
Grading: letter grade

Formerly KINPF 21AD. 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 UC or CSU; see counselor for limitations

KINPF 22   1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 22B   1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 23   1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 24 1.0 unit
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 CSU

KINPF 42 1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 53 1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 53B 1.0 unit
Resistance Training
54 hours laboratory
Recommended Preparation: KINPF 53
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

KINPF 54 1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 54B 1.0 unit
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 UC or CSU; see counselor for limitations

KINPF 81   1.0 unit
Fitness and Wellness Center
9 hours lecture, 27 hours laboratory
Grading: letter grade

Formerly KINPF 81AD. Selected physical fitness tests are administered before, during and after exercise programs to improve endurance, strength, and joint mobility. Lectures focus on individualized goals, continuous self-evaluation, safe and sane diet and exercise, scientific information versus fallacy, and wellness lifestyles that reduce health risks.
Transferable to UC or CSU; see counselor for limitations

KINPF 84A   2.0 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 quality of life and reduce health risks.
Transferable to CSU

KINPF 84B   2.0 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 UC or CSU; see counselor for limitations

KINPF 681   0.0 unit
Human Performance Laboratory
9 hours lecture, 27 hours laboratory
Grading: LBCC Non-Graded Course

Formerly PEPF 681. This course is a physical fitness course that is designed for cardiorespiratory, strength and flexibility exercises within a prescribed fitness program. This course is available to faculty/staff of Long Beach City College.

Kinesiology, Professional Preparation (KINPP)

KINPP 1 (C-ID KIN 100)   3.0 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 UC or CSU; see counselor for limitations

KINPP 4   3.0 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 CSU

KINPP 5   3.0 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 CSU

KINPP 7   **3.0 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 CSU

KINPP 8   **3.0 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 UC or CSU; see counselor for limitations

KINPP 10   **3.0 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 UC or CSU; see counselor for limitations

KINPP 12   **2.0 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 CSU

KINPP 14   **3.0 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 CSU

KINPP 15   **3.0 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 off-campus sporting events for observation purposes.
Transferable to UC or CSU; see counselor for limitations

KINPP 17   **3.0 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 off-campus sporting events for observation purposes.
Transferable to UC or CSU; see counselor for limitations

KINPP 23 (C-ID KIN 101)   **3.0 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 UC or CSU; see counselor for limitations

KINPP 70A   **3.0 units**
Exercise Science & Fitness Assessment
54 hours lecture
Recommended Preparation: BIO 60 and KINPP 12
Grading: letter grade

This course is designed to provide the theoretical knowledge necessary to prepare for the American Council on Exercise National 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 ACE certification. (KINPP 70B)
Transferable to CSU

KINPP 70B   **3.0 units**
Fitness Program Design & Instruction
54 hours lecture
Recommended Preparation: KINPP 70A.
Grading: letter grade

This course is designed to provide the student with the theoretical knowledge and practical skills needed to prepare for the American Council on Exercise National 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 ACE certification. (KINPP 70A)
Transferable to CSU

KINPP 203   **3.0 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 the muscles and the bone as they relate to human movement. This class is designed for Kinesiology students, massage therapists, personal trainers, coaches and others interested in the overall health of individuals.

KINPP 230   **3.0 units**
Kinesiology Practicum
36 hours lecture, 54 hours laboratory
Prerequisite: KINPP 70B
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, self-marketing and professional responsibility and liability.

KINPP 233   **3.0 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.

Business, Law (LAW)

LAW 18A (C-ID BUS 125) 3.0 units
Business Law
54 hours lecture
Grading: letter grade

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 UC or CSU; see counselor for limitations

LAW 18B 3.0 units
Business Law
54 hours lecture
Grading: letter grade

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 UC or CSU; see counselor for limitations

LAW 20 3.0 units
Property Law
54 hours lecture
Grading: letter grade

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

Learning & Academic Resources (LEARN)

LEARN 11 3.0 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 UC or CSU; see counselor for limitations

LEARN 11H 3.0 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 UC or CSU; see counselor for limitations

LEARN 610   **0.0 unit**
Basic Study Skills Laboratory
54 hours laboratory
Grading: LBCC Non-Graded Course

This is a non-credit course in basic study skills. This course covers a variety of basic learning and study skills including note-taking, test-taking, memory enhancement and time management. Participation schedule will vary.

LEARN 650   **0.0 unit**
Supervised Tutoring
18 hours laboratory
Corequisite: Concurrent enrollment in an LBCC course
Grading: LBCC Non-Graded Course

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.

LEARN 811   **1.0 unit**
Introduction to Study Skills
18 hours lecture
Grading: pass/no pass

This is an introductory learning strategies and techniques course designed to assist students in understanding basic study skills and information along with their direct and practical application in preparation for college-level coursework. The goal is for students to enhance their academic effectiveness. Course topics will include: college expectations, time management, memory and concentration, study reading, listening and note-taking, and test-taking.

Library (LIB)

LIB 1   **2.0 units**
Information Competency
36 hours lecture
Grading: letter grade or pass/no pass

Formerly Library and Information Resources. In this course, students gain an in-depth understanding and mastery of information gathering and use across the curriculum. It emphasizes research strategies and evaluation of information resources. It covers different levels, types, and formats of information, including the Internet. This course will help students acquire and improve the advanced skills necessary for information literacy across the curriculum and feel confident in transferring and applying these skills to succeed in four-year colleges and beyond.
Transferable to UC or CSU; see counselor for limitations

LIB 2   **1.0 unit**
Web Databases
18 hours lecture
Grading: letter grade or pass/no pass

This course is a hands-on introduction to online databases and their structures. It emphasizes evaluation of information, search strategies, and search techniques used to effectively access and retrieve information in the online environment. This course will be beneficial for students who wish to develop vital information searching and retrieval skills for both academic and professional purposes.
Transferable to CSU

LIB 3   **3.0 units**
Library, Technology and Internet Literacy
54 hours lecture
Grading: letter grade or pass/no pass

Formerly Information Competency. This course is designed to help students become information-literate citizens in the seamless and global information world. This course encompasses library literacy, information technology literacy, and Internet literacy. It encourages thought transformation, intelligent reasoning, research skills, and a new understanding of the world, including an appreciation of diversity. The course has a well-balanced structure in practices and theories with lectures, active interaction and participation in class and online, computer lab activities, and written research assignments.
Transferable to UC or CSU; see counselor for limitations

LIB 200   **3.0 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 210 3.0 units
Introduction to Access Services
54 hours lecture
Prerequisite: LIB 3
Recommended Preparation: LIB 200
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 220 3.0 units
Introduction to Acquisitions
54 hours lecture
Recommended Preparation: LIB 200
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 and functions of acquisitions and the topics will include the basics of acquiring library materials, the financial management of materials budgets, vendors, and ethical considerations. Visitations to other libraries or information research centers are required.

LIB 230 3.0 units
Special Topics in Library Services
54 hours lecture
Prerequisite: LIB 200
Grading: letter grade or pass/no pass

Formerly LIB 204. 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 the roles of supervisors and managers; the role of reference and information services; and the influence of emerging technologies in various library services.

LIB 240 3.0 units
Introduction to Cataloging
54 hours lecture
Recommended Preparation: LIB 200
Grading: letter grade or pass/no pass

Formerly LIB 201. This course is designed to teach students the valuable skills necessary to become qualified technicians. Topics will include: cataloging principles and procedures including descriptive and subject cataloging, classification systems, Machine Readable Cataloging (MARC) formats, bibliographic utilities, authority and bibliographic verification and control.

LIB 271WE 1.0 - 4.0 units
Work Experience-Library Technician
72 hours laboratory
Prerequisite: LIB 201 or LIB 202 or LIB 203 or LIB 204
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.

Linguistics (LING)

LING 1 3.0 units
Linguistics 1
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34
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 UC or CSU; see counselor for limitations

LING 3 3.0 units
Introduction to World Languages
54 hours lecture
Recommended Preparation: LIB 1 and LING 1 and
ENGL 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 exams 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 UC or CSU; see counselor for limitations

Medical Assisting (MA)

MA 270 3.0 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 eight
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 3.0 units
Health Care Clinical Procedures
36 hours lecture, 54 hours laboratory
Prerequisite: MA 270 and health evaluation
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, specialty exams, patient positioning, drug
administration, injections and basic pharmacology.

MA 282 3.0 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, and in office laboratory skills.

MA 286 4.0 units
Medical Assisting Combined Practicum
216 hours laboratory
Prerequisite: MA 282
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 1.0 unit
Medical Assisting Practicum Seminar
18 hours lecture
Corequisite: MA 284A, MA 284B or 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 290 3.0 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.

Machine Tool (MACHT)

MACHT 202   3.0 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 (C-ID MATH 110)   5.0 units
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 21A and 21B together provide STAT 1 credit.
Transferable to CSU

MATH 21B (C-ID MATH 110)   5.0 units
Statistics Pathway B
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 UC or CSU; see counselor for limitations

MATH 27   3.0 units
Probability and Statistics for Elementary Teachers
54 hours lecture, 18 hours laboratory
Prerequisite: MATH 130, 130B, 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 or Qualification through the LBCC assessment process.
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 set theory, combinations, permutations, logic, probability and statistics.
Transferable to UC or CSU; see counselor for limitations

MATH 28   3.0 units
Mathematics for Elementary Teaching I
54 hours lecture, 18 hours laboratory
Prerequisite: MATH 130, 130B, 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 or Qualification through the LBCC assessment process.
Recommended Preparation: Eligibility for ENGL 1
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 UC or CSU; see counselor for limitations

MATH 29 — 3.0 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 with manipulatives. Writing is emphasized throughout the course.
Transferable to UC or CSU; see counselor for limitations

MATH 37 — 3.0 units
Finite Mathematics
54 hours lecture
Prerequisite: MATH 130, 130B or one year high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the LBCC assessment process for Math.
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 UC or CSU; see counselor for limitations

MATH 37H — 3.0 units
Honors Finite Mathematics
54 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, or qualification through the LBCC assessment process for Math, and qualification for the Honors Program.
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 UC or CSU; see counselor for limitations

MATH 40 — 3.0 units
Trigonometry
54 hours lecture
Prerequisite: MATH 130, 130B, 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 or Qualification through the LBCC assessment process.
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

MATH 45 — 4.0 units
College Algebra
72 hours lecture
Prerequisite: MATH 130, 130B or one year high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the LBCC assessment process for Math.
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 UC or CSU; see counselor for limitations

MATH 47 — 3.0 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 UC or CSU; see counselor for limitations

MATH 50 5.0 units
Precalculus Math
90 hours lecture
Prerequisite: MATH 40 or Qualification through the
LBCC assessment process for Math
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 UC or CSU; see counselor for limitations

MATH 50H 5.0 units
Honors Precalculus
90 hours lecture
Prerequisite: MATH 40 or Qualification through the
LBCC assessment process for MATH and Qualification
for the Honors program.
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. Eligibility
for the Honors Program is required for enrollment.
Transferable to CSU

MATH 55 4.0 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 or
CBIS 14.
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 UC or CSU; see counselor for limitations

MATH 60 (C-ID MATH 210) 5.0 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 or Qualification through
the LBCC assessment process for Math.
Grading: letter grade

Topics covered in this first semester calculus course
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; definite and indefinite
integrals; and applications of integrals, including
areas between curves, volumes, and work problems.
Transferable to UC or CSU; see counselor for limitations

MATH 60H (C-ID MATH 210) 5.0 units
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 or Qualification through
the LBCC assessment process for Math & Qualification
for the Honors program.
Grading: letter grade

Topics covered in this first semester calculus course
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; definite and indefinite
integrals; and applications of integrals, including
areas between curves, volumes, and work problems.
Transferable to UC or CSU; see counselor for limitations

MATH 70 5.0 units
Second Calculus Course
90 hours lecture
Prerequisite: MATH 60
Grading: letter grade

This course is the second in the calculus sequence.
Topics include Integration Techniques, Improper
Integrals, Applications of Integration, Differential
Equations, Parametric and Polar Functions and their
Graphs, Sequences, and infinite Series and their
applications.

Transferable to UC or CSU; see counselor for limitations

MATH 70H   **5.0 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 the calculus sequence.
Topics include Integration Techniques, Improper
Integrals, Applications of Integration, Differential
Equations, Parametric and Polar Functions and their
Graphs, Sequences, and infinite Series and their
applications.
Transferable to UC or CSU; see counselor for limitations

MATH 80   **5.0 units**
Third Calculus Course
90 hours lecture
Prerequisite: MATH 70
Grading: letter grade

This course is calculus of functions of more than one
variable. Topics include vectors and the geometry of
space, vector functions, partial derivatives, multiple
integrals and vector calculus concepts such as Green's
Theorem, Stoke's Theorem, Divergence Theorem,
gradient and curl.
Transferable to UC or CSU; see counselor for limitations

MATH 84   **5.0 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 UC or CSU; see counselor for limitations

MATH 110   **5.0 units**
First Course in Algebra
90 hours lecture
Prerequisite: Qualification through the LBCC
assessment process for Math or MATH 815.
Recommended Preparation: Students who have
not met the reading proficiency requirement for
graduation are advised to take a reading course
before taking this algebra course.
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   **3.0 units**
First Course in Algebra-Part 1
54 hours lecture, 18 hours laboratory
Prerequisite: Qualification through the LBCC
assessment process for Math or MATH 815.
Recommended Preparation: Students who have
not met the reading proficiency requirement for
graduation are advised to take a reading course
before taking this algebra course.
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 3.0 units
First Course in Algebra-Part 2
54 hours lecture, 18 hours laboratory
Prerequisite: MATH 110A
Recommended Preparation: Students who have
not met the reading proficiency requirement for
graduation are advised to take a reading course
before taking this algebra course.
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 115 4.0 units
Applied Math
72 hours lecture
Prerequisite: ELECT 225 or MATH 110, MATH 110B
or MATH 880 or one year High School Elementary
Algebra with a grade of B or better as reflected by the
second semester grade or Qualification through the
LBCC assessment process for Math.
Recommended Preparation: READ 882
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 120 4.0 units
Geometry
72 hours lecture
Prerequisite: Qualification through the LBCC
assessment process for Math or MATH 110 or MATH
110B or MATH 880 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 a traditional Euclidean geometry course
covering such topics as deductive reasoning, basic
postulates and theorems, congruency, similarity,
area, volume, right triangle trigonometry, analytic
geometry, and constructions.

MATH 125 6.0 units
Stat Path
108 hours lecture
Prerequisite: MATH 815 or Qualification through the
LBCC assessment process for Math.
Recommended Preparation: READ 882.
Grading: letter grade or pass/no pass

This course combines the topics found in a Beginning
Algebra (Math 110) and Applied Mathematics
(Math 115). The idea is to give stronger students
an accelerated 1-semester alternative to the
current 2-semester Math 110/115 sequence. 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
basic rational, and radical equations; graphing lines
and parabolas; basic geometric and trigonometric
concepts and applications, and basic statistics,
counting and probability concepts. Application
problems are solved throughout the course. Students
are required to complete 5 hours of supplemental
learning activities in any designated Success Center.

MATH 130 5.0 units
Intermediate Algebra
90 hours lecture
Prerequisite: Qualification through the LBCC
assessment process for Math or MATH 110 or MATH
110B or MATH 880 or one year High School Elementary
Algebra with a grade of B or better as reflected by the
second semester grade.
Recommended Preparation: Students who have

not met the reading proficiency requirement for graduation are advised to take a reading course before taking this algebra course.
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   **3.0 units**
Intermediate Algebra, Part A
54 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Math or MATH 110 or MATH 110B or MATH 880 or one year High School Elementary Algebra with a grade of B or better as reflected by the second semester grade.
Recommended Preparation: Students who have not met the reading proficiency requirement for graduation are advised to take a reading course before taking this algebra course.
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.

MATH 130B   **3.0 units**
Intermediate Algebra, Part B
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 140   **6.0 units**
Algebra Readiness
108 hours lecture
Prerequisite: MATH 815 or Qualification through the LBCC assessment process for Math.
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 650   **0.0 unit**
Math Learning Center
18 hours laboratory
Grading: LBCC Non-Graded Course

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 805   **4.0 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 815 4.0 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 1.0 unit
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 1.0 unit
Foundation 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 2.0 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 2.0 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.

Business, Management (MGMT)

MGMT 49A 3.0 units
Introduction to Management
54 hours lecture
Grading: letter grade

Introduction to Management is the entry level management course designed to introduce the traditional management tasks of planning, organizing, influencing and controlling. Course topics will include important issues such as innovation, technology, diversity, quality, ethics and the global environment. Transferable to CSU

MGMT 49B 3.0 units
Human Resources Management
54 hours lecture
Grading: letter grade

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

MGMT 58   3.0 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

MGMT 60   3.0 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

MGMT 80   3.0 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

Business, Marketing (MKTG)

MKTG 40   3.0 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

MKTG 41   3.0 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

MKTG 47   3.0 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

Metal Fabrication (MTFAB)

MTFAB 50   4.0 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

MTFAB 90   3.0 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

MTFAB 220A   4.0 units
Basic Metal Layout and Fabrication
54 hours lecture, 72 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 220B   4.0 units
Advanced Metal Layout and Fabrication
54 hours lecture, 72 hours laboratory
Recommended Preparation:

MTFAB 220A or MTFAB 50
Grading: letter grade or pass/no pass

Formerly SHMET 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 220C   4.0 units
Power Metalworking Machine Operations
54 hours lecture, 72 hours laboratory
Recommended Preparation:
MTFAB 220A or MTFAB 50
Grading: letter grade or pass/no pass

Formerly SHMET 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 220D   4.0 units
CNC Metal Fabrication Systems
54 hours lecture, 72 hours laboratory
Recommended Preparation:
MTFAB 220A or MTFAB 50
Grading: letter grade or pass/no pass

Formerly SHMET 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 221   2.0 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   2.0 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   3.0 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   3.0 units
Metallurgy
54 hours lecture

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 non-ferrous metals are emphasized. Proper determination of chemical contents of common steels, cast irons, stainless steels, and aluminum alloys are demonstrated.

MTFAB 280   2.5 units
Introduction to Robotic Welding
36 hours lecture, 27 hours laboratory
Grading: letter grade

The first of a three-part series introducing fundamental theory and hands-on 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   2.5 units
Intermediate Robotic Welding
36 hours lecture, 27 hours laboratory
Grading: letter grade

The second of a three-part series introducing intermediate level theory and hands-on application of robotic welding automation. Emphasizes safety awareness, programming techniques, and intermediate gas metal arc welding applications using six-axis robotic welding systems.

MTFAB 420   2.0 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   1.0 unit
Metal Fabrication and Layout
54 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 423   3.0 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.

Music (MUSIC)

MUSIC 1A (C-ID MUS 120)   3.0 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, 7th chords, and the basic elements of form.
Transferable to UC or CSU; see counselor for limitations

MUSIC 1B (C-ID MUS 130/MUS 140)   3.0 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 UC or CSU; see counselor for limitations

MUSIC 2A (C-ID MUS 140/MUS 150)   3.0 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 UC or CSU; see counselor for limitations

MUSIC 5 (C-ID MUS 125)   1.0 unit
Musicianship I
54 hours laboratory
Corequisite: MUSIC 6
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 UC or CSU; see counselor for limitations

MUSIC 6 (C-ID MUS 110)   3.0 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 UC or CSU; see counselor for limitations

MUSIC 7   2.5 units
Elementary Voice
36 hours lecture, 36 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 UC or CSU; see counselor for limitations

MUSIC 8AD   **2.5 units**
Advanced Voice
36 hours lecture, 36 hours laboratory
Recommended Preparation: MUSIC 7
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 UC or CSU; see counselor for limitations

MUSIC 9 (C-ID MUS 135)   **1.0 unit**
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 UC or CSU; see counselor for limitations

MUSIC 10 (C-ID MUS 145)   **1.0 unit**
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 UC or CSU; see counselor for limitations

MUSIC 11AD (C-ID MUS 180)   **1.5 units**
Long Beach City College Viking Chorale
90 hours laboratory
Recommended Preparation: Prior vocal experience

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.
Transferable to UC or 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 select ensemble with performances throughout the year. All periods and styles of choral music, especially classical chamber literature, are performed.
Transferable to UC or 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 UC or 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 UC or 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 UC or CSU; see counselor for limitations

MUSIC 16 (C-ID MUS 155)   1.0 unit
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 UC or CSU; see counselor for limitations

MUSIC 17A   0.5 unit
Advanced Applied Vocal & Instrumental Music
36 hours laboratory
Prerequisite: At least 2 semesters of MUSIC 92AD and
performing audition before the program faculty
Corequisite: MUSIC 11AD or 14AD or 46 and MUSIC 6 or
1A or 1B or 2A and MUSIC 5 or 9 or 10 or 16
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 UC or CSU; see counselor for limitations

MUSIC 19   2.5 units
Beginning Instruments
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Beginning instruments entails instruction in the
elementary and intermediate principles of playing
woodwind, brass and percussion instruments. This
class is not designed for the study of the student's
major instrument, but for students who want to
learn a new instrument. Reading music is not a
requirement, and will be taught in the class.
Transferable to UC or CSU; see counselor for limitations

MUSIC 20   1.5 units
LBCC Southland Chorale
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 UC or 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. Audition
to qualify for enrollment will occur during the first
class meeting or as scheduled in the schedule of
classes.
Transferable to CSU

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

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 UC or CSU; see counselor for limitations

MUSIC 27   **1.5 units**
Brass Ensemble
90 hours laboratory
Recommended Preparation: Prior instrumental
experience.
Grading: letter grade or pass/no pass

The brass ensemble rehearses and performs music of
various periods for this particular medium. The group
can range from a quintet to large double brass choirs.
One concert performance is required each semester.
The brass repertoire can include various styles from
classical to contemporary music as well as jazz and
pop arrangements.
Transferable to UC or 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 CSU

MUSIC 30A   **3.0 units**
Music History: Antiquity to 1750
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34 or
qualify for ENGL 1 through the assessment process.
Grading: letter grade or pass/no pass

This course is a survey of music history and literature
from antiquity to 1750, including cultural, intellectual
and social influences. This course provides an in-depth
examination of the development of Western European
music through analysis and synthesizing of historical
details and stylistic elements of the musical trends of
the era. This course is offered in the Fall semester only.
Transferable to UC or CSU; see counselor for limitations

MUSIC 30B   **3.0 units**
Music History: 1750-Present
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34 or
qualify for ENGL 1 through the assessment process
Grading: letter grade or pass/no pass

This course is a survey of music history and literature
from 1750 to the present, including cultural,
intellectual and social influences. This course provides
an in-depth examination of the development of
Western European music through analysis and
synthesizing of historical details and stylistic elements
of the musical trends of the era. This course is offered
in the Spring semester only.
Transferable to UC or CSU; see counselor for limitations

MUSIC 32   **3.0 units**
History of Jazz
54 hours lecture
Grading: letter grade

This one semester course is an overview on the
development of the jazz tradition, tracing back to its
African roots, and forward through the different styles,
including blues, ragtime, swing, bebop, and post-
bop. This course also focuses on the critical cultural
and social issues associated with African-Americans
and American history, and the role the musical
developments played within the context of art as a
reflection of society.
Transferable to UC or CSU; see counselor for limitations

MUSIC 33B   **3.0 units**
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 UC or CSU; see counselor for limitations

MUSIC 35   **3.0 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 UC or CSU; see counselor for limitations

MUSIC 38AD (C-ID MUS 180)   1.5 units
Wind Ensemble
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 UC or CSU; see counselor for limitations

MUSIC 40 (C-ID MUS 100)   3.0 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 UC or CSU; see counselor for limitations

MUSIC 40H   3.0 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 UC or CSU; see counselor for limitations

MUSIC 41AD   1.5 units
Madrigal A'Capella Choir
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'capella choral literature. Participation in several performances each semester is required.
Transferable to UC or CSU; see counselor for limitations

MUSIC 43   1.0 unit
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

MUSIC 44   1.0 unit
The Evening Jazz Choir
90 hours laboratory
Recommended Preparation: Prior vocal experience
Grading: letter grade or pass/no pass

Formerly MUSIC 44AD. Jazz standards and pop classics are studied and performed in a choral setting (Soprano, Alto, Tenor, Bass), emphasizing the musical styles characteristic of this genre. The choir is comprised of people within the community who usually work full-time in a non-related occupation and can rehearse and perform during the evening.
Transferable to UC or CSU; see counselor for limitations

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 UC or CSU; see counselor for limitations

MUSIC 47AD   **1.5 units**
Wind Symphony
90 hours laboratory
Recommended Preparation: Prior instrumental
experience
Grading: letter grade or pass/no pass

The Wind Symphony is a performance organization
which seeks out, prepares and performs wind band
literature from all periods and musical styles. While
all repertoire is considered, the majority of music
performed is somewhat more traditional in nature
and tends to be focused more on mainstream 20th
Century literature composed and transcribed for
wind instruments. The instrumentation of the wind
ensemble includes woodwinds, brass, and percussion.
The ensemble will traditionally have two concerts a
semester as well as go on a tour in the spring. Other
concert opportunities may also arise.
Transferable to UC or 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

MUSIC 51A   **3.0 units**
Beginning Piano 1
54 hours lecture
Grading: letter grade or pass/no pass

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.
Transferable to UC or CSU; see counselor for limitations

MUSIC 51B   **3.0 units**
Beginning Piano 2
54 hours lecture
Prerequisite: MUSIC 51A
Grading: letter grade or pass/no pass

In this course students refine and further develop
beginning keyboard skills. This includes piano
technique, major scales and arpeggios, sight-reading,
chord progressions and harmonization skills, as
encountered in upper-beginning/early intermediate
piano music.
Transferable to UC or CSU; see counselor for limitations

MUSIC 51C   **3.0 units**
Intermediate Piano I
54 hours lecture
Prerequisite: MUSIC 51B
Grading: letter grade or pass/no pass

This course will allow students to refine and develop
beginning keyboard skills. Piano technique, major and
minor scales and arpeggios, sight-reading, expanded
chord progressions and harmonization skills are
encountered in intermediate piano music.
Transferable to UC or 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

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 UC or CSU; see counselor for limitations

MUSIC 55   2.5 units
Guitar
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly MUSIC 55AD. This course provides beginning instruction in the guitar, using a classical approach to basic technique, musicianship, and repertoire.
Transferable to UC or CSU; see counselor for limitations

MUSIC 56   2.5 units
Intermediate Guitar
36 hours lecture, 36 hours laboratory
Prerequisite: MUSIC 55
Grading: letter grade or pass/no pass

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 UC or 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 CSU

MUSIC 58   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 UC or CSU; see counselor for limitations

MUSIC 68   3.0 units
Basic Audio Theory
54 hours lecture
Grading: letter grade or pass/no pass

This course is an introduction to the theoretical and practical aspects of sound, recording studio and live sound reinforcement technology.
Transferable to CSU

MUSIC 71   2.5 units
Introduction to Music Technology
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly MUSIC 71AD. This course is a comprehensive introduction to music technology. Historical and current uses of music technology including MIDI are covered. This class also covers basic music notation as it is used in music technology.
Transferable to CSU

MUSIC 89   3.0 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 UC or CSU; see counselor for limitations

MUSIC 91   2.0 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 91AD. 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 UC or CSU; see counselor for limitations

MUSIC 92AD (C-ID MUS 160)   0.5 unit
Applied Vocal & Instrumental Music
36 hours laboratory
Prerequisite: Performance audition before the program faculty
Corequisite: MUSIC 11AD or 14AD or 46 and MUSIC 6 or 1A or 1B or 2A and MUSIC 5 or 9 or 10 or 16
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 UC or CSU; see counselor for limitations

MUSIC 96   2.5 units
Advanced Recording Techniques
36 hours lecture, 36 hours laboratory
Grading: letter grade or pass/no pass

Formerly MUSIC 96AD. This class provides hands-on instruction in advanced recording techniques, including the use of a digital multi-track studio, studio mixing techniques, studio etiquette, dealing with musicians, and mixing at the advanced level, including the advanced use of out-board gear.
Transferable to CSU

Occupational Safety Health Administration (OSHA)

OSHA 254   2.0 units
OSHA Standards for General Industry
36 hours lecture
Grading: pass/no pass

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 Training Completion Card.

Geography, Physical (PGEOG)

PGEOG 1 (C-ID GEOG 110)   3.0 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 UC or CSU; see counselor for limitations

PGEOG 1L (C-ID GEOG 111)   1.5 units
Physical Geography Lab
18 hours lecture, 36 hours laboratory
Prerequisite: PGEOG 1
Corequisite: PGEOG 1
Grading: letter grade or pass/no pass

Physical Geography Laboratory emphasizes the practical application of concepts presented in Physical Geography Lecture, including the distribution and relationships of environmental elements in Earth's atmosphere, lithosphere, hydrosphere, and biosphere, including weather, climate, water resources, landforms, soils, natural vegetation and wildlife. Focus is on systems and cycles of the natural world including the roles and interactions of humans with Earth's environment. Physical Geography Lab introduces the student to the tools and methods used in Geography and may offer field study opportunities.
Transferable to UC or CSU; see counselor for limitations

PGEOG 2 (C-ID GEOG 130)   3.0 units
Weather and Climate
54 hours lecture
Grading: letter grade or pass/no pass

This is an introductory science course developed by the American Meteorological Society with support from the National Science Foundation. This course

examines the physical properties of the atmosphere, radiation heating and cooling, precipitation, clouds, weather disturbances, climate controls, 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 UC or CSU; see counselor for limitations

Philosophy (PHIL)

PHIL 3   **3.0 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 UC or CSU; see counselor for limitations

PHIL 4 (C-ID PHIL 130)   **3.0 units**
History of Ancient Philosophy
54 hours lecture
Recommended Preparation:
ENGL 105 or ESL 34X and PHIL 6
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 non-western thinkers. An emphasis will be placed on reading ancient primary texts critically.
Transferable to UC or CSU; see counselor for limitations

PHIL 5 (C-ID PHIL 140)   **3.0 units**
History of Modern Philosophy
54 hours lecture
Recommended Preparation: ENGL 105 or ESL 34X and PHIL 6
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 UC or CSU; see counselor for limitations

PHIL 6 (C-ID PHIL 100)   **3.0 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 UC or CSU; see counselor for limitations

PHIL 6H (C-ID PHIL 100)   **3.0 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 UC or CSU; see counselor for limitations

PHIL 7 (C-ID PHIL 120)   **3.0 units**
Introduction to Ethics
54 hours lecture
Grading: letter grade or pass/no pass

This course examines meta-ethical issues, moral theories, and the application of moral principles. Topics covered include presuppositions of, and challenges to, moral conversations; moral theories from the history of philosophy; and the application of moral theories to contemporary moral issues. Examples of contemporary moral issues are abortion, euthanasia, animal rights, censorship, terrorism,

torture, affirmative action, environmentalism, and capital punishment.
Transferable to UC or CSU; see counselor for limitations

PHIL 7H (C-ID PHIL 120)   3.0 units
Honors Introduction to Ethics
54 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or pass/no pass

This course examines meta-ethical issues, moral theories, and the application of moral principles. Topics covered include presuppositions of, and challenges to, moral conversations; moral theories from the history of philosophy; and the application of moral theories to contemporary moral issues. Examples of contemporary moral issues are abortion, euthanasia, animal rights, censorship, terrorism, torture, affirmative action, environmentalism, and capital punishment.
Transferable to UC or CSU; see counselor for limitations

PHIL 8   3.0 units
Introduction to Non-Western Philosophy
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, African Philosophy, and American Indian Philosophy. The major themes to be examined include the nature of reality, the meaning of life, the role of the individual and society, and the effects of history and culture on belief systems.
Transferable to UC or CSU; see counselor for limitations

PHIL 9   3.0 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 UC or CSU; see counselor for limitations

PHIL 10   3.0 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 metaphysics, epistemology, and axiology. This exploration will examine both feminist theory and practice.
Transferable to UC or CSU; see counselor for limitations

PHIL 11   3.0 units
Critical Thinking
54 hours lecture
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 UC or CSU; see counselor for limitations

PHIL 12   3.0 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 UC or CSU; see counselor for limitations

PHIL 14   3.0 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 UC or CSU; see counselor for limitations

PHIL 15   3.0 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, the ideal state, distributive justice, and the rights and responsibilities of citizens.
Transferable to UC or CSU; see counselor for limitations

PHIL 16   3.0 units
Introduction to Business Ethics
54 hours lecture
Grading: letter grade or pass/no pass

This course will examine ethical issues in business using an interdisciplinary approach or team teaching drawn from Philosophy and Management. 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, and ethical egoism.
Transferable to UC or CSU; see counselor for limitations

PHIL 22 (C-ID PHIL 210)   3.0 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 UC or CSU; see counselor for limitations

Photography (PHOT)

PHOT 1   2.0 units
The Photographic Vision
36 hours lecture
Grading: letter grade or pass/no pass

This course is a speakers and critique series which introduces students to a broad range of photographic visions. The class will also provide the student with the skills necessary to critically evaluate and discuss the photograph. Technical information will be used to give students a deeper understanding of the photographer's vision.
Transferable to CSU

PHOT 10   3.0 units
History of Photography
54 hours lecture
Recommended Preparation: Qualification through the English assessment process at the ENGL 1 level or completion of ENGL 105 or ESL 34 and READ 82.
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 UC or CSU; see counselor for limitations

PHOT 31   4.0 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

PHOT 32   4.0 units
Introduction to Digital Photography
36 hours lecture, 108 hours laboratory
Recommended Preparation: ART 31
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

PHOT 33   4.0 units
Photography Studio Lighting
36 hours lecture, 108 hours laboratory
Prerequisite: One semester of
PHOT 31 or 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

PHOT 34   4.0 units
Advanced Photography-Applications
36 hours lecture, 108 hours laboratory
Prerequisite: One Semester of PHOT 32 and PHOT 33
Grading: letter grade or pass/no pass

This is a comprehensive studio course for the advanced student of photography. The major emphasis is centered around continuing to build complex problem solving in studio photography for professional uses.
Transferable to CSU

PHOT 35   3.0 units
Photography for Publication
36 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

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 35AD.
Transferable to CSU

PHOT 37   4.0 units
Portrait Photography
36 hours lecture, 108 hours laboratory
Prerequisite: One semester of 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

PHOT 38   3.0 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

PHOT 39   3.0 units
Photography on Location
36 hours lecture, 72 hours laboratory
Prerequisite: One semester of PHOT 31 or PHOT 32 or ART 81
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

PHOT 40 3.0 units
Mastering the Photographic Print
36 hours lecture, 72 hours laboratory
Prerequisite: One semester of ART 81 or PHOT 31
Recommended Preparation: PHOT 43
Grading: letter grade or pass/no pass

This is a comprehensive visual arts course for the advanced student of photography. Emphasis is on crafting high quality digital photographic output which would include prints, portfolios and books. Students will practice digital methods of capture, processing and printing.
Transferable to CSU

PHOT 41 4.0 units
Professional Photographic Portfolio
36 hours lecture, 108 hours laboratory
Prerequisite: One semester of 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

PHOT 42 4.0 units
Experimental Photography Laboratory
36 hours lecture, 108 hours laboratory
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

PHOT 43 3.0 units
Photoshop and Digital Image Management
36 hours lecture, 72 hours laboratory
Recommended Preparation: PHOT 31 or PHOT 32 or ART 81 and ART 41
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 and the basics of image-bank management.
Transferable to CSU

PHOT 281 1.0 unit
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 1.0 unit
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 681 0.0 unit
Fundamentals of Photography Laboratory
108 hours laboratory
Grading: LBCC Non-Graded Course

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 UC or 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 UC or CSU; see counselor for limitations

PHYS 3A (C-ID PHYS 205)   **5.5 units**
Physics for Sci. & Eng. - Mechanics
90 hours lecture, 36 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 UC or CSU; see counselor for limitations

PHYS 3B   **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 UC or CSU; see counselor for limitations

PHYS 3C   **4.5 units**
Physics for Sci. & Eng. - Modern Physics
72 hours lecture, 36 hours laboratory
Prerequisite: PHYS 3A
Corequisite: MATH 70
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. PHYS 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 UC or CSU; see counselor for limitations

PHYS 4   **4.0 units**
Survey of Chemistry and Physics
54 hours lecture, 54 hours laboratory
Prerequisite: MATH 110 or MATH 110A and MATH 110B or higher level math class
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 inter-dependence 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 UC or CSU; see counselor for limitations

Physiology (PHYSI)

PHYSI 1 (C-ID BIOL 120)   5.0 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 UC or CSU; see counselor for limitations

Political Science (POLSC)

POLSC 1 (C-ID POLS 110)   3.0 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 UC or CSU; see counselor for limitations

POLSC 1H (C-ID POLS 110)   3.0 units
Honors Introduction to Government
54 hours lecture
Prerequisite: Qualification for the Honors Program
Recommended Preparation: ENGL 1
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 UC or CSU; see counselor for limitations

POLSC 2 (C-ID POLS 130)   3.0 units
Comparative Government
54 hours lecture
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 UC or CSU; see counselor for limitations

POLSC 2H (C-ID POLS 130)   3.0 units
Honors Comparative Government
54 hours lecture
Prerequisite: Qualification for the Honors Program
Recommended Preparation: ENGL 1
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 UC or CSU; see counselor for limitations

POLSC 3   3.0 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 UC or CSU; see counselor for limitations

POLSC 4 (C-ID POLS 140)   **3.0 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 UC or CSU; see counselor for limitations

POLSC 4H (C-ID POLS 140)   **3.0 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 UC or CSU; see counselor for limitations

POLSC 9   **3.0 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 UC or CSU; see counselor for limitations

POLSC 10 (C-ID POLS 150)   **3.0 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 UC or CSU; see counselor for limitations

POLSC 11 (C-ID POLS 120)   **3.0 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 UC or CSU; see counselor for limitations

POLSC 48M1   **1.0 unit**
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

Psychology (PSYCH)

PSYCH 1 (C-ID PSY 110)   **3.0 units**
Introduction to Psychology
54 hours lecture
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 UC or CSU; see counselor for limitations

PSYCH 1H (C-ID PSY 110)   3.0 units
Honors Introduction to Psychology
54 hours lecture
Prerequisite: Qualification for the Honors Program
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 UC or CSU; see counselor for limitations

PSYCH 2 (C-ID PSYCH 205)   4.0 units
Research Methods for Psychology
54 hours lecture, 54 hours laboratory
Prerequisite: PSYCH 1 and STAT 1 or STAT 1H
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 UC or CSU; see counselor for limitations

PSYCH 4   3.0 units
Personal and Social Development
54 hours lecture
Grading: letter grade or pass/no pass

This course involves the application of psychological principles to everyday life, emphasizing how to cope with life's challenges and realize your full potential. Stress is placed on self-awareness, self-management, interpersonal communication and way to improve the quality of interpersonal relationships.
Transferable to CSU

PSYCH 6 (C-ID PSY 150)   3.0 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 UC or CSU; see counselor for limitations

PSYCH 10   3.0 units
Human Sexuality
54 hours lecture
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 UC or CSU; see counselor for limitations

PSYCH 11 (C-ID PSY 170)   3.0 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 UC or CSU; see counselor for limitations

PSYCH 14   3.0 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, mood disorders, schizophrenia and delusional disorders, substance use disorders,

gender dysphoria and sexual disorders, eating and sleep disorders, disorders that begin in childhood, disorders related to aging, personality disorders, ways of determining abnormality, causes and treatment of disorders.
Transferable to UC or CSU; see counselor for limitations

PSYCH 33   **3.0 units**
Psychology of Personality
54 hours lecture
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 UC or CSU; see counselor for limitations

Public Administration (PUBAD)

PUBAD 1   **3.0 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

Reading (READ)

READ 82   **4.0 units**
Proficient Reading
72 hours lecture
Prerequisite: Completion of READ 883 or 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

READ 83   **4.0 units**
Power Reading
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Reading or successful completion (PASS) of READ 883 or ESL 863
Grading: letter grade or pass/no pass

This course focuses on power reading strategies, analysis of written discourse, and application of flexible reading techniques to personal, professional, and academic reading. It is designed for those with strong comprehension skills. Students are required to complete 3 hours of Supplemental Learning Assistance activities in designated Success Centers.
Transferable to CSU

READ 84   **3.0 units**
Analytical Reading
54 hours lecture
Prerequisite: Completion of READ 883 or READ 883AX or eligibility for READ 82 and READ 182AX or achievement of LBCC Reading Proficiency
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 CSU

READ 85   **3.0 units**
Vocabulary Building
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 increase personal vocabulary skills and stimulate appreciation of the English language.
Transferable to CSU

READ 182AX   **4.0 units**
Accelerated Proficient Reading
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Reading or successful completion (PASS) of READ 883AX, READ 883, READ 882, ESL 863 or ESL 862
Grading: letter grade

This course provides instruction in the advanced academic reading strategies necessary to comprehend and evaluate complex college level literary and informational texts independently and proficiently in a highly intensive, accelerated format. Students are required to complete 2 hours of Supplemental Learning Assistance activities in designated success centers.

READ 881   **4.0 units**
Reading Essentials
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Reading or successful completion (PASS) of READ 880, ESL 860, BAE 601A or BAE 601B
Grading: pass/no pass

This course focuses on essential reading skills and strategies with an emphasis on comprehension, vocabulary, and active reading. Comprehension skills are developed through the use of narrative and expository text. To help gain efficiency with comprehension, students are required to complete 3 hours during the semester in a Success Center focusing on activities related to the course content.

READ 882   **4.0 units**
Reading Development
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Reading or successful completion (PASS) of READ 881 or ESL 861
Grading: pass/no pass

This course develops essential reading concepts. The course focuses on literal and inferential comprehension strategies with continued building of vocabulary skills. Exposure to longer text selections provides opportunities for applying academic reading skills.

READ 883   **4.0 units**
Reading Improvement
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Reading or successful completion (PASS) of READ 882 or ESL 862.
Grading: pass/no pass

For students who have previously acquired essential reading skills, READ 883 reinforces instruction in reading improvement strategies and vocabulary enrichment, emphasizing the development of critical comprehension. Opportunities to apply the components of critical comprehension in a variety of genres emphasize both deeper and broader thought processes. Students are required to complete 3 hours of learning activities in a Success Center over the course of the semester.

READ 883AX   **4.0 units**
Accelerated Reading Improvement
72 hours lecture
Prerequisite: Qualification through the LBCC assessment process for Reading or successful completion (PASS) of READ 881 or BAE 601B or ESL 861
Grading: letter grade

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 78   **3.0 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

REAL 80   3.0 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

REAL 81A   3.0 units
Real Estate Practice
54 hours lecture
Grading: letter grade

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 persons seeking a Real Estate Salesperson license or a Real Estate Broker license.
Transferable to CSU

REAL 84   3.0 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

REAL 85   3.0 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

REAL 86   3.0 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

REAL 87   3.0 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

REAL 92A   3.0 units
Escrows and Land Titles
54 hours lecture
Grading: letter grade

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

REAL 253   3.0 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, landlord-tenant 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.

Radio & Television (R_TV)

R_TV 1   3.0 units
Introduction to Broadcasting
54 hours lecture
Grading: letter grade

Introduction to Broadcasting explores the evolution of mass media and its impact on society. The class will analyze methods the media uses to persuade the consumer and become an educated viewer and evaluate their tactics.
Transferable to CSU

R_TV 2   2.0 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

R_TV 3   2.5 units
Using MacIntosh Comp Entertainment Indus
36 hours lecture, 36 hours laboratory
Grading: letter grade

This course is designed for students to develop current computer operation skills and equipment systems related to the entertainment industry. No previous computer knowledge is necessary. It covers the basic use of hardware and certain software, Internet use, word processing, spreadsheet, database use, communications applications, and basic digital audio and video production. The course will explore specific examples of how various applications are used in the entertainment industry.
Transferable to CSU

R_TV 4   3.0 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

R_TV 8   3.0 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

R_TV 12   2.5 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

R_TV 13   3.0 units
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

R_TV 14   3.0 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 "stand-alone" productions and as elements for edited productions. Editing will be covered as it relates to field production.
Transferable to CSU

R_TV 15   2.5 units
Advanced Television Production
36 hours lecture, 36 hours laboratory
Recommended Preparation: Audition
Grading: letter grade

Formerly R_TV 15AC. This class explores the creation and production of television program material with an emphasis on the quality of the finished product. Projects which students produce, direct and crew will be largely of their own choosing.
Transferable to CSU

R_TV 21   3.0 units
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

R_TV 25   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

R_TV 30   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

R_TV 34   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 34 AD. 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

R_TV 35   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

R_TV 36   2.5 units
Broadcast News Production
36 hours lecture, 36 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

R_TV 37   3.0 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

R_TV 40   2.5 units
On-Camera Performance
36 hours lecture, 36 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

R_TV 60   2.5 units
Pro Tools (Digital Audio Recording/Edit)
36 hours lecture, 36 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

R_TV 70   3.0 units
Fieldwork in Radio/Television
54 hours lecture
Grading: letter grade

This course covers topics including the employee's role and responsibilities in the Radio/Television/Film industry. It will also cover professional and desirable traits needed to gain employment in the entertainment industry. Emphasis will be placed on setting and achieving three fieldwork objectives and how to solve everyday issues and problems in the workplace. This course also covers guidelines for students to participate up to 125 hours of supervised fieldwork at a pre-approved work site as out of classroom assignments. The purpose of this course is to prepare students to be successful in obtaining employment in the Radio/Television/Film industry.
Transferable to CSU

R_TV 216   2.5 units
Non-Linear Video & Film Editing
36 hours lecture, 36 hours laboratory
Recommended Preparation: R_TV 3
Grading: letter grade or pass/no pass

Formerly R_TV 214 AC. This course explores the process of non-linear video and film editing using Final Cut Pro.

R_TV 270WE   1.0 - 4.0 units
Work Experience - Radio and Television
72 hours laboratory
Grading: letter grade

Students learn and gain on-the-job experience in the Film, Television, Radio, Digital Media 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.

Sign Language (SIGN)

SIGN 1   **4.0 units**
American Sign Language 1
72 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

Formerly 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 CSU

SIGN 1A   **3.0 units**
American Sign Language, Beginning 1
54 hours lecture
Grading: letter grade or pass/no pass

This is a basic course in the instruction and practice in American Sign Language (ASL) and fingerspelling. Emphasis will be placed on the development of vocabulary, grammar, syntax, expressive, and receptive skills. This course includes an overview of the history of sign language and Deaf culture.
Transferable to UC or CSU; see counselor for limitations

SIGN 1B   **3.0 units**
American Sign Language, Beginning 2
54 hours lecture
Prerequisite: SIGN 1A
Grading: letter grade or pass/no pass

Formerly COMDI 2B. This is the second half of the beginning course in the instruction and practice in American Sign Language (ASL) and fingerspelling. Emphasis will be placed on the development of vocabulary, grammar, syntax, expressive, and receptive skills. This course includes an overview of the history of Sign Language and Deaf culture.
Transferable to UC or CSU; see counselor for limitations

SIGN 2   **4.0 units**
American Sign Language 2
72 hours lecture, 18 hours laboratory
Prerequisite: SIGN 1
Grading: letter grade or pass/no pass

Formerly 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 CSU

SIGN 2A   **3.0 units**
American Sign Language, Intermediate 1
54 hours lecture
Prerequisite: SIGN 1A and SIGN 1B
Grading: letter grade or pass/no pass

This is a course in intermediate instruction for the continuing student of ASL and fingerspelling. The purpose is to increase signing vocabulary, emphasizing practice in improving expressive and receptive conversational skills with the goal of increasing smoothness, clarity and speed of signing. The history of sign language and Deaf culture will also be discussed. This course is formally known as COMDI 3A.
Transferable to UC or CSU; see counselor for limitations

SIGN 2B   **3.0 units**
American Sign Language, Intermediate 2
54 hours lecture
Prerequisite: SIGN 1A and SIGN 1B and SIGN 2A
Grading: letter grade or pass/no pass

This is a course in intermediate instruction for the continuing student of ASL and fingerspelling. The purpose is to increase signing vocabulary, emphasizing practice in improving expressive and receptive conversational skills with the goal of increasing smoothness, clarity, and speed of signing. The history of sign language and Deaf culture will also be discussed. This course is formally known as COMDI 3B.
Transferable to UC or CSU; see counselor for limitations

SIGN 3   **4.0 units**
American Sign Language 3
72 hours lecture, 18 hours laboratory
Prerequisite: SIGN 2 or SIGN 1B
Grading: letter grade or pass/no pass

SIGN 3 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 CSU

SIGN 4   4.0 units
American Sign Language 4
72 hours lecture, 18 hours laboratory
Prerequisite: SIGN 3
Grading: letter grade or pass/no pass

SIGN 4 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 CSU

SIGN 24   3.0 units
American Deaf Cultures
54 hours lecture
Grading: letter grade

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 CSU

Sociology (SOCIO)

SOCIO 1 (C-ID SOCI 110)   3.0 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 UC or CSU; see counselor for limitations

SOCIO 1H (C-ID SOCI 110)   3.0 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 UC or CSU; see counselor for limitations

SOCIO 2 (C-ID SOCI 115)   3.0 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, crime, poverty, sexism, racism, sexuality, social change, addiction, abuse, and alienation. The role of social institutions will also be considered.
Transferable to UC or CSU; see counselor for limitations

SOCIO 11 (C-ID SOCI 150)   3.0 units
Race & Ethnic Relations in the U.S.
54 hours lecture
Recommended Preparation: Enrollment in or Completion of 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 intra-group relations. An examination of how social, political, economic and historical forces affect contemporary race and ethnic relations will be included.
Transferable to UC or CSU; see counselor for limitations

SOCIO 11H   **3.0 units**
Honors Race & Ethnic Relations in the US
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 intra-group relations. An examination of how social, political, economic and historical forces affect contemporary race and ethnic relations will be included.
Transferable to CSU

SOCIO 13   **3.0 units**
Sociology of Latinos
54 hours lecture
Grading: letter grade

This course is a survey of the sociology of Latinos in the United States, with a focus on their contemporary cultural and socio-economic conditions. Study will include a review of the immigration patterns of various Latino groups and their experiences with important social processes and institutions in the U.S. The effects of globalization, immigration status, race, class, gender, and Latino responses to discrimination will also be examined.
Transferable to UC or CSU; see counselor for limitations

SOCIO 17   **3.0 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 CSU

SOCIO 40 (C-ID SOCI 130)   **3.0 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 UC or CSU; see counselor for limitations

Social Science (SOCSC)

SOCSC 1   **3.0 units**
Comparative World Cultures
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 UC or CSU; see counselor for limitations

SOCSC 1H   **3.0 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. These teams study 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 part of the Honors Curriculum. This course is not open for credit to students who have completed Humanities 1, Humanities 1H, or Social Science 1.
Transferable to UC or CSU; see counselor for limitations

SOCSC 7   **3.0 units**
American Pluralism 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 UC or CSU; see counselor for limitations

Foreign Language, Spanish (SPAN)

SPAN 1 (C-ID SPAN 100)   **5.0 units**
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. It is not recommended for native speakers of Spanish.
Transferable to UC or CSU; see counselor for limitations

SPAN 2 (C-ID SPAN 110)   **5.0 units**
Elementary Spanish
90 hours lecture, 18 hours laboratory
Prerequisite: SPAN 1
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 UC or CSU; see counselor for limitations

SPAN 3 (C-ID SPAN 200)   **5.0 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 in the four skills necessary for language acquisition: listening, speaking, reading and writing. Topics will be placed in the contemporary context in the Spanish-speaking world.
Transferable to UC or CSU; see counselor for limitations

SPAN 4 (C-ID SPAN 210)   **5.0 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 UC or CSU; see counselor for limitations

SPAN 8   **3.0 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

SPAN 9 (C-ID SPAN 220)   **5.0 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 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. This course has a prerequisite. Students must be a heritage speaker with the ability equivalent to SPAN 2.
Transferable to UC or CSU; see counselor for limitations

SPAN 9H   **5.0 units**
Honors Spanish for Spanish Speakers
90 hours lecture
Prerequisite: Qualification for the Honors Program
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 UC or CSU; see counselor for limitations

SPAN 10   **5.0 units**
Spanish for Spanish Speakers
90 hours lecture
Recommended Preparation: SPAN 9 or fluency in spoken Spanish
Grading: letter grade or pass/no pass

This course is the second semester of intermediate Spanish. It continues developing reading and writing skills of native Spanish speakers. It also includes an extensive grammar review. The Hispanic cultural and reading materials support the development and understanding of writing styles and techniques, enabling the Spanish speaker to apply them to creative writing and to use argument and debating skills in novel situations.
Transferable to UC or CSU; see counselor for limitations

SPAN 10H   **5.0 units**
Honors Spanish for Spanish Speakers
90 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or pass/no pass

This course is the second semester of intermediate Spanish. It continues developing reading, writing and oral skills of native Spanish speakers. It also includes an extensive grammar review. The Hispanic cultural and reading materials support the development and understanding of writing styles and techniques, enabling the Spanish speaker to apply them to creative writing and to use argument and debating skills in novel situations.
Transferable to UC or CSU; see counselor for limitations

SPAN 25A   **3.0 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 1400s, 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 UC or CSU; see counselor for limitations

SPAN 25B   **3.0 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 1400's, including the Native American cultures, present day Latin America and the Hispanic communities in the U.S.
Transferable to UC or CSU; see counselor for limitations

SPAN 25C   **3.0 units**
Advanced Spanish: Politics, Current Event
54 hours lecture
Prerequisite: SPAN 4 or 10
Grading: letter grade or pass/no pass

This course is a course that focuses on the current events of the Spanish-speaking world.
Transferable to UC or CSU; see counselor for limitations

SPAN 25D 3.0 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 UC or CSU; see counselor for limitations

Statistics (STAT)

STAT 1 (C-ID MATH 110) 4.0 units
Elementary Statistics
72 hours lecture
Prerequisite: MATH 130, 130B or one year high school intermediate algebra with a grade of B or better as reflected by the second semester grade or qualification through the LBCC assessment process for Math.
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 UC or CSU; see counselor for limitations

STAT 1H (C-ID MATH 110) 4.0 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, or qualification through the LBCC assessment process for Math, 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 UC or CSU; see counselor for limitations

STAT 801X 1.0 unit
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.

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. You must enroll in the corequisite course before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 1B 2.0 units
Acting 1 - Movement
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

TART 1C   **2.0 units**
Acting 1-Voice
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Recommended Preparation: TART 1B
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

TART 1D   **2.0 units**
Acting 1 - Improvisation
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or pass/no pass

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 UC or 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
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Recommended Preparation: TART 1B, 1C, or 1D, 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 UC or CSU; see counselor for limitations

TART 2A   **2.0 units**
Acting 2-The Spoken Text
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1C
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
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 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 UC or CSU; see counselor for limitations

TART 2B   **2.0 units**
Acting 2-The Spoken Text
27 hours lecture, 27 hours laboratory
Prerequisite: TART 2A
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

TART 2C   **2.0 units**
Acting 2-Movement, Mime and Mask
27 hours lecture, 27 hours laboratory
Prerequisite: TART 1B
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

TART 2D   **2.0 units**
Acting 2-Movement, Mime and Mask
27 hours lecture, 27 hours laboratory
Prerequisite: TART 2C
Corequisite: TART 51
Grading: letter grade or pass/no pass

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 UC or CSU; see counselor for limitations

TART 3A   **3.5 units**
Acting 3-Scene Study
54 hours lecture, 36 hours laboratory
Corequisite: TART 51. You must enroll in the corequisite
course before enrolling in this course.
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
16th and 17th century, to heighten the intensity of the
acting experience for the serious theatre student.
Transferable to UC or CSU; see counselor for limitations

TART 3B   **3.5 units**
Acting 3-Scene Study
54 hours lecture, 36 hours laboratory
Prerequisite: TART 3A
Corequisite: TART 51. You must enroll in the corequisite
course before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 4   **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

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 UC or CSU; see counselor for limitations

TART 25 (C-ID THTR 111)   **3.0 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 UC or CSU; see counselor for limitations

TART 30   **3.0 units**
Introduction to Dramatic Literature
54 hours lecture
Corequisite: TART 51. You must enroll in the corequisite
course before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 39AD (C-ID THTR 192)   **1.0 unit**
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 UC or CSU; see counselor for limitations

TART 40 (C-ID THTR 171) 3.0 units
Stage Craft
36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD and 51. You must enroll in the corequisite courses before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 42 (C-ID THTR 173) 3.0 units
Introduction to Stage Lighting
36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD and 51. You must enroll in the corequisite courses before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 43 3.0 units
Introduction to Stage Costume
36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD and 51. You must enroll in the corequisite courses before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 44 3.0 units
Costume Design
36 hours lecture, 54 hours laboratory
Prerequisite: TART 43
Corequisite: TART 39AD and 51. You must enroll in the corequisite courses before enrolling in this course.
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, i.e.: museums, garment district, costume rental houses, etc.
Transferable to UC or CSU; see counselor for limitations

TART 47 3.0 units
Stage Management
54 hours lecture
Corequisite: TART 51
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

TART 49AD 2.5 units
Rehearsal and Performance
144 hours laboratory
Prerequisite: TART 1 (may be taken concurrently)
Corequisite: TART 51. You must enroll in the corequisite course before enrolling in this course.
Grading: letter grade or pass/no pass

Formerly TART 49AD. 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 UC or CSU; see counselor for limitations

TART 50 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 UC or CSU; see counselor for limitations

TART 50/1   0.5 unit
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 UC or CSU; see counselor for limitations

TART 50/2   1.0 unit
Major Production Performance
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 UC or CSU; see counselor for limitations

TART 50/3   2.0 units
Major Production Performance
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 UC or CSU; see counselor for limitations

TART 51   1.0 unit
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

TART 55 (C-ID THTR 175)   3.0 units
Stage Makeup
36 hours lecture, 54 hours laboratory
Corequisite: TART 39AD and 51. You must enroll in the corequisite courses before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 56   3.0 units
Intermediate Stage Makeup
36 hours lecture, 54 hours laboratory
Prerequisite: TART 55
Corequisite: TART 39AD and TART 51. You must enroll in the corequisite courses before enrolling in this course.
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 UC or CSU; see counselor for limitations

TART 75AD   2.0 units
Summer Repertory Theatre: Performance
126 hours laboratory
Corequisite: TART 76AD
Recommended Preparation: Audition
Grading: letter grade or pass/no pass

Formerly TART 75AD. 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 UC or CSU; see counselor for limitations

TART 76AD   **2.0 units**
Summer Repertory Theatre: Production
126 hours laboratory
Grading: letter grade or pass/no pass

Formerly TART 76AD. 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 UC or CSU; see counselor for limitations

TART 201   **1.5 units**
Show Business Careers-How to Start
18 hours lecture, 36 hours laboratory
Prerequisite: TART 1
Grading: letter grade or pass/no pass

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.

TART 204   **1.5 units**
Marketing Yourself for Show Business
18 hours lecture, 36 hours laboratory
Prerequisite: TART 1
Grading: letter grade or pass/no pass

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.

TART 205   **3.5 units**
Auditions for Theatre and Film
54 hours lecture, 36 hours laboratory
Prerequisite: TART 1
Recommended Preparation:
TART 1B and TART 1C 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 actor's 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
Prerequisite: TART 1
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.

TART 208A   **1.5 units**
Breaking into Commercials - Beginning
18 hours lecture, 36 hours laboratory
Prerequisite: TART 1
Grading: letter grade or pass/no pass

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.

TART 208B 1.5 units
Breaking Into Commercials - Advanced
18 hours lecture, 36 hours laboratory
Prerequisite: TART 208A
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.

TART 210A 1.5 units
Voice-Over Techniques - Beginning
18 hours lecture, 36 hours laboratory
Prerequisite: TART 1
Recommended Preparation: TART 1C
Grading: letter grade or pass/no pass

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.

TART 210B 1.5 units
Voice-Over Techniques-Advanced
18 hours lecture, 36 hours laboratory
Prerequisite: TART 210A
Recommended Preparation: TART 1C
Grading: letter grade or pass/no pass

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.

TART 212A 1.5 units
Acting in Film - Beginning
18 hours lecture, 36 hours laboratory
Prerequisite: TART 1
Grading: letter grade or pass/no pass

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.

TART 212B 1.5 units
Acting in Film - Advanced
18 hours lecture, 36 hours laboratory
Prerequisite: TART 212A
Grading: letter grade or pass/no pass

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.

Technology (TEC)

TEC 60 4.0 units
Computer Aided Design and Drafting (CADD)
54 hours lecture, 54 hours laboratory
Recommended Preparation:
ARCHT 60 or ARCHT 61 or DRAFT 51A
Grading: letter grade

Formerly TEC 60AD. This course introduces students to new and emerging software and equipment technologies as they become integrated in varied technical design fields. Classes may present Computer Aided Drafting and Design, CADD, parametric software programs, presentation graphics and/or various 3D printing technologies. The course is designed to enhance and upgrade the software and hardware skills of mechanical engineers, architects, interior designers, civil engineers and students employed in other design related occupations. Transferable to CSU

TEC 211 3.0 units
Print Reading for Industry
54 hours lecture
Grading: letter grade or pass/no pass

This course introduces designers/drafters to the theory, techniques, and application of mechanical drawing systems in the fields of engineering technology, engineering, and mechanical design as related to manufacturing industries such as aerospace and automotive. The course addresses industry standards required to establish universal interpretation of technical drawings to ensure the consistency of manufactured goods and assembled products.

Foreign Language, Vietnamese (VIET)

VIET 1   **5.0 units**
Elementary Vietnamese
90 hours lecture, 18 hours laboratory
Grading: letter grade or pass/no pass

This is the first course in Vietnamese. It introduces students to the four basic skills necessary for language acquisition: listening, speaking, reading and writing. Students will learn the sound system, appropriate vocabulary and basic grammatical structures. In addition, this course exposes students to everyday situations and cultural topics of the Vietnamese speaking world.
Transferable to UC or CSU; see counselor for limitations

VIET 2   **5.0 units**
Elementary Vietnamese
90 hours lecture, 18 hours laboratory
Prerequisite: VIET 1 or VIET 1A and VIET 1B
Grading: letter grade or pass/no pass

This course is a continuation of the study of Vietnamese vocabulary and grammar forms, emphasizing listening and speaking, reading and writing based on modern topical material.
Transferable to UC or CSU; see counselor for limitations

Nursing, Vocational Nursing (VN)

VN 215   **6.0 units**
Fundamentals of Nursing
63 hours lecture, 135 hours laboratory
Recommended Preparation: READ 883 and 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 throughout 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   **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 (C.N.A) 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 220   **4.0 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 required for VN program admission. Students are required to complete 2 additional hours of Supplemental Instruction in a designated Success Center.

VN 222   **1 unit**
Intravenous Therapy & Blood Withdrawal
.5 hour lecture, 1.5 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 225   3.0 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 VN225 are equivalent courses.

VN 230   3.0 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 off-campus clinical sites.

VN 235   3.0 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
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 240   3.0 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 245   **2.0 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   **1.0 unit**
Maternal-Infant Nursing Lab
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 250   **2.0 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   **1.0 unit**
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 255   **3.0 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   **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 265 3.0 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 3.0 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.

Welding (WELD)

WELD 50 4.0 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

WELD 211 9.0 units
Fundamentals of Welding & Tools of Trade
90 hours lecture, 239 hours laboratory
Grading: letter grade or pass/no pass

This course is an introduction to welding, emphasizing oxy-acetylene welding, oxy-acetylene cuttings, braze welding and pipefitting. 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. Students are required to attend 5 hours at the Career Technical Education (CTE) success center for specially designed activities and assignments that relate to this course content.

WELD 212 4.0 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 213 4.0 units
Intro to Semi-Automatic 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 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 214 4.0 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 221   3.0 units
Arc Welding Structural Certification
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 400   2.0 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 410   2.0 units
Welding (ARC)
108 hours laboratory
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   1.0 unit
Welding (ARC)
54 hours laboratory
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 412   3.0 units
Shielded Metal Arc Welding (ARC)
162 hours laboratory
Grading: letter grade or pass/no pass

This course will address the techniques of arc welding of steels, cast iron, aluminum, hard facing, and cutting. It also covers correct equipment setup and safety practices.

WELD 413   2.0 units
SMAW Flat/Horz Groove Welds with Backing
108 hours laboratory
Recommended Preparation: 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 414   2.0 units
SMAW Vert & OV/HD Grv Welds w/Backing
108 hours laboratory
Recommended Preparation: 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 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 415   2.0 units
SMAW Flat/Horz Open Root Groove Welds
108 hours laboratory
Recommended Preparation: 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 successful in the program.

WELD 416   2.0 units
SMAW Vert & O/H Open Root Groove Welds
108 hours laboratory
Recommended Preparation: 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 successful in the program.

WELD 460   2.0 units
Welding (Acetylene Gas)
108 hours laboratory
Grading: letter grade or pass/no pass

This course explores the techniques of oxy-acetylene gas welding of steels and aluminum, hard facing, flame cutting, brazing and oxy-hydrogen welding. Safety practices and general related information is included.

WELD 461   1.0 unit
Oxygen Acetylene Welding
54 hours laboratory
Grading: letter grade or pass/no pass

This course is a study of the techniques of oxy-acetylene gas welding of steels and aluminum, hard facing, flame cutting brazing, oxy-hydrogen welding and safety practices.

WELD 480   2.0 units
Welding (Inert Gas)
108 hours laboratory
Recommended Preparation: 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   1.0 unit
Welding (Inert Gas)
54 hours laboratory
Grading: letter grade or pass/no pass

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 482   2.0 units
Gas Tungsten Arc Welding Basic Joints
108 hours laboratory
Recommended Preparation: 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   2.0 units
Gas Metal Arc/Flux Core Arc Welding
108 hours laboratory
Recommended Preparation: 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 601   0.0 unit
Welding Practice
18 hours laboratory
Grading: LBCC Non-Graded Course

This course offers the new student or a former student additional assistance in welding and or helps improve mastery of a specific welding position. Also, a student can use this course to practice for a practical performance test.

Appendix A: Administration

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https://www.lbcc.edu/academic-services

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ALVAREZ, LISBETH
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ALVIAL, LEFIA
Matriculation Aide

AMADOR, FELISHA
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AMADOR, RUBEN
Library Systems Technician

ANDERSON, AARON
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ANDRADE, ELIZABETH
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ANDRAFE-HERNANDEZ, MARIA
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ARY, MICHELLE
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ATWOOD, KATHIE
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AZEVEDO, PAULO
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BECKMAN, RANDALL
Certified Athletic Trainer

BEJARANO LOCASCIO, TRACY
Senior Administrative Assistant

BERBER, JENNIFER
Performance Accompanist -
Dance

BERTELL, MEGHANROSE
Certified Athletic Trainer

BIGELOW, AMY
Manager, Child Dev. Center

BIRDWELL, JILL
Academic Administrative Assistant

BIRONG, MARK
Reprographics & Mail Assistant

BIRONG, MICHAEL
Senior Network Administrator

BLINCOE, DANIEL
Senior Locksmith

BOEDE, STEVE
Plumber

BOLANOS, ANGEL
Custodian

BOLENDER, KYLE LOUIS
Aquatics Facilities Technician

BONALES, STEPHANIE L
Interpreter Services Coordinator

BONILLA, JOSE
Custodian

BONNER JR., GREGORY L
Custodian

BOWEN, MICHELLE
Financial Aid Specialist

BOWERS, SARAH
Administrative Assistant

BOWSER JR, CLYDE
Custodian

BOYLE, DEBORAH
EOPS Program Specialist

BRADY, KRISTEN LEE
Manager, SBDC Marketing

BRETON, JOANNE
Schedule Specialist

BRITT JR., CHESTER
Special Event Assistant

BROOKS, ARLEATHA
Enrollment Specialist

BROOKS, CAREY
Custodian

BROWN, CYNTHIA
Office Assistant

BROWN, SHIRLEY
Administrative Assistant

BUCKNER, DOMINIQUE L
Custodian

BUHAIN, ALLAN
Warehouse Worker

BUI, CHAU
Technical Support Specialist

BURKE, MICHAEL
Deputy Director, Operations and Maintenance

BURTON, SOLEDAD
Accounting Technician II

BUTLER, THOMAS
Custodian

CAMPBELL, LARRY
Custodian

CAO, CAMTU
Library Technician II

CARLOS MURO, MARK
Custodian

CARMAN, ROBERT PAUL
Deputy Director, Web and Mobile Services

CARROLL, SEAN
Senior Multimedia Services Tech.

CARSON, KENNETH
Custodian

CASTELLANOS, JOSHUA
Executive Director, Public Affairs and Marketing

CASTRO, ALEXANDER
Custodian

CASTRO, SARA
Student Support Services Aide

CASUGA, KIMBERLY
Senior Administrative Assistant

CEJA, TOMAS
Skilled Maintenance Worker

CERDA, ANDREA
Child Care Assistant

CHAN, HO
Custodian

CHAO, JULIE
Senior Accounting Technician

CHAO, SEM
Budget Officer

CHASE, BENJAMIN
Financial Aid Specialist

CHIT UYS, ROMADA
Matriculation Aide

CHONG, KENTON
Custodian

CHRETIEN SHOOK, CAROLINE
Interim Executive Director, Classified

CLARK, TAMMY
Custodian

CLEMONS-HARDEN, LATONYUA
Lead Cashier

CLEVELAND, SANDRA
Student Support Services Aide

CLEVERINGA, TRAVIS
Library Assistant

COATS, DONNA
Administrative Assistant

COMPIAN, JOHNNY
Skilled Maintenance Worker

COMPIAN, LAURA
Academic Administrative Assistant

COMPTON, SHYRA
Associate Director, Scholarship and Outreach

CONCHADA, KATHERINE
Senior Office Assistant

CONTRERAS ZAVALA, MARIA
Financial Aid Accounting Technician

CONTRERAS, MARY ESTHER
Academic Administrative Assistant

COOK, RASHANDA
Child Dev. Center Teacher

COOPER, THOMAS
Custodian

COQUIA, JANICE
Instructional Aide

COVARRUBIAS, LETICIA ISABEL
Nurse

CRANE, PETRA
Child Care Assistant

CRIHFIELD, BRADLEE
Media Producer

CROSS, GABRIELLE
Instructional Aide

CRUZ, EVELYN
Child Care Assistant

CRUZ, JAIMARIE
Administrative Assistant

CULLY, SEAN
Outreach Assistant

CULPEPPER, AARON
Custodian

CURTIS, DANIEL
Multimedia Services Technician

CYR, ANTHONY
Custodian

DANDIE, JARED
Electrician

DANIELS, DOUGLAS
Science Lab Equipment
Technician

DANIELS, JULIE
Academic Administrative Assistant

DASANAYAKE, LIHINI
Student Support Services Aide

DE SANTIAGO JR., DARIO
Multimedia Services Technician

DEANDA, MONICA
Health Services Technician

DELGADO, MARIA
International Student Program
Adm. Technician

DENTON JR., DERRICK
Custodian

DEQUEANT, CHARLES
Matriculation Aide

DOLES, CATHERINE
Admissions & Records Tech II

DOMINGUEZ, SEAN
Tutorial Program Coordinator

DOMINGUEZ, SUNDEE
Math Lab Coordinator

DORFMAN, ANDRIUS
Manager, Sr. PeopleSoft DBA/Sys

DORSEY, CHRISTOPHER
Business Systems Analyst IV

DOUGLAS, JENNIFER
Student Support Services Aide

DUARTE, DARREN
HVAC Mechanic

DUARTE, DIANE
SBDC Financial Analyst

DUCKWORTH, LISA
DSPS Technical Assistant

DURAN JR., CONRRADO
Accounting Supervisor

DURAN, SUSANA
Financial Aid Advisor

EACH, KATHRYN
Academic Administrative Assistant

ENGEL, ANNE
Application Administrator

ENSBERG, STEN ERICKSON
Interim SBDC Systems Specialist

ESPARZA, ROSARIO
Financial Aid Specialist

ESTACIO, RICHARD
Lead Custodian

ESTACIO, RONALD
Senior Warehouse Worker

EVANS, RICKY
Grounds Maintenance Worker

FACKELDEY, JOHANNA
Administrative Assistant

FAMA, JAY
Records Specialist

FAN, CICY
Administrative Assistant

FEENSTRA, DARREN
Fleet & Equipment Mechanic

FERNANDEZ, MONIQUE
Curriculum Database Specialist

FERNANDEZ, YOLANDA
Administrative Assistant

FINTLAND, SUSAN
Tutorial & Supplemental Inst.
Program Coordinator

FISHER, DEVIN
Accounting Technician I

FITZGERALD, JAMES
Irrigation and Grounds
Maintenance Technician

FLORES, SALOMON
Child Care Assistant

FLORES, TANAIRI
Child Care Assistant

FLOWERS, JIMMIE
Equipment Technician

FOLEY, SEAN E
Job Developer Coordinator

FOOT, HAROLD
Instructional Lab Coordinator

FOWLKES, ANGELA
Financial Aid Specialist

FRANCE, NEIL
Photo Lab Technician

FRANCO, JENNIFER
Child Care Assistant

FREDERICK, VERONICA
Admissions & Records Tech II

FRIEZ, DANA
Workforce Development Training
Manager

FUENMAYOR, ANDREW
Data Scientist

GAGNE, COLLEEN
Senior Multimedia Services Tech

GALARZA, DIANA
Multimedia Services Technician

GALLARDO, ELIZABETH
Instructional Lab Coordinator

GALLEGOS, JESSICA
Matriculation Aide

GALVEZ-NOZAN, GRACE
Instructional Aide

GARBER, JASON
Custodian

GARCIA, ALONDRA
Matriculation Aide

GARCIA, CLAUDIA
Program Manager, FKCE

GARCIA, DORA S
Human Services Specialist

GARCIA, KELLY
Senior Administrative Assistant

GARCIA, KIMBERLY
Matriculation Aide

GARCIA, MIGUEL ANGEL
Matriculation Aide

GARCIA, PEDRO
Senior Custodial Supervisor

GARCIA, SYLVIA
Student Conduct Specialist

GARNER, CARL
DSPS Adaptive Computing
Specialist

GARRIOTT, ALEXIS
Instructional Lab Coordinator

GARRISON, PAMELA
Administrative Assistant

GARY, STEPHEN
Custodial Supervisor I

GILMORE, BRENT
Director, Academic Services

GILPATRICK, DANIEL
Admission & Records Technician I

GLASSOCK, TRACI
Scholarship Specialist

GOBELI, FAITH
Instructional Associate

GOINS, REBECCA
Administrative Assistant

GOMEZ, ADRIANA
Workforce Development Program
Specialist

GOMEZ, GRISELDA
Admissions & Records Technician I

GOMEZ, VALERIA
Child Care Assistant

GONZALES, GLORIA
Senior Office Assistant

GONZALEZ, BERNADETTE
Disability Support Svc. Specalist

GONZALEZ-WILSON, GLORIA
Human Resources Specialist

GOOLD, LEAH
Director, Global Trade/Logistics

GOWENS, KEVIN
Enrollment Specialist

GRAHAM, LATASHA
Child Care Assistant

GRIMALDI, SERGIO A
Student Life Coordinator

GRINNELL, NATHANAEL
Grant Assistant II, ERD

GROUNDS LYNNA
Child Care Assistant

GUERRERO, FABIOLA
Senior Administrative Assistant

GUIDAS, MARK
Deputy Director, Network Services

GUTIERREZ, ERICKA
Financial Aid Advisor

GUTIERREZ, YVONNE
Senior Director, Financial Aid

HANN, AUDREY
Admission & Records Technician I

HANN, BRANDON
Technical Support Specialist

HANN, JACKIE
Board Secretary

HARDIN, DENA L
Child Dev Center Teacher

HARRIS, JAMES LOUIS
Custodian

HARRIS, RICARDO
Supervisor, Warehouse Logistics

HARVESTON, RANDY
Lead Library Technician

HARVEY, BRIAN
Reprographics & Mail Assistant

HASTIE, BRIAN
Irrigation and Grounds
Maintenance Technician

HAYES, BRENDAN J
Manger, Environ Health/ Safety
Services

HEBER, LESLIE
Multimedia Services Technician

HEFFERN, TIMOTHY
Deputy Director, Academic
Computing/MultiSvcs

HELLER, KEVIN
Custodian

HERNANDEZ ALEJANDRO
Custodian

HERNANDEZ, ANGELICA
Child Dev. Center Teacher

HERNANDEZ, MIREILLE
Buyer

HERRERA, BRENDA
Culinary Arts Lab Instr. Asst.

HERRERA, JUAN
Skilled Maintenance Worker

HIATT, TED
Associate Director, SBDC

HINDMAN, EILEEN MAE
Payroll Technician

HIVELY, STUART E.
Vocational Instructor Tech
Electrical

HOEFGEN, ATEFEH
Child Care Assistant

HOLMGREN, JENNIFER
Director, Planning

HONG, PAUL
Senior Tech Support Specialist

HOWARD, JONATHAN
Grounds Maintenance Worker

HOYO, RENE
Instructional Assistant

HUERTA, JACQUELINE
Matriculation Aide

HUERTA, MAGDALENA
Interim Business Systems Analyst II

HUESMANN, LAURIE
Senior Office Assistant

HUYNH, TIFFANEY
Technical Support Specialist

HWANG, JAE
Technical Support Specialist

IGLESIA, LUBERT
Director, Workforce Development

INFUSINO, MELISSA
Director, Workforce Development

INTARATTANA, VALINDA
Disability Support Svc. Spec.

ISASLAZO, ROGELIO
Sr. Technical Support Specialist

JACKSON, CYNTHIA
Buyer

JACKSON, ERICKA
Interim Human Resources
Manager - Classified

JARRETT, NATE
Manager, Mail & Reprographics
Services

JEFFERSON, FELICIA
Admissions & Records Technician II

JENKINS, MEGANN
Outreach Assistant

JIMENEZ, EVA
Admissions & Records Technician II

JOHNSON, LAFRIEDA
Enrollment Specialist

JOHNSON, PENELOPE
Administrative Assistant

JOHNSON, ROBERT
Vocational Instructor Technician
Sheet Metal

JOHNSON, SHANEE M
Child Care Assistant

JOKANOVICH, IRIS
Matriculation Aide

JONES, JOHN D.
Custodian

JONES, SHONDA
Executive Assistant

JORGENSEN, MARISSA M
Accounting Technician II

KAMMERMAN, JAMIE
Student Activities Advisor

KANE, HEATHER
Academic Administrative Assistant

KARGAS, ALEXIS
Child Care Assistant

KEARNEY, KEVIN
Performance Accompanist

KEMPF, RACHEL
Accounting Technician II

KHAN, BRITTANY
Accountant

KHONG, NONG
Instructional Assistant

KIBLER, ADRIENNE
Grants Research Analyst

KLIESEN, TAYLOR
Instructional Lab Support
Technician

KOPPE, KAYE
Administrative Assistant

KOTTAB, FARSIO
Interim Business Systems Analyst II

KRASNER, MARINA
Applications Dev. Analyst V

KYLE, JEFF
Grounds Maintenance Worker

LA, AMY
Mental Health Clinician

LAM, HUE
CalWorks Program Student
Advisor

LASHLEY, LENNOX
Custodian

LE, ARIANE
Lead Library Technician

LEDESMA, MICHELE
Child Care Assistant

LEFLORE, BROOKE
Child Care Assistant

LEGAULT, JESSICA
Academic Administrative Assistant

LEON, CYDNEY
Executive Assistant

LEPE DIAZ, CAROLINA
Research Analyst II

LERCH, VICKI
Executive Assistant

LESLIE, VALENTINA
Culinary Arts Lab Instr. Asst.

LINCOLN, TAMARA
Instructional Aide

LOPEZ DE SANTA ANNA, DONNA
Administrative Assistant

LOPEZ, JONAH
Business Systems Analyst IV

LOPEZ, WENDI
Distance Learning Specialist II

LUCERO, ZAIDA R
Student Support Service Aide

LUONG, NGOC H
Administrative Assistant

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
Senior Manager, PeopleSoft DBA/
Sys.

MAIS, KATHLEEN
Simulation Hospital Lab
Coordinator

MALADAGA, CINDERELA M
Applications Dev. Analyst IV

MALINIS, KHANTINA
Reprographics & Mail Assistant

MARANO, MARK
Child Dev. Center Teacher

MARONEY, ROBERTA
Administrative Assistant

MARTIN, KEISHON
Custodian

MARTIN, MARINDA
Graphic Design Specialist

MARTINEZ, JAMES
Financial Aid Advisor

MARTINEZ, LESLIE
Child Development Center
Associate Teacher

MARTINEZ, LUPITA
Mental Health Clinician

MARTINEZ, MELISSA
Child Dev. Center Teacher

MARTINEZ, SARAI
Child Care Assistant

MARTINEZ, TERESA L
Child Care Assistant

MARTUCCIO, LETICIA
Child Development. Center
Associate Teacher

MAY, DORIS
Custodian

MCANELLY, LAUREN
Senior Administrative Assistant

MCCOY, BRITTNEY
Financial Aid Specialist

MCFARLAND, JEFFREY
Senior Accountant

MCGLOTHAN, APRIL
Interim Disability Support Services
Specialist

MCMAHON, SHARON M
Instructional Assistant

MEAK, SAVOUN
Office Assistant

MEDINA, RIO ROSARIO
Career Pathways Coordinator

MEJIA, ANNIE
Instructional Aide

MELENDEZ, CHERYL LYNN
Manager, 10K Small Businesses
Program

MENDEZ, SUSANA
Equipment Technician

MENDOZA, BETTY M
Senior Office Assistant

MENDOZA, DAVID
Custodian

MENDOZA, JENNIFER
Child Development Center
Associate Teacher

MENJIVAR, JUAN
Deputy Director, Enrollment
Services

MEYER, SUE
Administrative Assistant

MICHAEL, SEAN
Manager, Facilities Maintenance

MILKES, SHARON
Records Specialist

MILLER, LAURA
Senior Accountant

MILLER, MARGARET
Admissions & Records Technician II

MILLER-CALVERT, DEBORAH
Director, Student Health Services
and Student Life

MIRANDA, MARILU
Manager, Payroll & Benefits

MIYAO-MOORE, NANCY
Curriculum/Schedule Technician

MIZE-BOLTON, CAMILLE
Public Relations Coordinator

MOGHARABI, NEILOUFAHR
WRC Lab Coordinator

MOHAN, LATIKA
Child Development Center
Associate Teacher

MOLONEY, ALAN
Deputy Director, Purchasing and
Contracts

MONTGOMERY, GREGG
Multimedia Services Technician

MOORE, RYAN
Curriculum/Schedule Technician

MORALES, BLANCA
Contracts Technician

MORALES, ELIZABETH
Upward Bound Specialist

MORGAN SR., MICHAEL
Custodian

MORGAN, MICHAEL
Lead Custodian

MOTLEY, MICHELLE
Academic Scheduling Analyst

MRAVEC, MONIKA
Educational Technologist II

MUNOZ, ALMA
Child Care Assistant

MURILLO-RAMIREZ, MELISSA
Child Care Assistant

MURILLO-RAMIREZ, SUSANA
Child Development Center
Associate Teacher

MURPHY, ERIN
Interim Director, Special Projects

MURRIN, KATHERINE
American Language and Cultural
Institute Coordinator

MYRTLE, MATTHEW JAMES
Business Client Supervisor

NAPOLILLO, ANTHONY
Custodian

NAVARRO, BLANCA
Matriculation Aide

NEAL, MARK
Locker Room Attendant

NECIOSUP, MARIA
Enrollment Specialist

NEPOMUCENO, KIMBERLY
Administrative Support Spec.

NGO, LOAN
Web Developer II

NGUYEN, CINDI
Human Resources Analyst

NGUYEN, TAI
Assessment Coordinator

NICHOLAS, BERNADETTE
Child Care Assistant

NORRIS, TREVOR
Art Gallery Coordinator

NUGUID, ELYSE
Accountant

NYE, PATRICK
Executive Director, Small Business
and Entr.

NYSSEN, THOMAS
Carpenter

NYSTROM, ARNE
Senior Network Administrator

NYSTROM, MARCIA
Administrative Assistant

OLMOS, LINDA
Enrollment Specialist

OLSEN BELL, MARY
Human Resources Analyst

OLSEN, SHARON
Accounting Technician I

OLSON, ROBERT
Performing Arts Prod. Technician

ORIEE, DEREK
Student Activities Advisor

ORNELAS JR., MARTHA
Child Care Assistant

PALACIOS, MARIANNE
Nurse Practitioner

PARIS, RYAN
Interim Functional Lead Analyst

PARKER, JESSIE
Custodian

PARKER, MARCIA
Senior Director, Community
Relations and Acad. Part

PARVIAINEN, KAREN
Cashier

PATTERSON, KOREY
Instructional Lab Support Asst.

PEARSON, ANTHONY
Performing Arts Prod. Technician

PENA, JERHOME
Parking Services Coordinator

PEREZ RODRIGUEZ, ELIZABETH
Matriculation Aide

PEREZ, JAEMIE
Child Care Assistant

PERLAS, LINH
Interim Admin. Support Manager,
ERD

PETERSON, SHARON
10K Small Bus. Alumni Manager

PHAN, DIANA
Educ. Assess. Research Analyst I

PHENG, RENA
Financial Aid Accounting
Technician

PHILLIPS JR., MALCOLM
Custodian

PINKSTON, ETIENNE M
Instructional Lab Support
Assistant

POLLACK, BRADLEY
Program Director, SBDC

POPE, MICHELLE
Supervisor, Enroll. Services

PORTER-COSTE, WENDY
Supervisor, Upward Bound

PREUSS, CURTIS
Locksmith

PRICE, SHERRI
Cashier

QUILATON, JUDITH
Enrollment Specialist

QUIROZ, KEMBERLY
Matriculation Program Assistant

RAMIREZ JR., ARTURO
Multimedia Services Technician

RAMIREZ, JOANN M
Financial Aid Specialist

RAMOS, BRENDA
Administrative Assistant

RANTALA, LAURA
Manager, Student Tech Help Desk

RAPOZA, ROBERT
Director, Business Support
Services

RATSAMY, NANCY
Business Systems Analyst IV

RAU, MEGGAN
Instructional Aide

RAYMOND, KARSTEN
Science Lab Equipment
Technician

RAZZAGHI, NOSHIN E
Academic Admin Assistant

REECE, M'SHELLE
Executive Assistant to
Superintendent-President

REED, EVELYN
Benefits Technician

REID, ANDREA
Cashier

REMETA, ROBERT
Skilled Maintenance Worker

RENTERIA, DANIEL
Technical Support Specialist

REYES, KATHERINE T
Administrative Assistant

RICE, SANDRA
Senior Buyer

RIPLEY, AMANDA B
Science Lab Equipment
Technician

RITTER, BREANNA ELIZABETH
Human Resources Specialist

RIVAS, JODIE
Matriculation Aide

RIVELL, SEAN BRIAN
Deputy Director, Facilities
Rental and Grounds

ROA, LUIS
Payroll Technician

ROBERTSON, TEILA
Student Life Coordinator

ROBINSON, STACEY
Bursar

ROBLEDO, JANINA
Interim Child Development Center
Associate Teacher

RODRIGUES, JOY
Records Specialist

RODRIGUEZ, ALEJANDRO
Custodian

RODRIGUEZ, ERIKA
Financial Aid Specialist

RODRIGUEZ, VERONICA
Workforce Development Training
Coordinator

ROESSLER IV, FREDERICK
Sound Engineering Technician

ROMANOVA, YELENA
Child Care Assistant

ROSALES, DIEGO
Technical Support Specialist

ROSENFELD, DANIEL
Supervisor, Business Client

ROSS, RACHEL
Financial Aid Specialist

ROUAULT, KRISTEN
Disability Support Services
Specialist

RUBALCAVA, MARIA
Records Specialist

RUDOLPH, JOANNA
Instructional Aide

RUELAS, ISAAC
Custodian

SADLER, CC
Educational Technologist II

SALAZAR, SUSAN
Interim Executive Assistant

SALDANA, DANIEL
Custodian

SALDANA, RAYMOND
Custodian

SAN, TIFFANY
Child Development Center
Program Assistant

SANCHEZ RUEDA, SANDRA
Nursing and Allied Health Lab
Technician

SANCHEZ, ELENA
Administrative Assistant

SANCHEZ, VANESSA
Child Care Assistant

SANTIEL, RAMEL A
Multimedia Services Technician

SANTOSCOY, OSCAR
Instructional Lab Support
Technician

SARAYE, GLORIA
Grant Assistant III, ERD

SATELE, TAUASOSI
Admissions & Records Technician II

SAUCEDO, SARAH ASHLEI
Academic Administrative Assistant

SAUNDERS, TALISA
Financial Aid Specialist

SCHOLES, MATTHEW
Accountant

SCHOLZ, LAUREN MICHELLE
Sports Info. Specialist

SEANG, CHELSEA
Multimedia Services Technician

SERRANO, SULICARINA
Senior Accountant

SETH, SOPHALL
Custodian

SHAHEEN, CYNTHIA
Nurse

SHANKLIN, WHITNEY
Custodian

SHERWOOD JR., THOMAS
Custodian

SHEWMAKE, BECCA
Administrative Assistant

SHIELDS, BRIAN KEITH
Plumber

SIMON, SARAH
Business Client Supervisor

SIMPSON, MARCUS L
Custodian

SKIEFF, BRIAN
Admissions & Records Technician I

SKILLE, STEVEN D
Accounting Technician II

SLANY, KIMBERLY
Interim Human Resources
Manager - Academic

SLATER, WENDY
Academic Administrative Assistant

SMEDING, JEFFREY
Trad./Dig. Phot./Grphc. Art –
Instructional Assc.

SMITH, CYNTHIA
Risk Services Coordinator

SMITH, JOANNA
Administrative Assistant

SMITH, MARC
Nursing & Allied Health
Coordinator

SMITH, MICHAEL
Instructional Associate

SMITH, PELEISE
Administrative Assistant

SMITH, PRESTON
Custodian

SMITH, TIMOTHY ANDREW
Research Analyst I

SMITH-CLARK, STACEY
Manager, Child Dev. Center

SORG, DARON
Costume Technician

SOSA, PAOLA
Child Development Center
Associate Teacher

SOTO, MICHAEL
Grounds Maintenance Worker

SPENCER, TRELTON
Financial Aid Specialist

STEELE, JASON S
Grounds Maintenance Worker

STEVENS, MARLIN
Voc. Instr. Technician. – Welding

STOCKWELL, MELODY A
Athletic Coordinator

STUART, MARK
Custodian

STUFFEL, NATHAN
Auditorium Technical Coord.

SUMMERVILLE, ANTIONETTE
Administrative Assistant

SUNDARA, KETMANY
Career & Technical Education
Coordinator

SUNLENG, SOTA
Contracts Technician

SWEET, BENJAMIN JOEL
Technical Support Specialist

SWEET-KELLY, DEBORAH
Senior Office Assistant

SWENDELL, DIANE
Admissions & Records Technician II

TANG, JUN REN
Applications Dev. Analyst IV

TAYLOR, MARKESHA
Child Dev. Center Teacher

TEJADA, JONATHAN
Help Desk Support Specialist

TERAOKA, ADAM
Powertools Lab Technician

THACH, KYNE HONG
Functional Lead Analyst

THIP, BUNSETH
Custodian

THOMAS, JEROME
Media Producer

THOMAS, RYAN
Interim Stadium Maintenance
Technician

THOMAS, STARLA
Accounting Technician II

THOMAS-EDDENS, ERIKA
TRIO Supervisor

THOMPSON, CHARACE L
ERD Education Program
Coordinator

THOMPSON, JOHN
Director, Fiscal Services

THRIFT-VIVEROS, LOURDES
Child Dev. Center Teacher

TIANPIBOONSIRI, PAUL
College Articulation Specialist

TICZON, ROLAND
Buyer

TITUS, TEDDE
Voc. Instr. Technician – Electrical

TODA, STACEY
Associate Director, Office of Comm.
& Engagement

TORRES, SANDRA
Payroll Technician

TOUCH, MICH
Instructional Associate

TOUCH, SUNLENG
Senior Technical Support Spec.

TRAN, CHRISTINE
Admissions & Records Technician II

TRAN, THOMAS
Instructional Assistant

TRASK, SUSAN
Grounds Maintenance Worker

TRINH, CONG
Chemistry Lab Specialist

TRIOLA, BRITTANY
Comm. & College Adv. Project
Assistant

TRUESDELLE, DAWN
Health Services Technician

TSAI TAING, CHRISTINE
Library Assistant

TURNER, AARON
Custodian

TURNER, SARAH M
Custodian

UMEMOTO, JANINE TERIKO
Functional Lead Analyst – HR

VARELA, YOLANDA
Instructional Associate

VERGARA, GIOVANNI
Grounds Maintenance Worker

VILLEGAS, LIZZETTE
Manager, Career Pathways

VIOLA, CHRISTOPHER
Journalism Lab Technician

VO, LEON
Web Developer II

VOELKER, SCOTT
Deputy Director, User Support and
Web Development

VOS, RONALD
Athletic Field Maint. Worker

VU, THOMAS
Reprographics Technician

WADE, CHERRI
Intern Enrollment Services
Supervisor

WALL, DEBRA
Admissions & Records Technician II

WASHINGTON, LESLEY
Child Dev. Center Teacher

WATSON, ARIENNE
Academic Admin Assistant

WATSON, GABRIEL
Senior Technical Support Spec.

WATTS, DEBRA
Child Dev. Center Teacher

WELTON, JAMES
Custodian

WICKS, CRAIG
Custodian

WILHITE, ALEGRE
Child Development Center
Associate Teacher

WILLIAMS JR., ROLAND
Custodian

WILLIAMS, CHERYL D.
Manager, Operations

WILLIAMS, JOSHUA
Director, Student Discipline &
Student Life

WOLFORD III, WILLIAM
Reprographics & Mail Assist.

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Music/Radio/TV Equip. Technician

WOOD, JEFFREY T
Director, Superintendent-
President's Office

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Senior Administrative Assistant

WOODSON, DARLENE
Child Care Assistant

WRIGHT, MOHAMMED
Web Content & Elect. Media
Coordinator

WU, CHING-MIN
Senior Accounting Technician

YAN LAMBINICIO, SOKHA
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YI, HANNAH S.
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YUNG, JACQUELINE
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