



LONG BEACH
CITY COLLEGE

2017-2018
College Catalog

www.LBCC.edu

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The Long Beach Community College District

Liberal Arts Campus

4901 East Carson Street, Long Beach, CA 90808
Tel: 562.938.4111

Pacific Coast Campus

1305 E. Pacific Coast Highway, Long Beach, CA 90806
Tel: 562.938.4111

Accreditations

The Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC) accredits Long Beach City College. ACCJC, 10 Commercial Blvd, Ste 204, Novato, CA 94949 (415) 506-0234, is an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Curriculum 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 information deadline for submission of information for this catalog, February 2017.

Schedule of Classes

Before the beginning of each academic term, Long Beach City College publishes a schedule of classes online indicating each course to be offered. Schedules are available on the college website (<http://www.lbcc.edu>). Changes in curriculum offerings or fees charged may occur after the schedule is published.

Rehabilitation Act of 1973

In compliance with Section 508 of the Rehabilitation Act of 1973, the Long Beach Community College District provides its catalog and other college publications in alternative formats. Any individual who requires special assistance and would like materials in an alternative format should contact the Disabled Students Programs and Services Department at (562) 938-4558

or (562) 938-4833 TDD. A Disabled Students Programs & Services Office is located on both the Liberal Arts Campus (LAC), at 4901 E. Carson St. Long Beach, 90808, and the Pacific Coast Campus (PCC), at 1305 E. Pacific Coast Highway Long Beach, CA 90806.

Accuracy Statement

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

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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, in my first academic year as LBCC's new superintendent-president.

You will find LBCC to be a welcoming and diverse community, a sentiment captured in our new motto, "Stand Together. Rise Above." This statement honors the strength and solidarity of our campus community, and the ability to lift ourselves up through education.

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 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.

Whether you are looking to transfer to a university, earn a degree or certificate, LBCC will help prepare you for success in all your career and life goals.

This year Long Beach City College celebrates its 90th Anniversary. That's nine decades of 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.

Dr. Reagan F. Romali, Ph.D.
Superintendent-President



Academic Senate Message

Welcome to Long Beach City College. The faculty at LBCC is dedicated to providing you with the knowledge and skills you that 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 your pursuit of your academic and personal goals.

Jorge Ochoa
Academic Senate President

2017 -2018 Academic Calendar*

Summer Sessions 2017

June 19	Six week and eight week sessions begin
Finals	All final exams are the last scheduled day of class

Fall Semester 2017

August 28	Instruction begins
September 21	Flex Day – No classes
December 16	Fall Semester ends
December 18-February 3	Winter Recess
Finals	All final exams are the last scheduled day of class

Winter Intersession 2018

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

Spring Semester 2018

February 5	Spring classes begin
March 15	Flex Day
April 2-7	No classes- Spring Break
June 6	Spring Semester Ends
June 7	Commencement
Finals	All final exams are the last scheduled day of class

Holidays (No classes are in session)

July 4, 2017	Independence Day
September 4, 2017	Labor Day
November 10, 2017	Veterans Day
November 23-25, 2017	Thanksgiving Holiday
January 15, 2018	Dr. Martin Luther King Jr.'s Birthday observed
February 16, 2018	Abraham Lincoln's Birthday observed
February 19, 2018	George Washington's Birthday observed
May 28, 2018	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.

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General Information



College Mission and Values

Mission

Long Beach City College promotes 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	Jeffrey A. Kellogg
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
Director, Superintendent-President Office	Dr. Miles Nevin
Executive Director, Foundation	Elizabeth McCann

EXECUTIVE COMMITTEE

Executive Vice President, College Advancement & Economic Development	Lou Anne Bynum
Vice President, Academic Affairs	Dr. Terri Long
Vice President, Student Support Services	Dr. Greg Peterson
Vice President, Administrative Services	Ann-Marie Gabel
Vice President, Human Resources	Rose DelGaudio

ACADEMIC AFFAIRS

Vice President, Academic Affairs	Dr. Terri Long
Director, Grants	Diane Brown

Academic Services

Dean, Academic Services	Michelle Grimes-Hillman
Director, Academic Services	Brent Gilmore

Career Technical Education (CTE)

Dean	Vacant
Associate Dean	David Gonzales

The Career Technical Education departments include:

- Child Development and Educational Studies
- Family & Consumer Studies
- Culinary Arts
- Public Services
- Computer and Office Studies
- Trades & Industrial Technology

Adult Education

Director	Stephanie Lewis
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Health, Kinesiology, Science & Mathematics

Dean

Dr. Paul Creason

The Health, Kinesiology, Science & Mathematics departments include:

- Life Sciences
- Physical Sciences/Geography
- Math & Engineering
- Allied Health
- Associate Degree Nursing
- Vocational Nursing
- Kinesiology & Health Education

Institutional Effectiveness and Student Success

Dean

Vacant

Director, Institutional Research

Dr. Lauren Sosenko

Library and Learning Resources

Associate Dean

Dr. Karen Rothstein

The Library and Learning Resources departments include:

- Learning and Academic Resources
- Library

Language Arts & Communications

Dean

Lee Douglas

The Language Arts and Communications departments include:

- Reading
- English
- ESL
- Foreign Language
- Communication Studies

Social Sciences and Arts

Dean

Elizabeth Orr

The Social Sciences and Arts departments include:

- Visual & Media Arts
- Performing Arts
- Social Sciences
- Business Administration & Economics
- History & Political Science

ADMINISTRATIVE SERVICES

Vice President, Administrative Services

Ann-Marie Gabel

Fiscal Services

Director, Fiscal Services

John Thompson

Budget Officer, Fiscal Services & Payroll

Sem Chao

Deputy Director, Finance & Accounting
Payroll/Benefits Manager
Store Manager, Bookstore
General Manager, Bookstore at LAC
Bursar
Accounting Supervisor

Cindy Baker
Malu Miranda
Harold Taylor
Dana Heathcott
Stacey Robinson
Conrado Duran

Facilities

Director, District Facilities
Deputy Director, Planning and Construction
Deputy Director, Maintenance and Operations
Deputy Director, Facilities, Rentals & Grounds
Manager, Facilities Maintenance
Grounds and Transportation Supervisor

Tim Wootten
Medhanie Ephrem
Michael Burke
Sean Rivell
Sean Michael
Isaac Kirkpatrick

Business Support Services

Director, Business Support Services
Deputy Director, Purchasing & Contracts
Manager, Environmental & Safety and Parking Services
Manager, Mail and Reprographic Services
Manager, Warehouse Logistics
Coordinator, Risk Services

Margie Padron
Alan Maloney
Brendan Hayes
Nate Jarrett
Ricardo Harris
Cindy Smith

Instruction and Information Technology Services (IITS)

Chief Information Systems Officer
Director, Applications Development & Support
Director, Institutional Technology & Distance Learning
Deputy Director, Network Services
Deputy Director, Academic Computing & Multimedia Services
Media Production Supervisor
Deputy Director, User Support & Web Development
Interim Deputy Director, Web and Mobile Services

Sylvia Lynch
Mae Sakamoto
Hussam Kashou
Mark Guidas
Cindy Hanks
Fred Rossmannek
Scott Voelker
Rob Carman

COLLEGE ADVANCEMENT & ECONOMIC DEVELOPMENT

Executive Vice President, College Advancement &
Economic Development
Chief Operating Officer, College Advancement &
Economic Development

Lou Anne Bynum
Sheneui Weber

Small Business & Entrepreneurship Programs

Executive Director
Director, Workforce Development
Regional Executive Director, 10,000 Small Businesses
Associate Director, Small Business Development Center (SBDC)
Interim Director, Long Beach Small Business Development Center (SBDC)

Patrick Nye
Melissa Infusino
Vivian Shimoyama
Ted Hiatt
Brad Pollak

Communications and Community Engagement

Director, Office of Communications and Community Engagement
 Associate Director, Office of Communications &
 Community Engagement

John Pope

Stacey Toda

HUMAN RESOURCES

Vice President, Human Resources
 Associate Vice President, Human Resources
 Director, Human Resources
 Human Resources Manager - Academic
 Human Resources Manager - Classified

Rose DelGaudio

Gene Durand

Vacant

Diane Bangs

Diana Torres

STUDENT SUPPORT SERVICES

Vice President, Student Support Services

Dr. Greg Peterson

Athletics

Athletics Director
 Athletics Coordinator, Student Athlete Success Center

Randy Totorp

Mary Hegarty

Career Pathways Support Services

Director
 Career Pathways Manager

Amy Smith

Lizzette Villegas

Counseling and Student Support Services

Dean
 Director, Categorical & Special Programs (DSPS)
 Assistant Director, EOPS
 Assistant Director, CalWORKs
 Coordinator, Student Success & Support Services
 Interim Director, Student Success & Support Services
 Coordinator, Transfer & Career Services
 TRIO Project GO Supervisor

Nohel Corral

Eric Borin

Anthony Hayes

Margaret Antonio-Palomares

Elijah Sims

Sonia de la Torre-Iniguez

Ruben Page

Erika Thomas-Eddens

Enrollment Services

Interim Executive Dean
 Director, Enrollment Services
 Deputy Director, Enrollment Services
 Enrollment Services Supervisor
 Enrollment Services Supervisor (Foster Youth)
 Veterans Resource Center Advisor
 American Language & Culture Institute Coordinator
 Associate Director, Scholarship & Outreach
 Interim Upward Bound Supervisor

Robin Darcangelo

Lillian Justice

Juan Franc Menjivar

Jason Avila

Michele Pope

James Martinez

Katherine Murrin

Shyra Compton

Vacant

Student Affairs

Dean
 Director, Student Health Services & Student Life
 Lead Nurse/Nurse Practitioner
 Director, Student Conduct & Student Life

Ramon Knox

Virginia DuRivage

Marianne Palacios

Josh Williams

College History

For nearly 90 years, Long Beach City College has prepared students for success in their future studies and careers. LBCC has grown from a single building to 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 113 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 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: Long Beach City College has earned 91 state championships, more than any other community college in California.

LBCC grew rapidly after World War II, adding the Pacific Coast Campus, which formerly housed Hamilton Junior High, in 1949. 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, Long Beach City College 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 instructional technology training programs for faculty connect students through course websites, social media, and distance learning programs.

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 Long Beach City College to prepare its students to meet the changing demands of today's workplace both globally and locally.

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, and the City of Long Beach – are helping more students succeed in college. The program has become a national model for communities looking to increase student success.

Long Beach City College 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 Long Beach City College Senior Studies Program provides fee based programs for adults. We offer classes in world affairs, music, and brain enhancement, and other areas, all designed for the active adult. Mini tours to museums and galleries are also sponsored by our center. The Senior Center is located at the Pacific Coast Campus, Room FF 108. For further information, call (562) 938-3048.

Distance Learning

Distance 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 walk-in or by accessing the Viking Student System through <https://my.lbcc.edu>. Distance

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 further information, access the Distance Learning website at <http://www.lbcc.edu/dl> or call (562) 938-4818 or email dl@lbcc.edu.

LBCC offers two types of Distance Learning courses:

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, through the LBCC cable station, on the YouTube channel, or on DVDs.

Hybrid Courses

Hybrid courses meet partially online and include some required on-campus or face-to-face 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.

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 concurrent enrollment
- OR
- International Students with a valid Visa

Applying to the College

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.

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.

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 Dual Enrollment

Long Beach City College is proud to offer dual enrollment to our local high school students. Concurrent enrollment allows high school students to enroll in classes at Long Beach City College while they are still attending high school.

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 Office. No I-20 will be issued until all requirements are met. Contact the International Student Office for more information at (562) 938-4747 or visit www.lbcc.edu/international.

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 Long Beach City College, will not be returned, and may not be duplicated.

International Student Program

Admission Procedures

Long Beach City College 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 services to international students from the moment of their initial application 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 of all ages 18 and above, 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 Long Beach City College ALCI can help them to reach their goals. The ALCI is a great first step toward enrolling in LBCC's regular college program.

Applications for admission to ALCI can be submitted online at www.lbcc.edu/alci. 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. 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 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 Long Beach City College:

1. Apply online at www.lbcc.edu/international
2. Application fee of \$40 can be paid online.

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

1. Proof of English Proficiency. Accepted test scores include the following:
 - a. iTEP International English Test (level 4.5)
 - b. PTE Pearson test of English Academic (44 score)
 - c. TOEFL - 500/173/61 or better
 - d. ALI at CSULB - level 104
 - e. ALI at SDSU - level 106
 - f. IELTS - Level 5
 - g. TOEIC- 645 or better
 - h. ELS- Level 109
 - i. STEP Eiken - Level 2A
2. Proof of Financial Support: An original PDF signed and stamped bank statement or letter of financial sponsorship showing enough funds 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 from a hospital or doctor is required.
5. Personal Essay: Personal one-page essay explaining why the student wants to study at Long Beach City College, 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 admission advisor will review the file and inform the prospective student of the admission decision.

General International Student Immigration and College Policy:

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 session.
2. All international students must purchase and maintain valid student health insurance from an authorized LBCC 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 via email at international@lbcc.edu for answers to 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 Office of Enrollment Services. 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.

Student Success and Support Program (SSSP), Formerly Matriculation

The Student Success and Support Program supports the transition of new students into the college by providing

them services that promote academic achievement and successful completion of degrees, transfer preparation, career technical education, certificates, and career advancement.

New students are referred to required core services: assessment, orientation, and counseling. These services must be completed in order for students to access their priority registration times. During this process, students will receive assistance in completing an abbreviated education plan; however, a course of study (major) and a comprehensive student education plan must be completed by the third semester but no later than completing 15 degree applicable units. Students may complete this requirement by enrolling in a COUNS 1 course, attending an educational planning workshop, or scheduling an appointment with a counselor.

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

1. College's Responsibility

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

2. Student's Responsibility

All new non-exempt students must complete assessment and orientation before they enroll. Each student must identify a specific educational goal or major by the semester after he or she has completed 15 units of degree-applicable credit coursework. Students must also demonstrate diligence in class attendance, completion of assigned coursework, and maintenance of progress toward an educational goal.

3. Components of the SSSP

The SSSP is composed of the following components to ensure student success:

- Admission to the college
- Assessment of English, math, reading, and English as a Second Language skills

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

Other student services are available to assist students in attaining an educational goal: financial aid, the Health Center, job placement, the Transfer Center, and tutoring. **These components are required of all students to be fully matriculated.** (See section 5 below for exemptions)

4. Requirements

All new non-exempt students must complete assessment and orientation before they enroll. Assessment placement results are valid for two years. The LBCC Assessment and Orientation is required of any student who falls under one of the following categories:

- a. All new, non-exempt students (see below for exemptions).
- b. Students who want to enroll in any English composition, reading, or math course.
- c. Students who want to use the assessment to fulfill their associate degree math or reading proficiency.
- d. Students who are financial aid recipients, including Extended Opportunities Programs and Services (EOPS).
- e. Students wishing to fulfill English or math prerequisites as specified by a department program.

5. Component Exemptions

Orientation and Assessment - Students are exempt from the orientation and assessment component if they meet any of the following criteria:

- a. Students who hold an associate or higher degree.
- b. Students who demonstrate that they are taking courses only for personal enrichment.
- c. Students who are co-enrolled at a four-year college or university.
- d. Students who are enrolled only in the following:
 1. Performance or activity classes.
 2. With documentation of coursework from another accredited college or high school.

6. Matriculation Component

Appeal/Waiver Process and District Policies of Handling Admission.

All students must participate in this component; there is no waiver allowed.

- **Orientation, Assessment and Counseling.** Any student who feels that he or /she is exempt from any of these components may appeal by filing a Matriculation Component Waiver form, which is available in the Assessment 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 Specialist, and the student will be notified of the decision by mail. A student may request to participate in a previously waived component by contacting the Matriculation Specialist.
- **College Assessment Test.** 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 Assessment Office, the Counseling Department, or the respective academic department. The student will be notified of the appeal decision by mail.

7. Student Rights and Matriculation

A student may initiate a complaint against Long Beach City College matriculation practices by filing a complaint form, which is available at the Assessment 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 Board of Governors Fee Waiver (BOG)

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 2016, the Board of Governors (BOG) Fee Waiver will require satisfactory academic progress. All grades will

be used to determine BOG eligibility. Any combination of two consecutive Fall and Spring terms of cumulative GPA below 2.0 or cumulative course completion of less than 50% may result in loss of the BOG Fee Waiver.

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.

Continuing 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 BOG Fee Waiver if they are on any combination of progress or academic probation for two consecutive semesters.

Continuing 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 BOG

Students may submit an appeal for loss of enrollment priority and loss of BOG Fee Waiver to Enrollment Services at either campus. Appeal forms can be picked up in the Enrollment Services Offices or on the college website at <http://www.lbcc.edu/Admissions/forms.cfm>.

Student Grievance Policy

Long Beach City College 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 instructional or 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 2017-2018

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 Long Beach City College 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.

Registration Procedures

Students are responsible for officially enrolling in classes. A registration receipt is proof of enrollment. 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 \$223.00 per unit plus the normal enrollment fee of \$46 per unit and a capital outlay surcharge of \$40 per unit, for a total of \$309.00 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 Long Beach City College. The CSC is validated each semester by a current CSC sticker. 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 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 during the first two weeks of instruction for a full-term class. See the online student center for refund deadlines for classes of less than full-term. Long Beach City College 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.

Long Beach City College 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 or to transfer enrollment fees or nonresident tuition from one class to another, students must officially withdraw or transfer within the period defined below. Transfer of fees and tuition will be made at the 100 percent rate; refunds will be 100 percent. The period depends on the length of the class, regardless of when the student enrolls.

1. For classes that are scheduled for an entire semester, the refund or transfer period is the first two weeks of the semester. After the second week, no refund can be made and transfers may only be made within the same academic department provided that permission is granted by both instructors.

2. For all classes that are scheduled for shorter or longer periods of time than a regular semester, the refund or transfer period is the first ten percent of the total scheduled class meetings, excluding holidays. After ten percent of the scheduled class meetings have passed, no refunds can be made and transfers may only be made within the same academic department provided that permission is granted by both instructors.
3. Enrollment fees, nonresident tuition, health fees, and materials fees will be automatically refunded to students who officially withdraw or transfer during the refund or transfer 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 Refund Due to Special Circumstances:

1. The Enrollment Services Management Team shall consider all appeals for refunds of tuition and enrollment fees.
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

Long Beach City College provides you with a wide variety of academic assistance and personal support,

but it is up to you to know when you need help and to seek it out. It is the student's responsibility for staying informed and obeying campus rules, regulations, and policies that affect his or her academic standing as a Long Beach City College 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, 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 Long Beach City College 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. 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.

1. Parents may have access to records of their children only if the children are still their dependents as evidenced by a claim of dependent status on federal income tax returns. Parents desiring access to the records of a dependent child must complete the college dependent release form and present the full name, social security number, and birth date of the child and their own personal identification and a copy, that the college district may keep, of the current year's federal income tax transcript indicating that the child has been claimed as a dependent. Parents seeking to review records of a dependent child during the early months of the year must be able to demonstrate that they have already filed for the year even though the filing deadline is not until April 15th.
2. By law, notwithstanding any of the above, 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.
3. Any questions regarding the student's rights under this act should be directed to the 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. Long Beach City College offers forums and other educational programs regarding the harmful effects of drugs and alcohol. 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 Long Beach City College as safe as possible for students, employees, and visitors. The Long Beach Police Department College Unit exists to inform, educate, and make individuals aware of personal safety as well as the safety of others. Students are encouraged to promptly and accurately report all criminal and emergency actions to the Long Beach Police Department College Unit on either campus. Those actions requiring further reporting should also be reported to the appropriate law enforcement agency. The college will provide assistance as needed to accomplish this task.

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

Under the auspices of the Long Beach Police Department College Unit, monthly crime reports are compiled and distributed for both student and employee consumption.

These reports are intended to inform individuals about current criminal experience as well as educate individuals regarding crime prevention.

5:00 p.m. After business hours, calls can be directed to the General Service number.

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 makes available its campus crime statistics and Annual Security Report. A link to the report containing the statistics can be found on the district's main web page under the Special Announcements Section.

Emergency Services – 911

The Long Beach Police Department should be contacted without delay by calling 911 from campus phones, 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

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 department is designed to complement the college's instructional programs by providing major specific counseling services. Counselors are available to assist students in developing an educational plan to achieve their stated goals. If a student has not identified a career goal, the Career and Job Services Center can help him or her through the decision-making process.

Counseling appointments may be scheduled as follows:
By calling (562) 938-4560 (LAC) or (562) 938-3920 (PCC)

In-person in the Counseling Department at (LAC) A-1111 or (PCC) GG-202

Online at www.lbcc.edu/counseling/

For Athletic, Career, Honors, or International Counseling, by contacting the corresponding office to schedule an appointment.

For counseling hours at either campus, check the counseling website.

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

Campus Child Development Center and Learning Lab

Child-care 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 child-care 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. For information about fees, space availability, and parent responsibilities, contact the PCC Center at (562) 938-3079 or (562) 938-3082 or the LAC Center at (562) 938-4253 or (562) 938-4251 or at www.lbcc.edu/childrencenter.

Transfer Center

The Transfer Center is part of Career and Transfer Services at Long Beach City College. The center offers assistance to students in the process of transferring to a four-year college or university. Online application assistance is available for CSU, UC, and private universities. Other services available include university representative appointments, university tours, university transfer fairs, and specialized transfer workshops. Each campus has a center, at the LAC in room A-1097 (562) 938-4670 and at the PCC in room EE-105 (562) 938-3916.

Students should visit the Transfer Center Website at www.transfer.lbcc.edu for the calendar of transfer events, regular transfer updates, valuable transfer resources, and updated hours of operation. The Transfer Center can help students to pursue their university transfer goals through a variety of support services.

Career and Job Services Centers

The Career and Job Services Centers are part of Career and Transfer Services at Long Beach City College. These centers can assist individuals in their career planning and job search endeavors. Programs and services available to help in this personal exploration include the following:

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

The centers' services offer the opportunity to explore career options and be successful in entering the 21st century workforce. Counselors and other staff are available to assist students. Each campus has a center: at LAC in room A-1097 (562) 938-4670 and at PCC in room EE-105 (562) 938-3916. Students may also visit the centers' website at www.careers.lbcc.edu 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 Long Beach City College. 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 the LAC Campus (Building E) and the PCC Campus (Building EE).

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 Long Beach City College. 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 at LAC and Building EE at PCC.

College Advancement and Economic Development (CAED)

Long Beach City College 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.

CAED programs and initiatives include the following:

- **Workforce Development.** 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 for the community and a gateway to higher or continuing education.
- **Small Business Development Center Network.** Facilitating millions of dollars in capital for small businesses, creating and retaining thousands of jobs, and supporting start-ups and established businesses through coaching and professional development.
- **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.
- **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.

CAED 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 additional information, call (562) 938-5020 or email: caed@lbcc.edu.

Student Health Services

LBCC Student Health Services provides optimal wellness through quality and accessible primary care and mental health services on-campus and through health care, dental care, and mental health partnerships within the Long Beach community. All services are no-cost or low-cost and are supported by student health fees. Student Health Services engages students in making informed decisions about health-related concerns and empowers them to be self-directed health care consumers. Health Services are located on both campuses and are staffed

by nurse practitioners, registered nurses, and health service technicians. Services include the following:

- Health assessment
- Health referrals
- First aid treatment
- Health counseling
- Blood pressure check
- Pregnancy tests
- Vision screening
- Hearing screening
- Over-the-counter medications for colds, flu, and headache
- Health-related programs such as the annual LBCC health fair
- Insurance coverage for accidents occurring on campus or at off-campus college-sponsored events (\$50 deductible).
- TB tests

Information on low-cost health insurance coverage under Covered California is also available.

The Health Services Office is located at LAC in room A-1010 and at PCC in room GG-117. For information or to make an appointment to see a nurse or a nurse practitioner, call (562) 938-4210 (LAC) or (562) 938-3992 (PCC).

Psychological Services

Individual counseling by a licensed or graduate mental health professional is available at no cost for students currently enrolled at LBCC. The college provides individual and group services to help students cope with academic stress, anxiety, depression, and substance abuse. Counseling services are available by appointment. Walk-in visits are also available for students in crisis. Sessions are strictly confidential and are held in the Student Health Services offices at both LAC in room A-1010 and PCC in room GG-117. Crisis intervention and referrals to campus and community resources are also available. Contact (562) 938-3987 for more information.

Evening Safety Escorts

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 Long Beach City College lots. Student permits and daily permits do not authorize parking in staff areas 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, and 5.
- Meter parking is available in Lots F, G, and H and on Lew Davis Street at LAC. 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 rear window. 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. 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 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. Motorcycles and mopeds are to be parked only in areas specifically posted for their use. 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 or by calling (562) 570-6822.
- 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 Lots 5, 6, and 10 at PCC the week before and the first week of the semester only. Permits are required during intersessions at all times.

Student Financial Aid

Long Beach City College 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 January 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. Please check with the Financial Aid Office or visit the website for the maximum and minimum Pell award

amounts. Pell Grants are limited to 12 semesters.

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 eighteen hours per week while school is in session.

*FSEOG and FWS funds are limited and early application is strongly advised. Be sure to check the financial aid calendar available online at www.lbcc.edu/financialaid for financial aid deadlines.

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

Board of Governors Waiver (BOGW)

Students can qualify for the BOGW 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.

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 2 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 2 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. For students who qualify for a Cal Grant A and want to attend a public community college first, the Student Aid Commission will hold the tuition and fee award on reserve until the student transfers to a four-year school provided the student continues to qualify.

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.

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, please 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 BOG Fee Waiver or Cal Grants. Please visit www.lbcc.edu/FinancialAid/ab540.cfm to read more about these awards.

Financial Aid Office	Financial Aid Office
Liberal Arts Campus	Pacific Coast Campus
4901 E. Carson Street,	1305 E. Pacific Coast Hwy,
Room A-1075	Room GG-202
Long Beach, CA 90808	Long Beach, CA 90806
(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 Long Beach City College. (Limited Service at the PCC campus.)

Veteran Services Office	VSO Outpost
Liberal Arts Campus	Pacific Coast Campus
4901 E Carson St.	1305 E Pacific Coast Hwy
Room E-08L	Room GG-102
Long Beach, CA 90808	Long Beach, CA 90806
(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/veterans

Per federal regulations, only required courses for a

declared major can be certified by the institution. For additional information/clarification please contact the VSO.

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 Board of Governors' 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.

CalWORKs

CalWORKs funds assist single 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 provides 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, temporary child care 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, and the college has a three business day turn around for pick-up of documentation.

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 at least twelve units or have an approved documented exemption.

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 the website at 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:

1. Accessible parking spaces.
2. Registration assistance for students unable to negotiate the standard registration procedures.
3. Specialized academic, personal, and vocational counseling.
4. Special equipment for campus use available on an as-needed and first come-first served basis, such as visual enlarging machines, a talking calculator, assistive listening devices, and adaptive computer equipment.
5. Access to services of the State Department of Rehabilitation, such as vocational counseling and guidance, training, and job placement.
6. Accessible instruction for students with physical, learning, psychological, or developmental disabilities.
7. Training in the use of assistive computer technology including access to the DSPS Adaptive Computing Lab.
8. Specialized services for the deaf and hard of hearing, including speechreading or lip reading instruction as well as the coordination of classroom interpreters for qualified students. Students who may need these services should request the services from DSPS prior to the beginning of classes.
9. Adapted physical education for students with physical limitations requiring specialized physical education.
10. Access to print in alternate formats.

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 Human Resources at (562) 938-4372.

Section 504, 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, at LAC in room A-1134 and at PCC in room GG-107. 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) 938-4372.

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 re-serve 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) 938-4372.

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 Human Resources Office at (562) 938-4372.

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 Internet website at <http://www.lbcc.edu/studenthealth/sexassult.cfm>. 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. In addition, the Sexual Assault Crisis Agency provides several unique

services including an advocate to accompany victims to the hospital, confidential individual counseling, support groups for survivors and families, and advocates to assist victims in working with courts and law enforcement agencies. LBCC personal counseling and health services are available on both campuses during business hours.

- Counseling Offices: LAC room A-1111, phone (562) 938- 4559 or PCC room GG-203, phone (562) 938-3922.
- Student Health Services: LAC room Q-120 near the gym, phone (562) 938-4210, or PCC room AA-114 near administration, phone (562) 938-3992.
- Sexual Assault Crisis Agency- 24-hour hotline in English and Spanish. Phone (562) 597-2002, address 1703 Termino Avenue, Suite 103, Long Beach CA 90804

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) 938-4372.

Learning Resources



Libraries

Libraries at each of the two main campuses serve as vital information centers. 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. The library website provides a portal to valuable resources such as the online catalog, electronic databases, reliable websites, and instructional materials. The website is accessible on

campus and remotely over the Internet. During all hours the libraries are open, librarians are available to assist students 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, workshops, and orientations. For more information, please visit the Library website at www.lib.lbcc.edu. For additional information, call (562) 938-4232/4231 (LAC) or (562) 938-3028 (PCC).

The Learning and Academic Resources Department offers a variety of programs to help students achieve their academic and occupational goals. For more information about LAR services, visit the LAR web page at www.lbcc.edu/lar.

Liberal Arts Campus	Pacific Coast Campus
L Building 2nd Floor	EE Building 2nd Floor
(562) 938-4699	(562) 938-3991

Learning and Academic Resources Department LAC & PCC Multidisciplinary Student Success Centers (L-212, EE-206)

Check our website at www.lbcc.edu/SuccessCenters for further information or to learn how the Center can meet your needs, please call (562) 938-4699 (LAC) or (562) 938-3991 (PCC).

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

Free tutoring (LAC- L-203, PCC- EE-206) 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, call (562) 938-4474.

Math Success Centers

Liberal Arts Campus

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, or a study room can be reserved. Math faculty are available for supplemental instruction.

The Math Success 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.

The Mathematics Success Center is located in room V-161 on the first floor of the Math and Culinary Arts Building near the corner of Clark and Carson Streets. Students may use the Mathematics Success 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. Hours of operation are scheduled Monday through Saturday. For further information, please call (562) 938-4228.

Writing and Reading Success Center

Liberal Arts Campus

The Writing and Reading Success Center (WRSC) is located in the lower level of the E Building (E09L). 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 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. Visit the WRSC website for online tutoring 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 further information or to learn how the Writing and Reading Success Center meets student needs, please visit the website at www.lbcc.edu/WRSC or call (562) 938-4520.

Nursing and Allied Health Learning Center & Skills Lab

Liberal Arts Campus

The Nursing and Allied Health Learning Center 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 Nursing and Allied Health Learning Center is located in Room C-304 and is open during posted hours. For additional information, call (562) 938-4299.

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 courses utilize simulation to facilitate learning.

Foreign Language Multimedia Learning Center

The Foreign Language Learning Center, located in room M-103 at LAC and room BB-233 at PCC, offers technological and linguistic support in a multimedia environment for students enrolled in foreign language classes. The center also operates as an open access lab to support computer-assisted learning.

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

The English as a Second Language Learning Center, located in room LL-211 on the second floor of the library at PCC, provides students enrolled in English as a

Second Language classes tutoring assistance, assistance with homework, technical help with class research, help with classroom projects, and free workshops designed to help students practice and master difficult concepts in English grammar, speech, reading and writing. Tutoring and workshops are provided by ESL professors and additional help is offered to students in their native language by multilingual student aides.

The center provides self-paced instructional software, study tables, textbooks, dictionaries, and other materials to assist the ESL student. Students must enroll in ESLLC699, the ESL Learning Center, or bring their student ID and password for our assistance. For additional information, call (562) 938-3255 or visit us on our LBCC ESL page at: <http://www.lbcc.edu/ESL/ESLLearningCenter/index.cfm>

Academic Computing Centers

Liberal Arts Campus	Pacific Coast Campus
L-251	LL-216
(562) 938-4854	(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.

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, please call (562) 938-4669.

Computer and Office Studies Study Centers

Computer and Office Studies Study Centers are located at PCC-AA206 and at LAC-M109. For further information or to learn how the Computer and Office Studies Study Centers can meet your needs, please visit the website at www.cos.lbcc.edu/cosstudycenters.php.

Multimedia Presentation Practice Room

A multimedia presentation practice room is available at the LAC campus by appointment for students wanting to practice, view, and record their classroom presentations. For additional information, please call (562) 938-4320. Multimedia Presentation Practice Room (L-212)

Academic Policies



Faculty Office Hours

All instructional faculty who are teaching full-time hold five regularly scheduled office hours per week. 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. The grade assigned by the instructor upon dropping a student for non-attendance shall be 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.

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 G.P.A.); 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 indicates 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 at www.lbcc.edu/Policies/regulations.cfm.

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 before the census date will not record the drop. 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.

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.

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 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:

- The student must have completed at least 24 units at Long Beach City College with at least a 2.0 cumulative GPA subsequent to the term to be disregarded.
- At least one calendar year must have elapsed from the time grades to be disregarded were earned.
- Courses will only be disregarded on a semester or term basis. All courses in the designated semester will be ignored in determining requirements for graduation, including grade point average, field of concentration, honors, general education, and units. Any requirements that would otherwise be met by courses thus ignored must be fulfilled by retaking a course or by other educational means.
- A maximum of two semesters or terms may be disregarded.

- All courses shall remain on the official record. The transcript shall be appropriately annotated to indicate that academic renewal has been applied, including the specific semesters or terms that were disregarded.
- Academic Renewal by Long Beach City College does not guarantee that other institutions will honor this action. The student is responsible for ensuring that his or her transfer institution will approve of academic renewal from Long Beach City College.
- Once a certificate or degree is posted at Long Beach City College, 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 Long Beach City College.
- 1b. Progress probation: After enrolling in a minimum of 12 units at Long Beach City College, 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 1.b, the entries of W, NP, and I are counted as incomplete work while entries of A, B, C, D, F, and P are counted as complete.
3. Students on academic or progress probation shall be subject to counseling intervention which includes the following provisions:
 - Meeting with a counselor in the Counseling Department, DSPS, or EOPS;
 - Completing a student "Strategy for Success" contract or an educational plan;
 - Being limited to a maximum of 12 units each semester until the student is removed from probation; and
 - Completing the sequence of basic skills courses in the educational plan.
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 and has not completed the counseling intervention and made up the deficiencies in his or her 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 three 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 three units during the semester. If enrolled in 3 to 5.5 units, the student must complete all units. If enrolled in six or more units, the student must complete 80% of the units.
- Academic and progress dismissals are recorded at the end of the spring semester.
- Readmission After Dismissal
- Dismissed students will not be allowed to enroll in the fall 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 second Friday of September to be considered for readmission in the spring semester. The Readmission Committee reviews all petitions.
- A dismissed student who is readmitted will be placed on probation and may be subject to further enrollment restrictions and requirements.

Scholarship Office/Foundation Financial Scholarships

Long Beach City College administers more than 1,000 scholarships each year. These scholarships are funded by campus and community organizations, local businesses, and private donors. The Scholarship Office/Foundation Office is located in Building A-1001 at the Liberal Arts Campus.

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 Long Beach City College. Recipients must maintain a 3.0 GPA or higher and be enrolled in the Honors Program once they attend Long Beach City College. Scholarship applications are available in September at www.lbcc.edu/scholarships.

Outstanding Student Scholarship

Long Beach City College 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

Students on the Dean's Honors List are recognized each semester on a posted announcement and with a personal letter. 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 better overall completion ratio and maintain the necessary semester GPA to qualify for outstanding scholarship described above.

*Note: 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

Long Beach City College 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. Information and applications are available at LAC in room M-226. The Delta Chi Chapter is located at the Pacific Coast Campus. Information and applications are available in the Student Affairs Office, LAC E-206 (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 and Courses

The Honors Program serves motivated, high-achieving students who plan to transfer to competitive colleges and universities. The LBCC Honors Program offers courses in more than a dozen disciplines to serve intellectually ambitious students. Students who complete the Honors Program have proven records of success in their applications to competitive baccalaureate programs as well as to professional and graduate schools. For detailed information about the LBCC Honors Program and the application process, call the Honors Program Office at (562) 938-4354 or visit us in the LAC Library (L-164) or on the web at 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 degree and transfer requirements. Courses are offered in Anthropology, Astronomy, Art, Biology, Communications, Economics, English, Geology, History, Humanities, Learn, Math, Music, Philosophy, Political Science, Psychology, Sociology, and Statistics. Please see the schedule of classes for current offerings.

Transfer Programs

Students who complete the Honors Program earn priority transfer consideration for admissions to such institutions and programs as UCLA, UCI Honors, and

CSULB Honors, and more than a dozen private colleges and universities. Some benefits of the Long Beach City College Honors Program are as follows:

- Honors scholarships for entering students from local high schools and for President's Scholars at graduation
- Priority registration
- Faculty mentors
- Honors academic counseling
- Informal degree checks
- Invitation to special honors forums, seminars, and social events
- Participation in honors research conferences
- Facilitation of placement in four-year college honors programs.

President's Scholar Honors

The President's Scholar designation is awarded in recognition of outstanding achievement in the college's Honors Program.

1. To qualify, a student must complete a minimum of five honors courses with a 3.5 or higher GPA and must be transferring to a baccalaureate institution. In addition, the student must maintain a Long Beach City College cumulative GPA of 3.5 or higher with at least 80 percent of all units attempted in courses numbered 1-99.
2. The President's Scholar designation is entered on the transcript, next to the associate degree notation. In addition, qualifying students receive a gold seal on their diplomas and are given special recognition at commencement. President's Scholars are the first to receive their diplomas and are awarded medallions, which they wear at graduation.
3. As part of the President's Scholar award, students customarily receive a cash scholarship at graduation.

Honors Student

The honors student designation is awarded to all transfer students who complete the Honors Program.

1. To qualify, a student must have completed a minimum of five honors classes with a 3.0 GPA or higher.

2. In addition, a student must maintain a Long Beach City College cumulative GPA of 3.0 or higher with at least 80 percent of all units attempted in courses numbered 1-99.

Admission to the Honors Program

To apply for admission to the Honors Program, a student must complete an online application and obtain two letters of recommendation.

To be eligible for the Honors Program, students must qualify for English 1 and meet the college's standard for reading proficiency or place into READ 82 or READ 83. Students must have a GPA of at least 3.0. For further eligibility information, please visit www.lbcc.edu/honors.

Continued superior academic achievement is required to remain in the Honors Program. Honors students must maintain a minimum 3.0 GPA in addition to completing program requirements.

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 better. 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 Long Beach City College. 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 Dean of Enrollment Services or designated representative.

High School Concurrent Enrollment

Long Beach City College is proud to offer concurrent enrollment to local high school students. Concurrent enrollment allows high school students to enroll in

classes at Long Beach City College while they are still attending high school. Students first complete the Application for Admission and receive an ID number, then take the assessment tests for English, reading, and mathematics. If the application is approved, enrollment fees will be waived. Students are responsible to pay the costs of the health fee, books, materials fees, parking fees, and College Service Card fees. Please see www.lbcc.edu/Admissions/concurrent.cfm for the application and more information.

High School Pathways Project

Long Beach City College is involved in the High School Pathways Project, which is a joint program with K-12 districts throughout the region. The aim of the High School Pathways Project is to provide high school students with early college credit opportunities and assist them in seamlessly transitioning from high school to LBCC. The admissions process for students participating in the High School Pathways Project may differ from the regular high school concurrent enrollment process. Students interested in earning early college credit through pathway facilitated dual enrollment or articulated courses must adhere to the processes and criteria set forth by their K-12 district of origin and LBCC. For more information, please contact the Director of Career Pathways Support Services at careerpathways@lbcc.edu.

Credit by Advanced Placement

Long Beach City College 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 Long Beach City College'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 Long Beach City College 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 Long Beach City College courses. A complete listing of AP Courses and A.A. /A.S. Degree general education requirements can be found at this website: www.lbcc.edu/catalog.

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 Long Beach City College 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 awarded.
3. Units earned through Credit by Examination may not be counted toward the 12-unit residence 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. A complete listing of credit by examination opportunities can be found at this website: www.lbcc.edu/catalog.

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 Long Beach City College. 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)

Long Beach City College 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 Long Beach City College'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 Long Beach City College 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 Long Beach City College 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 Long Beach City College's certification.

Credit by International Baccalaureate (IB)

Assessment Long Beach City College 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 Long Beach City College'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 Long Beach City College 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 Long Beach City College 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 Long Beach City College 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 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 Long Beach City College under Plan A. Courses approved for a specific general education area at another institution will be honored for the comparable general education area at Long Beach City College.

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.

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 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 Long Beach City College.
- 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 LBCC courses. Students in these situations may apply for credit by examination, if such credit is offered.

Credit for Cooperative Work Experience Education

Long Beach City College 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 veterans 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

Long Beach City College 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 Long Beach City College, 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.

Policy on Open Courses

Every Long Beach City College 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.

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 Long Beach City College 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 a 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 Long Beach City College 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 is prohibited in all buildings.
2. Eating and drinking are prohibited in all buildings except where food is sold or is 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 be parked 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 footwear.
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.

- 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:

- 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.
- 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 also 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.

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

- 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.
- 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.
- 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.
- 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.
- 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.

General Education, Transfer & Degree/Certificate Requirements



This section includes information on the following:

- General Information on GE, Transfer, and Degree and Certificate Requirements
- List of Degrees and Certificates Offered
- Catalog Rights
- Admission Requirements to a 4-year Institution
- General Education Philosophy and Patterns
- Requirements for Associate Degrees for Transfer and Other Associate Degrees
- Requirements for Certificates

General Information

Long Beach City College 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 adults seeking to finish basic education or learn English as a second language.

Long Beach City College 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 requirements, and competency or admission requirements. Depending on the educational goal of the student, three options are offered for fulfilling general education 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 general education pattern for their specific goals.

Long Beach City College offers three types of certificates:

- A Certificate of Achievement is awarded for successful completion of a course of study that consists of at least 18 units and is indicated on a transcript.
- A Certificate of Accomplishment is awarded for successful completion of a course of study that consists of less than 18 units and is not noted on a student's transcript.

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.

- 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.

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-TSA Associate				ACC	
Administrative Assistant		AS	ACH		
Business Communication				ACC	
Business Digital Literacy				ACC	
Computer & Office Skills				ACC	
Computing & Internet Literacy				ACC	
Law Office Procedures				ACC	
Microsoft Office				ACC	
Adv Trans Technology: Alternative Fuels		AS	ACH		
Adv Trans Technology: Light:Medium Duty				ACC	
Adv Trans Technology: Heavy Duty				ACC	
Adv Trans Technology: Electric Vehicles		AS	ACH	ACC	
Alcohol and Drug Studies		AA	ACH		
Co-Occurring Disorders-Level One				ACC	
Alcohol & Chemical Dependency				ACC	
Anthropology	AA-T				
Architectural Design		AS	ACH		
Art		AA			
Art History	AA-T				
Digital Film Making			ACH		
Fundamentals of Digital Media Arts				ACC	
Graphic Design				ACC	
Studio Arts	AA-T				
Baking and Pastry Arts		AS	ACH		
Biological Sciences		AS			
Biology	AS-T				
Business					
Business Administration	AS-T				
Business: Accounting		AA	ACH	ACC	
Business: Economics				ACC	
Business: General Business		AA	ACH	ACC	
Business: International Business		AA	ACH	ACC	
Business: Logistics				ACC	
Business: Management		AA	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
Business: Marketing		AA	ACH	ACC	
Business: Money and Banking				ACC	
Real Estate Broker				ACC	
Real Estate Salesperson				ACC	
Business Information Professional		AS	ACH		
Child Development and Educational Studies - Early Childhood Education	AS-T	AA	ACH		
CDECE: Assistant Teacher Certificate				ACC	
CDECE: Associate Teacher Certificate				ACC	
CDECE: Family Development				ACC	
Permit Specialization Area- Child Health and Safety				ACC	
Permit Specialization Area- Children with Exceptional Needs				ACC	
Permit Specialization Area- Family Child Care Certificate				ACC	
Permit Specialization Area- Infant/Toddler				ACC	
Permit Specialization Area- Early Literacy				ACC	
Permit Specialization Area- Curriculum in Early Childhood Education				ACC	
Child Development and Educational Studies - Special Ed Assistant		AA	ACH		
College and Workplace Readiness					COMP
Communication Studies	AA-T	AA			
Computer Security & Networking		AS	ACH		
Computer Hardware Technician				ACC	
Computer Network Technician				ACC	
Cyber Security				ACC	
Microsoft Windows Networking Technician				ACC	
UNIX Network Administrator				ACC	
Computer Science		AS	ACH		
Android App Developer				ACC	
Computer Technology		AS	ACH		
Culinary Arts		AS	ACH		
Customer Support		AS	ACH		
Business Communications				ACC	
Data Entry				ACC	
Dance		AA			
Database Management		AS	ACH		
Android App Developer				ACC	
Database 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
PHP Web Programmer				ACC	
Diagnostic Medical Imaging (Rad Tech)		AS	ACH		
Computed Tomography				ACC	
Magnetic Resonance Imaging Technologist				ACC	
Dietetics					
Dietetic Service Supervisor		AA	ACH		
Nutrition Assistant		AA			
Formula Room Technician				ACC	
Digital Design and Publication		AA	ACH		
Digital Media Arts					
Digital Media Arts: Advanced Production			ACH		
Digital Media Arts: Interactive Design and Animation			ACH		
Drafting - Architectural		AS			
Drafting: Architectural - Core Skills			ACH		
Drafting: Architectural - Advanced Skills			ACH		
Drafting -Mechanical Design		AS			
Drafting: Mechanical - Core Skills			ACH		
Drafting: Mechanical- Advanced Skills			ACH		
AutoCAD I, Fundamentals (108 Hrs)				ACC	
AutoCAD II, Advanced Certificate (108Hrs)				ACC	
AutoCAD III, Visualization, Rendering, Animation (108 Hrs)				ACC	
CAD Professional Certificate (324 Hrs)				ACC	
Electrical Technology		AS	ACH		
Network Cabling Specialist				ACC	
CISCO Certified Network Associate				ACC	
Traffic Signal Systems 1				ACC	
Solar Photovoltaics Installation and Design				ACC	
Engineering		AS			
English	AA-T				
Language & Literature		AA			
Creative Writing		AA			
English as a Second Language					
English for Everyday					COMP
Reading Skills for ESL Students					COMP
Family & Consumer Studies		AA	ACH		
Fashion Design		AA	ACH		

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
Assistant Designer		AA	ACH		
Fashion Design: Patternmaker			ACH		
Fashion Design: Samplemaker			ACH		
Fashion Merchandising		AA	ACH		
Film		AA			
Digital Film Making			ACH		
Film, Television and Electronic Media	AS-T				
Fire Science		AS	ACH		
Floral Design		AA	ACH		
Foreign Language		AA	ACH		
Spanish	AA-T				
Geography	AA-T				
Geology	AS-T				
History	AA-T				
Horticulture		AS	ACH		
Human Services		AA	ACH		
Journalism	AA-T				
Journalism - Newspaper/Magazine Emphasis		AA			
Journalism - Public Relations Emphasis		AA			
Journalism -Publication Specialist Emphasis		AA			
Photojournalism			ACH		
Kinesiology	AA-T	AA			
Athletic Coaching				ACC	
Personal Trainer				ACC	
Library Technician		AA	ACH		
Linguistics		AA			
Mathematics	AS-T	AS			
Medical Assisting: Administrative/Clinical Combined		AS	ACH		
Medical Assisting: Administrative Option			ACH		
Medical Assisting: Clinical Option			ACH		
Emergency Medical Technician			ACH		
Medical Insurance Billing				ACC	
Phlebotomy				ACC	
Metal Fabrication Technology		AS			
Metal Fabrication Technology: Core Skills			ACH		
Metal Fabrication Technology: Advanced Skills			ACH		

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
Robotic Welding Automation				ACC	
Music	AA-T	AA			
Nutrition and Dietetics	AS-T				
Nursing LVN to RN		AS			
Nursing LVN to RN (30 Unit Option)			ACH		
Nursing: RN (ADN)		AS			
Nursing: Vocational/Practical		AS	ACH		
Home Health Aide				ACC	
Nursing Assistant				ACC	
Philosophy	AA-T				
Physical Sciences		AA/AS			
Political Science	AA-T				
Political Science General				ACC	
Political Science - Global				ACC	
Psychology	AA-T				
Radio and TV					
RTV Producer		AA	ACH		
Radio/Television Multimedia Production			ACH		
RTV: Broadcast News		AA	ACH		
RTV: Performance		AA	ACH		
Sociology	AA-T				
Theatre Arts					
Theatre Arts: General		AA			
Theatre Arts: Acting Academy		AA			
Vocational Media-Film Acting				ACC	
Vocational Media-Commercials				ACC	
Vocational Media-Voice over				ACC	
Web Development		AS	ACH		
Android App Developer				ACC	
PHP Web Programmer				ACC	
Web Developer				ACC	
Welding					
Gas Tungsten Arc Welding (GTAW)				ACC	
Shielded Metal Arc Welding (SMAW)				ACC	
Advanced Arc Welding (SMAW and FCAW)				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 Long Beach City College; or any other regionally accredited higher educational institution, after having initially enrolled at Long Beach City College. 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 Long Beach City College, 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 Long Beach City College requirements with “continuous attendance” for CSU requirements. The difference between these two definitions rests on how a school defines a “year.” Long Beach City College 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, Long Beach City College strongly recommends that all students see a counselor.

Admission Requirements for Transfer

Admission Requirements for Transfer to the California State University

While attending Long Beach City College, students planning to transfer to the California State University System should follow the recommended pattern of general education-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 are 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 better in adult school or high school summer sessions; or
- Completing appropriate courses in college with a C or better. One course of three semesters 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 better the CSU general education requirements in communication in the English language (9 units in areas A1, A2, and A3) and math (from area B4); or
- Students who graduated from high school in 1988 or later may complete with grades of C or better 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 general education or transfer curriculum requirements.

Each student must complete all CSU general education requirements in communication in the English language (9 units in Areas A1, A2, A3) and the general education requirement in math (from area B4) as part of the 30-semester unit requirement.

Please consult the Long Beach City College 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 Long Beach City College Catalog are transferable as general education or elective credit to the CSU. Students with 60 transferable units will 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 Long Beach City College 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 general education breadth requirements listed in Plan C. However, some high-unit majors may have other admission requirements.

A transfer student from Long Beach City College 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. 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 better in the A-G subjects that were lacking. The university will waive up to two units, or two academic years, of the required high school

coursework except in math and English.

c. Complete with grades of C or better the following college courses:

- **English:** one transferable college course in English.
- **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.
- **U.S. history, lab science, foreign language:** one transferable college course selected from these subjects.

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

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

A student who plans to transfer to the 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 transfer requirements for private colleges and universities, students should contact the LBCC counseling department.

General Education

Philosophy of General Education

General Education takes its character from an extensive list of disciplines whose integration generates a broad field of common knowledge that is indispensable to students. General Education 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, General Education 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 general education 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 Long Beach City College 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 general education 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, general education should lead to better self-understanding and the capacity to adapt, respond, and grow in a changing world.

In its general education program, Long Beach City College 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, Long Beach City College expects that those students who finish their general education 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 Long Beach City College's Student Learning Outcomes at the course, program, and institution levels. This

means that all general education courses should also be of an introductory or survey nature. In addition, a non-survey course may qualify as a general education 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 Long Beach City College (LBCC) prepares its General Education 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 General Education 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 general education outcomes as these define the knowledge, skills, and values acquired by students who satisfy our general education 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 General Education credit; and fifth, if transferable, this course must meet the specific requirements for General Education as outlined in the executive orders and criteria set forth by the receiving four-year institutions. These requirements, as well as the definition of General Education offered above, determine what can be described as the "Philosophy of General Education" as offered by LBCC.

Career & Technical Education

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

CTE students need a general education 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 general education needs to fit into a training program that prepares a student for work, and the quality and intensity of general education 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)

Long Beach City College's commitment to excellence in student learning incorporates the following expected general education outcomes for the educational process. GEOS are statements that define the knowledge, skills, and perspectives acquired by students who satisfy the college's general education 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 general education 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 General Education Transfer Curriculum (IGETC) requirements, and yearly updated notes, that define the University of California (UC) and CSU common core curriculum for General Education. These six sources have limited and shaped General Education at LBCC using a strategy known as the A, B, C General Education Plan.

The A, B, C Plans in this College Catalog define and distribute General Education courses to meet Associate Degree requirements while preparing students for transfer to the UC and CSU systems.

The strategy behind the A, B, C Plan is to introduce students to the various disciplines identified in the definition of General Education 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 general education certification process lies at the heart of Plan B and C of the A, B, C Plan.

General education certification is defined as a process by which LBCC verifies that a student has completed all the General Education 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 general education certification occurs, LBCC is in compliance with Executive Order 1100 and the list of instructions found in the IGETC Notes. In both cases, once general education certification has occurred, LBCC transfer students know that their General Education 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 general education pattern and a major field of preparation.

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

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

Under **Plan A**, a student can complete the general education requirements for an associate degree and may combine that degree with one of Long Beach City College'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 general education 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. General education forms can be found in appendix A.

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 general education requirement, no course may be counted in more than one general education area. However, courses may be used to satisfy both a general education requirement and a major requirement.

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

Plan A: Completion of Long Beach City College General Education Requirements

Plan A sets the general education requirements for the associate of arts (A.A.) and associate of science (A.S.) degrees. The minimum general education requirement for the A.A. degree is 25 units, while the minimum general education 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 and 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.

Long Beach City College 2017-2018 Associate Degree (A.A/A.S.) General Education Requirements - PLAN A

LEGEND

- ◆ Denotes laboratory class.
- ◀ Cross-listed courses. A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one subject area:

ECON 5 = GEOG 5: The Global Economy
 HUMAN 1/1H = SOCS 1/1H: Comparative World Cultures/Honors CWC
 HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
 HUMAN 7 = SOCS 7: American Pluralism and Identity
 HLED 10 = PSYCH 10: Human Sexuality

Graduation Proficiency Requirements

Mathematics

A qualifying score on the LBCC Assessment Test which places a student in

MATH 37	Finite Mathematics (3)
MATH 37H	Honors Finite Mathematics (3)
MATH 40	Trigonometry (3)
MATH 45	College Algebra (4)
STAT 1	Elementary Statistics (4)
STAT 1H	Honors Elementary Statistics (4)

or higher; or successful completion with a grade of "C", "P" or higher in a college math course at the level of

MATH 120	Geometry (4)
OR	
MATH 130	Intermediate Algebra (5)
OR	

MATH 130A	Intermediate Algebra, Part A (3)
OR	
MATH 140	Algebra Readiness (6)
OR	
MATH 125	Stat Path (6)
OR	
MATH 115	Applied Math (4) or higher.

Reading

Satisfying this proficiency may be achieved by any one of the following:

- A qualifying score achieved through multiple LBCC assessment measures OR
 - Completion of
 READ 82 Proficient Reading (4)
 OR
 READ 83 Power Reading (4)
 (“C”, “P” or better) at LBCC (courses taken at other colleges may be individually reviewed for equivalency by the Reading Department Chair)
- OR
- A Bachelor’s Degree from an accredited college or university.

Writing

Complete ENGL 1 or 1H with a grade of “C” or better.

ENGL 1	Reading and Composition (4)
ENGL 1H	Honors Reading and Composition (4)

Information Competency Requirement

Information Competency is the ability to find, evaluate, use and communicate information in all its various formats. It combines aspects of library literacy, research methods and technology proficiency.

Students must complete ONE course from INFORMATION and ONE course from TECHNOLOGY (courses MUST be completed with a grade of “C” or better):

Information

ENGL 1	Reading and Composition (4)
ENGL 1H	Honors Reading and Composition (4)
ENGL 3	Argumentative and Critical Writing (4)
ENGL 3H	Honors Argumentative & Critical Writing (4)
LIB 1	Information Competency (2)
LIB 3	Library, Technology & Internet Literacy (3)

Technology

COSA 1	Computer Information Competency (1)
COSA 4	Using the Mac as a Tool for Learning (1)
COSA 5	Microsoft Windows Operating System (3)
COSA 20	Microsoft PowerPoint for Windows (3)
COSA 25	Microsoft Access for Windows (4)
COSA 30	Introduction to Computers (3)
COSA 35	Microsoft Office (4)
COSA 50	Intro to IT Concepts & Applications (4)
COSK 200	Beginning Keyboarding and Document Production (3)

Area Requirements

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

ENGLISH COMPOSITION

One Class Required (3 units minimum)—choose from:

ENGL 1	Reading and Composition (4)
ENGL 1H	Honors Reading and Composition (4)

COMMUNICATION AND ANALYTICAL THINKING

One Class Required (3 units minimum)—choose from:

BCOM 15	Business Communications (3)
COMM 10	Elements of Public Speaking (3)
COMM 10H	Honors Elements of Public Speaking (3)
COMM 20	Elements of Interpersonal Communication (3)
COMM 25	Elements of Intercultural Communication (3)
COMM 30	Elements of Group Communication (3)
COMM 60	Elements of Argumentation and Debate (3)
COSP 8	Visual Basic Programming (4)
COSP 10	Intro to C# Programming (4)
COUNS 2	Making a Difference with Mentoring (3)
COSA 2	Critical Thinking Using Computers (3)
CS 11	Computer Programming: C++ I (4)
CS 21	Java: Computer Science I(4)
ELECT 225	Algebra and Trigonometry for Technicians (4)
ENGL 3	Argumentative and Critical Writing (4)
ENGL 3H	Honors Argumentative & Critical Writing (4)
ENGL 4	Critical Analysis of Literature (4)
ENGL 4H	Honors Critical Analysis of Literature (4)

LIB 3	Library, Technology & Internet Literacy (3)
MATH 27	Probability and Statistics for Elementary Teachers (3)
MATH 28	Mathematics for Elementary Teaching I (3)
MATH 37	Finite Mathematics (3)
MATH 37H	Honors Finite Mathematics (3)
MATH 40	Trigonometry (3)
MATH 45	College Algebra (4)
MATH 47	Calculus for Business (3)
MATH 50	Precalculus Math (5)
MATH 50H	Honors Precalculus (5)
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)
MATH 120	Geometry (4)
MATH 130	Intermediate Algebra (5)
MATH 130A	Intermediate Algebra, Part A (3)
MATH 130B	Intermediate Algebra, Part B (3)
PHIL 11	Critical Thinking (3)
PHIL 12	Introduction to Logic (3)
PHIL 22	Symbolic Logic (3)
READ 82	Proficient Reading (4)
READ 83	Power Reading (4)
READ 84	Analytical Reading (3)
STAT 1	Elementary Statistics (4)
STAT 1H	Honors Elementary Statistics (4)

NATURAL SCIENCES

One Class Required (3 units minimum)—choose from:

PHYSICAL SCIENCES

ASTR 1	Astronomy (3)
ASTR 1H	Honors Elementary Astronomy (3)
ASTR 1L	Astronomy Laboratory (2)
CHEM 1A	General Chemistry (5.5)
CHEM 1B	General Chemistry (5.5)
CHEM 2	Elementary Chemistry (4.5)
CHEM 3	Intro to Gen, Organic & Biochemistry (5)
CHEM 12A	Organic Chemistry (5.5)
CHEM 12B	Organic Chemistry (5.5)
ENVR 1	Energy for the Future (3)
GEOL 1	General Physical Geology (4.5)
GEOL 1H	Honors General Physical Geology (4.5)
GEOL 2	General Geology, Physical (3)
GEOL 2F	Geology Field Trips (1)
GEOL 2L	General Geol, Physical Geol Lab (1.5)

GEOL 3	Historical Geology (4.5)
GEOL 3H	Honors Historical Geology (4.5)
GEOL 4	Field Geology (2)
GEOL 5	Environmental Geology (3)
GEOL 7	Field Studies: Western Environments (2)
GEOL 16	Field Techniques/Geol: So Calif Deserts (3)
GEOL 17	Geology of Southern California Deserts (2)
GEOL 18	Geology of California (3)
PGEOG 1	Physical Geography (3)
PGEOG 1L	Physical Geography Lab (1.5)
PGEOG 2	Weather and Climate (3)
PHYS 2A	General Physics (4)
PHYS 2B	General Physics (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)

BIOLOGICAL SCIENCES

ANAT 1	Human Anatomy (4)
ANAT 41	Anatomy & Physiology (5)
ANTHR 1	Physical Anthropology (3)
ANTHR 1H	Honors Physical Anthropology (3)
BIO 1A	Biology for Science Major (5)
BIO 1B	Biology for Science Majors (5)
BIO 2	General Microbiology (5)
BIO 5	Plant Biology (4)
BIO 11	Environmental Problems of Man (3)
BIO 20	Marine Biology (4)
BIO 20H	Honors Marine Biology (4)
BIO 22	The Marine Environment (3)
BIO 25	Biology and Society (3)
BIO 28	Field Natural History of the Mountain (2)
BIO 30	Wildlife Biology (4)
BIO 31	Birds (2)
BIO 37	Field Natural History: South Calif. Desert (2)
BIO 41	Contemporary Biology (3)
BIO 41H	Honors Contemporary Biology (3)
BIO 41L	Contemporary Biology Lab (1)
BIO 41LH	Honors Contemporary Biology Lab (1)
BIO 60	Human Biology (4)
BIO 60L	Human Biology 1 Laboratory (1)
BIO 61	Human Biology 2 (3)
PHYSI 1	Human Physiology (5)

SOCIAL SCIENCES

One Class Required (3 units minimum)—choose from:

ANTHR 2	Cultural Anthropology (3)
ANTHR 2H	Honors Cultural Anthropology (3)

ANTHR 3	Intro to Archaeology (3)
ANTHR 3H	Honors Intro to Archaeology (3)
CDECE 45	Child & Adolescent Development DS 1(3)
CDECE 47	Human Development (3)
ECON 1	Macro Economic Analysis (3)
ECON 1H	Honors Macro Economic Analysis (3)
ECON 2	Micro Economic Analysis (3)
ECON 2H	Honors Micro Economics Analysis (3)
ECON 3	General Concepts in Economics (3)
ECON 4	Contemporary Economic Issues (3)
●ECON 5	The Global Economy (3)
FD 32	History of Fashion (3)
GEOG 2	Elements of Cultural Geography (3)
●GEOG 5	The Global Economy (3)
GEOG 40	World Regional Geography (3)
GEOG 48	Geography of California (3)
●HLED 10	Human Sexuality (3)
HIST 1A	History: Western (European) Civilization (3)
HIST 1AH	Honors History of Western European Civ (3)
HIST 1B	History: Western (European) Civilization (3)
HIST 1BH	Honors History of Western European Civ (3)
HIST 2B	World History to 1500 (3)
HIST 2C	World History Since 1500 (3)
HIST 2CH	Honors World History Since 1500 (3)
HIST 5A	History of England and Great Britain (3)
HIST 5B	History of England and Great Britain (3)
HIST 9A	History of China (3)
HIST 9B	History of Japan and Korea (3)
HIST 9C	History of India and Southeast Asia (3)
HIST 18	History of Mexico (3)
HIST 25	History of American Woman (3)
HIST 27A	History of the African-American to 1877 (3)
HIST 27B	Hist/African-American(Reconstr-Present) (3)
HIST 48	History of California (3)
(HIST 8A, 8B, 10 or 11 may be taken for the A.S. Degree)	
POLSC 2	Comparative Government (3)
POLSC 4	World Politics (3)
POLSC 9	The Constitution, Law and Society (3)
POLSC 10	Introduction to Political Science (3)
POLSC 11	Introduction to Political Theory (3)
(POLSC 1, 1H, or 3 may be taken for the A.S. Degree)	
PSYCH 1	Introduction to Psychology (3)
PSYCH 1H	Honors Introduction to Psychology (3)
PSYCH 2	Research Methods for Psychology (4)
PSYCH 4	Personal and Social Development (3)
●PSYCH 10	Human Sexuality (3)
PSYCH 11	Social Psychology (3)
PSYCH 14	Abnormal Psychology (3)
PSYCH 33	Psychology of Personality (3)

PUBAD 1	Introduction to Public Administration (3)
●SOCSC 1	Comparative World Cultures (3)
●SOCSC 1H	Honors Comparative World Cultures (3)
●SOCSC 7	American Pluralism and Identity (3)
SOCIO 1	Introduction to Sociology (3)
SOCIO 1H	Honors Introduction to Sociology (3)
SOCIO 2	Modern Social Problems (3)
SOCIO 11	Race & Ethnic Relations in the U.S. (3)
SOCIO 13	Sociology of Latinos (3)
SOCIO 40	Sociology of the Family (3)

AMERICAN HISTORY (NOT REQUIRED FOR THE A.S. DEGREE)

Note: Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either 8A/8AH or 8B/8BH to fulfill the history portion of the U.S. History, Constitution, and American Ideals requirements. (Retroactive to Fall 2004)

One Class Required (3 Units minimum)—choose from:

HIST 8A	History of the Americas (3)
HIST 8AH	Honors History of the Americas (3)
HIST 8B	History of the Americas (3)
HIST 8BH	Honors History of the Americas (3)
HIST 10	Hist./Early America (Colonial- Reconstr) (3)
HIST 10H	Honors History/Early America (Colonial-Reconstr) (3)
HIST 11	Modern U.S. History (Reconstr- Present) (3)
HIST 11H	Honors History/Modern America (3)
HIST 25	History of American Women (3)
HIST 27A	History of the African-American to 1877 (3)
HIST 27B	Hist/African-American (Reconstr-Present) (3)

POLITICAL SCIENCE (NOT REQUIRED FOR THE A.S. Degree)

One Class Required (3 units minimum)—choose from:

POLSC 1	Introduction to Government (3)
POLSC 1H	Honors Introduction to Government (3)
POLSC 3	Issues of American Government (3)

HUMANITIES AND ARTS

One Class Required (3 units minimum)—choose from:

ART 1	Art and Civilization (3)
ART 1H	Honors Art and Civilization (3)
ART 2	Art and Civilization (3)
ART 2H	Honors Art and Civilization (3)
ART 3	Modern and Contemporary Art (3)
ART 3H	Honors Modern and Contemporary Art (3)
ART 4	African, Oceanic, Native American Art (3)

ART 4H	Honors African, Oceanic, Native American Art (3)	ENGL 46	Survey of British Literature I (4)
ART 5	History of Asian Art (3)	ENGL 47	Survey of British Literature II (4)
ART 9	Introduction to Art (3)	ENGL 48	Modern & Contemporary Literature (3)
ART 10	Art Appreciation (3)	ENGL 48H	Honors Modern /Contemporary Literature (3)
ART 11	Latin American Art and Architecture (3)	ENGL 49	Film and Literature (3)
ART 11H	Honors Latin American Art and Architect.(3)	ENGL 49H	Honors Film and Literature (3)
ART 15	Beginning Drawing (3)	FILM 1	Introduction to Film Studies (3)
ART 23	Beginning Painting (3)	FILM 2A	Film History I (3)
ART 24	Watercolor, Beginning (3)	FILM 2B	Film History II (3)
ART 26	Figure Painting (3)	FILM 10	Film Genres (3)
ART 30	Fundamentals of Art/Volume, Plane & Form (3)	FILM 25	Introduction to Digital Cinematography (3)
ART 31	Fundamentals of Art/Composition & Color (3)	FREN 1	Elementary French (5)
ART 34	Applied Design/Crafts (3)	FREN 1C	French 1 for Spanish Speakers (5)
ART 35	Jewelry/Metalsmithing 1 (4)	FREN 2	Elementary French (5)
ART 43	Beginning Website Design (3)	FREN 2C	French 2 for Spanish Speakers (5)
ART 50	Ceramics I (3)	FREN 3	Intermediate French (5)
ART 51	Ceramics II (3)	FREN 4	Intermediate French (5)
ART 60	Beginning Sculpture (4)	FREN 25A	Advanced French: Culture in Literature (3)
ART 70	Printmaking, Silkscreen (3)	GER 1	Elementary German (5)
ART 71	Printmaking, Intaglio (3)	GER 2	Elementary German (5)
ART 80	Elements of Photography (3)	● HUMAN 1	Comparative World Cultures (3)
CHIN 1	Elementary Chinese 1 (5)	● HUMAN 1H	Honors Comparative World Cultures (3)
CHIN 2	Elementary Chinese 2 (5)	● HUMAN 7	American Pluralism and Identity (3)
COMM 50	Elements of Oral Interpretation (3)	ITAL 1	Elementary Italian (5)
CART 41	The Arts and Modern Man (3)	ITAL 2	Elementary Italian (5)
DANCE 1	Dance Forms Through the Ages (3)	JAPAN 1	Elementary Japanese (5)
DANCE 19	Hip Hop Dance History (3)	JAPAN 2	Elementary Japanese (5)
ENGL 2	Introduction to Literature/Composition (4)	JAPAN 3	Intermediate Japanese (5)
ENGL 2H	Honors Introduction to Literature/Composition (4)	JAPAN 4	Intermediate Japanese (5)
ENGL 26	Creative Writing 1 (3)	LING 1	Linguistics 1 (3)
ENGL 32	Masterpieces/Asian Literature (in English) (3)	MUSIC 6	Introduction to Music Theory (3)
ENGL 33	Mythology (4)	MUSIC 28AD	Percussion Ensemble (1.5)
ENGL 33H	Honors Mythology (4)	MUSIC 30A	Music History: Antiquity to 1750 (3)
ENGL 35	Interpreting the Short Story (3)	MUSIC 30B	Music History: 1750-Present (3)
ENGL 36	The Novel (3)	MUSIC 32	History of Jazz (3)
ENGL 37	Science Fiction, Fantasy, and Horror (3)	MUSIC 33B	Intercultural Music (3)
ENGL 38	The Bible as Lit: The Old Testament (3)	MUSIC 35	Music of Multicultural America (3)
ENGL 39	The Bible as Lit: Apocrypha/New Testament (3)	MUSIC 40	Appreciation of Music (3)
ENGL 41	American Literature I (4)	MUSIC 40H	Honors Appreciation of Music (3)
ENGL 42	American Literature II (4)	MUSIC 89	History of Rock (3)
ENGL 43A	Introduction to Shakespeare (4)	● PHIL 3	Intro to Issues/Phil, Psych & Religion (3)
ENGL 43B	Introduction to Shakespeare (4)	PHIL 6	Introduction to Philosophy (3)
ENGL 44	World Literature I (4)	PHIL 6H	Honors Introduction to Philosophy (3)
ENGL 44H	Honors World Literature I (4)	PHIL 7	Introduction to Ethics (3)
ENGL 45	World Literature II (4)	PHIL 7H	Honors Introduction to Ethics (3)
ENGL 45H	Honors World Literature II (4)	PHIL 8	Introduction to Non-Western Philosophy (3)
		PHIL 9	Introduction to Existentialism (3)
		PHIL 10	Introduction to Feminist Philosophy (3)

PHIL 14	Philosophy of Religion (3)	DANCE 41/2	Dance Performance (1)
PHIL 15	Introduction to Political Philosophy (3)	DANCE 41/3	Dance Performance (2)
PHIL 16	Introduction to Business Ethics (3)	DANCE 41	Dance Performance (2.5)
PHOT 10	History of Photography (3)	F_N 26	Nutrition for the Active Person (1)
R TV 1	Introduction to Broadcasting (3)	F_N 250	Nutrition for Culinary Arts (2)
SPAN 1	Elementary Spanish (5)	F_N 255C	Nutrition for Adults and Aging (1)
SPAN 2	Elementary Spanish (5)	F_N 255D	Vegetarian Lifestyle (1)
SPAN 3	Intermediate Spanish (5)	F_N 256	Weight Control & Energy Balance (2)
SPAN 4	Intermediate Spanish (5)	F_N 260	Cultural Foods (1)
SPAN 8	Spoken Spanish (3)	F_N 261	Cooking for Wellness (1)
SPAN 9	Spanish for Spanish Speakers (5)	F_N 262	Cooking for Singles (1)
SPAN 9H	Honors Spanish for Spanish Speaker (5)	HLED 21	Introduction to Public Health (3)
SPAN 10	Spanish for Spanish Speakers (5)	HLED 22	Health and Social Justice (3)
SPAN 10H	Honors Span for Spanish Speaker (5)	HLED 24	Drugs, Health and Society (3)
SPAN 25A	Advanced Spanish: Culture in Literature (3)	KINA 1	PE for the Physically Limited (1)
SPAN 25B	Advanced Spanish: History (3)	KING 2	Ultimate Frisbee (1)
SPAN 25C	Advanced Spanish: Politics, Current Event (3)	KING 2B	Ultimate Frisbee (1)
SPAN 25D	Advanced Spanish: Literature (3)	KING 10	Badminton (1)
TART 1	Acting 1-Introduction to Acting (3.5)	KING 10B	Badminton (1)
TART 25	Introduction to Theatre (3)	KING 14	Basketball (1)
TART 30	Introduction to Dramatic Literature (3)	KING 14B	Basketball (1)
VIET 1	Elementary Vietnamese (5)	KING 55	Lifeguard/Water Safety Training (4)
VIET 2	Elementary Vietnamese (5)	KING 65	Martial Arts (1)

PHYSICAL FITNESS/WELLNESS

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

1 Unit Required—choose from:

DANCE 3	Musical Theatre Dance (2)	KING 65B	Martial Arts (1)
DANCE 5	Tap Dance 1 (2)	KING 66	Martial Arts (1)
DANCE 6	Tap Dance2 (2)	KING 66B	Self-Defense (1)
DANCE 8	Stretch and Relaxation (2)	KING 70	Self-Defense (1)
DANCE 12A	Pilates 1 (2)	KING 70B	Soccer (1)
DANCE 13	Turns (2)	KING 74	Soccer (1)
DANCE 14	Modern Dance 1(2)	KING 76	Softball (1)
DANCE 17	Modern Dance 4(2)	KING 76	Swimming (1)
DANCE 18A	Folk and Ethnic Dance-African (2)	KING 84	Tennis (1)
DANCE 18B	Folk and Ethnic Dance-Belly Dance (2)	KING 86	Touch Football (1)
DANCE 20	Jazz Dance 1 (2)	KING 90	Volleyball (1)
DANCE 21	Jazz Dance 2 (2)	KING 90B	Volleyball (1)
DANCE 26	Ballet 1 (2)	KING 92	Sand Volleyball (1)
DANCE 29	Ballet 4 (2)	KING 92B	Sand Volleyball (1)
DANCE 31	Choreography I (2)	KING 94	Rugby (1)
DANCE 32	Choreography 2 (2)	KINIA 1AD	Baseball (Men) (3)
DANCE 33	Dance Choreography Workshop (2)	KINIA 2AD	Off-Season Conditioning for Athletes (3)
DANCE 41/1	Dance Performance (0.5)	KINIA 3AD	Baseball (Men) (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 35AD	Soccer (Women) (3)
KINIA 37AD	Softball (Women) (3)
KINIA 39AD	Swimming (Women) (3)
KINIA 41AD	Tennis (Women) (3)
KINIA 43AD	Track & Field (Women) (3)
KINIA 45AD	Volleyball (Women) (3)
KINIA 47AD	Water Polo (Women) (3)
KINPF 3	Aqua Calisthenics (1)
KINPF 4	Deep Water Aerobics (1)
KINPF 6	Dance Aerobics (1)
KINPF 8	Circuit Weight Training (1)
KINPF 8B	Circuit Weight Training (1)
KINPF 10	Stretch & Relaxation (1)
KINPF 10B	Stretch & Relaxation (1)
KINPF 12	Core Conditioning (1)
KINPF 12B	Core Conditioning (1)
KINPF 14	Yoga (1)
KINPF 17	Jogging (1)
KINPF 17B	Jogging (1)
KINPF 18	Triathlon Training (1)
KINPF 18B	Triathlon Training (1)
KINPF 21	Low Impact Cardio (1)
KINPF 22	Physical Fitness (1)
KINPF 22B	Physical Fitness (1)
KINPF 23	Cycling Conditioning (1)
KINPF 24	Cardio Cross Fit (1)
KINPF 42	Swimming Fitness (1)
KINPF 53	Power Lifting (1)
KINPF 54	Weight Training (1)
KINPF 54B	Weight Training (1)
KINPF 81	Fitness and Wellness Center (1)
KINPF 84A	Fitness and Wellness (2)
KINPF 84B	Fitness & Wellness (2)
KINPP 7	Intro to Community Recreation (3)
KINPP 10	Prevention & Care of Athletic Injuries (3)
KINPP 12	Techniques of Physical Fitness (2)
KINPP 15	Sports Officiating (Fall) (3)
KINPP 17	Sports Officiating (Spring) (3)
TART 1B	Acting 1 - Movement (2)
TART 2C	Acting 2 - Movement, Mime and Mask (2)

HEALTH EDUCATION

For Health Education, student may complete one of the 3 Unit courses from F_N 20, HLED 3, HLED 4, or HLED 5 OR by completing all courses in one of the groups.

3 Units Minimum Required— One class from:

F_N 20	Nutrition and Life (3)
HLED 3	Contemporary Health Problems (3)
HLED 4	Women's Health Issues (3)
HLED 5	Men's Health Issues (3)
OR	
(Group A: All courses grouped below must be completed to satisfy the requirement.)	

BIO 60	Human Biology 1 (4)
AND	
BIO 61	Human Biology 2 (3)
AND	
PSYCH 1	Introduction to Psychology (3)

OR
(Group B: All courses grouped below must be completed to satisfy the requirement.)

ANAT 41	Anatomy & Physiology (5)
AND	
DMI 60	Radiologic Pathology (3)
AND	
PSYCH 1	Introduction to Psychology (3)

OR
(Group C: All courses grouped below must be completed to satisfy the requirement.)

ANAT 1	Human Anatomy (4)
AND	
PHYSI 1	Human Physiology (5)
AND	
PSYCH 1	Introduction to Psychology (3)

Plan B: Completion and Certification of California State University General Education Breadth

- 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 general education 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).
- 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 General Education Plan B. After the student has transferred, the CSU campus

will then specify a minimum of nine more upper-division units to be taken primarily in areas B, C, and D. Courses that fulfill these CSU requirements do not necessarily meet the requirements for the University of California System.

**Long Beach City College
2017-2018 – California State University
General Education - Breadth - PLAN B**

LEGEND

- ◆ Denotes laboratory class.
- ◐ Cross-listed courses. A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plan B:

ECON 5 = GEOG 5: The Global Economy
 HUMAN 1/1H = SOCSC 1/1H: Comparative World Cultures/Honors CWC
 HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
 HUMAN 7 = SOCSC 7: American Pluralism and Identity
 HLED 10 = PSYCH 10: Human Sexuality

Area Requirements

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

AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING

A1. ORAL COMMUNICATION

One Class Required (3 units minimum)—choose from:

COMM 10	Elements of Public Speaking (3)
COMM 10H	Honors Elements of Public Speaking (3)
COMM 20	Elements of Interpersonal Communication (3)
COMM 30	Elements of Group Communication (3)
COMM 60	Elements of Argumentation and Debate (3)

A2. WRITTEN COMMUNICATION

One Class Required (3 units minimum)—choose from:

ENGL 1	Reading and Composition (4)
ENGL 1H	Honors Reading and Composition (4)

A3. CRITICAL THINKING

One Class Required (3 units minimum)—choose from:

COMM 60	Elements of Argumentation and Debate (3)
COSA 2	Critical Thinking Using Computers (3)
ENGL 3	Argumentative and Critical Writing (4)
ENGL 3H	Honors Argumentative & Critical Writing (4)
ENGL 4	Critical Analysis of Literature (4)
ENGL 4H	Honors Critical Analysis of Literature (4)
PHIL 11	Critical Thinking (3)
PHIL 12	Introduction to Logic (3)
PHIL 22	Symbolic Logic (3)
READ 84	Analytical Reading (3)

AREA B: SCIENTIFIC INQUIRY AND MATHEMATICS/QUANTITATIVE REASONING

Two Classes Required (6 units minimum).

- ◆ Indicates a lab course (Area B3).

NOTE: One class in this area must include an associated laboratory (Area B3).

B1. PHYSICAL SCIENCES (Complete 1 class)

ASTR 1	Astronomy (3)
ASTR 1H	Honors Elementary Astronomy (3)
◆ ASTR 1L	Astronomy Laboratory (2)
◆ CHEM 1A	General Chemistry (5.5)
◆ CHEM 1B	General Chemistry (5.5)
◆ CHEM 2	Elementary Chemistry (4.5)
◆ CHEM 3	Intro to Gen, Organic & Biochemistry (5)
ENVRS 1	Energy for the Future (3)
◆ GEOL 1	General Physical Geology (4.5)
◆ GEOL 1H	Honors General Physical Geology (4.5)
GEOL 2	General Geology, Physical (3)
GEOL 2F	Geology Field Trips (1)
◆ GEOL 2L	General Geology, Physical Geology Lab (1.5)
◆ GEOL 3	Historical Geology (4.5)
GEOL 3H	Honors Historical Geology (4.5)
◆ GEOL 4	Field Geology (2)
GEOL 5	Environmental Geology (3)
GEOL 7	Field Studies: Western Environments (2)
GEOL 18	Geology of California (3)
PGEOG 1	Physical Geography (3)
◆ PGEOG 1L	Physical Geography Lab (1.5)
PGEOG 2	Weather and Climate (3)
◆ PHYS 2A	General Physics (4)
◆ PHYS 2B	General Physics (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)

B2. BIOLOGICAL SCIENCES (Complete 1 class)

◆ ANAT 1	Human Anatomy (4)
◆ ANAT 41	Anatomy & Physiology (5)
ANTHR 1	Physical Anthropology (3)
ANTHR 1H	Honors Physical Anthropology (3)
◆ BIO 1A	Biology for Science Major (5)
◆ BIO 1B	Biology for Science Majors (5)
◆ BIO 2	General Microbiology (5)
◆ BIO 5	Plant Biology (4)
BIO 11	Environmental Problems of Man (3)
◆ BIO 20	Marine Biology (4)
◆ BIO 20H	Honors Marine Biology (4)
BIO 22	The Marine Environment (3)
BIO 25	Biology and Society (3)
◆ BIO 30	Wildlife Biology (4)
BIO 41	Contemporary Biology (3)
BIO 41H	Honors Contemporary Biology (3)
◆ BIO 41L	Contemporary Biology Laboratory (1)
◆ BIO 41LH	Honors Contemporary Biology Laboratory (1)
BIO 60	Human Biology (4)
◆ BIO 60L	Human Biology 1 Laboratory (1)
BIO 61	Human Biology 2 (3)
◆ PHYSI 1	Human Physiology (5)

B4. MATHEMATICS/QUANTITATIVE REASONING

One Class Required (3 units minimum)—choose from:

MATH 27	Probability and Statistics for Elementary Teachers (3)
MATH 28	Mathematics for Elementary Teaching I (3)
MATH 37	Finite Mathematics (3)
MATH 37H	Honors Finite Mathematics (3)
MATH 40	Trigonometry (3)
MATH 45	College Algebra (4)
MATH 47	Calculus for Business (3)
MATH 50	Precalculus Math (5)
MATH 50H	Honors Precalculus Math (5)
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)
STAT 1	Elementary Statistics (4)
STAT 1H	Honors Elementary Statistics (4)

AREA C: ARTS AND HUMANITIES

3 Classes Required (9 units minimum)

NOTE: Students must complete one class from both Areas C1 and C2 and a second course from either Area (for a total of 3 classes).

C1. ARTS (Complete 1 class)

ART 1	Art and Civilization (3)
ART 1H	Honors Art and Civilization (3)
ART 2	Art and Civilization (3)
ART 2H	Honors Art and Civilization (3)
ART 3	Modern and Contemporary Art (3)
ART 3H	Honors Modern and Contemporary Art (3)
ART 4	African, Oceanic, Native American Art (3)
ART 4H	Honors African, Oceanic, Native American Art (3)
ART 5	History of Asian Art (3)
ART 9	Introduction to Art (3)
ART 10	Art Appreciation (3)
ART 11	Latin America Art and Architecture (3)
ART 11H	Honors Art (3)
ART 30	Fundamentals of Art/Volume, Plane & Form (3)
ART 31	Fundamentals of Art/Composition & Color (3)
ART 80	Elements of Photography (3)
COMM 50	Elements of Oral Interpretation (3)
CART 41	The Arts and Modern Man (3)
DANCE 1	Dance Forms Through the Ages (3)
DANCE 19	Hip Hop Dance History (3)
FILM 1	Introduction to Film Studies (3)
FILM 2A	Film History I (3)
FILM 2B	Film History II (3)
FILM 10	Film Genres (3)
MUSIC 6	Introduction to Music Theory (3)
MUSIC 30A	Music History: Antiquity to 1750 (3)
MUSIC 30B	Music History: 1750-Present (3)
MUSIC 32	History of Jazz (3)
MUSIC 33B	Intercultural Music (3)
MUSIC 35	Music of Multicultural America (3)
MUSIC 40	Appreciation of Music (3)
MUSIC 40H	Honors Appreciation of Music (3)
MUSIC 89	History of Rock (3)
PHOT 10	History of Photography (3)
R_TV 1	Introduction to Broadcasting (3)
TART 1	Acting 1-Introduction to Acting (3.5)
TART 25	Introduction to Theatre (3)
TART 30	Introduction to Dramatic Literature(3)

C2. HUMANITIES (Complete 1 class)

CHIN 1	Elementary Chinese 1 (5)	HIST 8BH	Honors History of the Americas (3)
CHIN 2	Elementary Chinese 2 (5)	HIST 9A	History of China (3)
ENGL 2	Introduction to Literature/Composition (4)	HIST 9B	History of Japan and Korea (3)
ENGL 2H	Honors Introduction to Literature/ Composition (4)	HIST 9C	History of India and Southeast Asia (3)
ENGL 26	Creative Writing 1 (3)	HIST 10	Hist./Early America (Colonial-Reconstr) (3)
ENGL 32	Masterpieces/Asian Literature (in English) (3)	HIST 10H	Honors History/Early America (3)
ENGL 33	Mythology (4)	HIST 11	Modern U.S. History (Reconstr-Present) (3)
ENGL 33H	Honors Mythology (4)	HIST 11H	Honors History/Modern America (3)
ENGL 35	Interpreting the Short Story (3)	HIST 18	History of Mexico (3)
ENGL 36	The Novel (3)	HIST 25	History of American Women (3)
ENGL 37	Science Fiction, Fantasy and Horror (3)	HIST 27A	History of the African-American to 1877 (3)
ENGL 38	The Bible as Lit: The Old Testament (3)	HIST 27B	Hist/African-American (Reconstr-Present) (3)
ENGL 39	The Bible as Lit: Apocrypha/New Testament (3)	● HUMAN 1	Comparative World Cultures (3)
ENGL 41	American Literature I (4)	● HUMAN 1H	Honors Comparative World Cult (3)
ENGL 42	American Literature II (4)	● HUMAN 7	American Pluralism and Identity (3)
ENGL 43A	Introduction to Shakespeare (4)	ITAL 1	Elementary Italian (5)
ENGL 43B	Introduction to Shakespeare (4)	ITAL 2	Elementary Italian (5)
ENGL 44	World Literature I (4)	JAPAN 1	Elementary Japanese (5)
ENGL 44H	Honors World Literature I (4)	JAPAN 2	Elementary Japanese (5)
ENGL 45	World Literature II (4)	JAPAN 3	Intermediate Japanese (5)
ENGL 45H	Honors World Literature II (4)	JAPAN 4	Intermediate Japanese (5)
ENGL 46	Survey of British Literature I (4)	LING 1	Linguistics 1 (3)
ENGL 47	Survey of British Literature II (4)	● PHIL 3	Intro to Issues/Phil, Psych & Religion (3)
ENGL 48	Modern & Contemporary Literature (3)	PHIL 6	Introduction to Philosophy (3)
ENGL 48H	Honors Modern/Contemporary Literature (3)	PHIL 6H	Honors Introduction to Philosophy (3)
ENGL 49	Film and Literature (3)	PHIL 7	Introduction to Ethics (3)
ENGL 49H	Honors Film and Literature (3)	PHIL 7H	Honors Introduction to Ethics (3)
FREN 1	Elementary French (5)	PHIL 8	Introduction to Non-Western Philosophy (3)
FREN 2	Elementary French (5)	PHIL 9	Introduction to Existentialism (3)
FREN 3	Intermediate French (5)	PHIL 10	Introduction to Feminist Philosophy (3)
FREN 4	Intermediate French (5)	PHIL 14	Philosophy of Religion (3)
FREN 25A	Advanced French: Culture in Literature (3)	PHIL 15	Introduction to Political Philosophy (3)
GER 1	Elementary German (5)	PHIL 16	Introduction to Business Ethics (3)
GER 2	Elementary German (5)	● SOCSOC 1	Comparative World Cultures (3)
HIST 1A	History: Western (European) Civilization (3)	● SOCSOC 1H	Honors Comparative World Cultures (3)
HIST 1AH	Honors History: Western (European) Civilization (3)	● SOCSOC 7	American Pluralism and Identity (3)
HIST 1B	History: Western (European) Civilization (3)	SPAN 1	Elementary Spanish (5)
HIST 1BH	Honors History of Western European Civ (3)	SPAN 2	Elementary Spanish (5)
HIST 2B	World History to 1500 (3)	SPAN 3	Intermediate Spanish (5)
HIST 2C	World History Since 1500 (3)	SPAN 4	Intermediate Spanish (5)
HIST 2CH	Honors World History Since 1500 (3)	SPAN 9	Spanish for Spanish Speakers (3)
HIST 5A	History of England and Great Britain (3)	SPAN 9H	Honors Spanish for Spanish Speakers (5)
HIST 5B	History of England and Great Britain (3)	SPAN 10	Spanish for Spanish Speakers (5)
HIST 8A	History of the Americas (3)	SPAN 10H	Honors Spanish for Span Speakers (5)
HIST 8AH	Honors History of the Americas (3)	SPAN 25A	Advanced Spanish: Culture in Literature (3)
HIST 8B	History of the Americas (3)	SPAN 25B	Advanced Spanish: History (3)
		SPAN 25C	Advanced Spanish: Politics, Current Event (3)
		SPAN 25D	Advanced Spanish: Literature (3)
		VIET 1	Elementary Vietnamese (5)

VIET 2 Elementary Vietnamese (5)

AREA D: SOCIAL SCIENCES

3 Classes Required (9 units minimum)

NOTES: Students must take courses from at least 2 difference disciplines. Effective Fall 2016, Area D (Social Sciences) will no longer be categorized by sections D1-D0.

ANTHR 2	Cultural Anthropology (3)
ANTHR 2H	Honors Cultural Anthropology (3)
ANTHR 3	Intro to Archaeology (3)
ANTHR 3H	Honors Intro to Archaeology (3)
ANTHR 10	Magic, Witchcraft and Religion (3)
CDECE 45	Child & Adolescent Development DS 1(3)
COMM 25	Elements of Intercultural Communication (3)
ECON 1	Macro Economic Analysis (3)
ECON 1H	Honors Macro Economic Analysis (3)
ECON 2	Micro Economic Analysis (3)
ECON 2H	Honors Micro Economics Analysis (3)
ECON 3	General Concepts in Economics (3)
ECON 4	Contemporary Economic Issues (3)
●ECON 5	The Global Economy (3)
GEOG 2	Elements of Cultural Geography (3)
●GEOG 5	The Global Economy (3)
GEOG 40	World Regional Geography (3)
HIST 1A	History: Western (European) Civilization (3)
HIST 1AH	Honors History of Western European Civilization (3)
HIST 1B	History: Western (European) Civilization (3)
HIST 1BH	Honors History of Western European Civ (3)
HIST 2B	World History to 1500 (3)
HIST 2C	World History Since 1500 (3)
HIST 2CH	Honors World History Since 1500 (3)
HIST 5A	History of England and Great Britain (3)
HIST 5B	History of England and Great Britain (3)
HIST 8A	History of the Americas (3)
HIST 8AH	Honors History of the Americas (3)
HIST 8B	History of the Americas (3)
HIST 8BH	Honors History of the Americas (3)
HIST 9A	History of China (3)
HIST 9B	History of Japan and Korea (3)
HIST 9C	History of India and Southeast Asia (3)
HIST 18	History of Mexico (3)
HIST 25	History of American Women (3)
HIST 27A	History of the African-American to 1877 (3)
HIST 27B	Hist/African-American (Reconstr-Present) (3)
●HUMAN 1	Comparative World Cultures (3)
●HUMAN 1H	Honors Comparative World Cultures (3)

●HUMAN 7	American Pluralism and Identity (3)
●PHIL 3	Intro to Issues/Phil, Psych & Religion (3)
PHIL 10	Introduction to Feminist Philosophy (3)
PHIL 15	Introduction to Political Philosophy (3)
PHIL 16	Introduction to Business Ethics (3)
POLSC 1	Introduction to Government (3)
POLSC 1H	Honors Introduction to Government (3)
POLSC 2	Comparative Government (3)
POLSC 3	Issues of American Government (3)
POLSC 4	World Politics (3)
POLSC 9	The Constitution, Law and Society (3)
POLSC 10	Introduction to Political Science (3)
POLSC 11	Introduction to Political Theory (3)
PSYCH 1	Introduction to Psychology (3)
PSYCH 1H	Honors Introduction to Psychology (3)
PSYCH 11	Social Psychology (3)
PSYCH 14	Abnormal Psychology (3)
PSYCH 33	Psychology of Personality (3)
PUBAD 1	Introduction to Public Administration (3)
●SOCSC 1	Comparative World Cultures (3)
●SOCSC 1H	Honors Comparative World Cultures (3)
●SOCSC 7	American Pluralism and Identity (3)
SOCIO 1	Introduction to Sociology (3)
SOCIO 1H	Honors Introduction to Sociology (3)
SOCIO 2	Modern Social Problems (3)
SOCIO 11	Race & Ethnic Relations in the U.S. (3)
SOCIO 13	Sociology of Latinos (3)
SOCIO 40	Sociology of the Family (3)

AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT

(3 units minimum)

Complete one class from:

CDECE 45	Child & Adolescent Development DS 1(3)
CDECE 47	Human Development (3)
COUNS 2	Making a Difference With Mentoring (3)
COUNS 7	College and Professional Success (3)
F_N 20	Nutrition and Life (3)
GBUS 10	Personal Financial Management (3)
HLED 3	Contemporary Health Problems (3)
HLED 4	Women's Health Issues (3)
HLED 5	Men's Health Issues (3)
●HLED 10	Human Sexuality (3)
KINPP 1	Introduction to Kinesiology (3)
KINPP 4	Lifetime Wellness Principles (3)
LEARN 11	Learning and Academic Strategies (3)
LEARN 11H	Honors Learning and Academic Strategies (3)
PSYCH 4	Personal and Social Development (3)
PSYCH 10	Human Sexuality (3)

OR

Complete the following:

(KINPP 12 Techniques of Physical Fitness (2) & 1 unit KIN Activity)+

+--All courses grouped together must be completed to satisfy the requirement.

Check the approved CSU GE-Breadth Certification Area E course list on the ASSIST web site (www.assist.org) to determine which Kinesiology Activity courses satisfy this requirement.

CSU U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS GRADUATION REQUIREMENT

CSU Graduation Requirement

Complete both the History and Political Science sections below:

Students may complete this requirement after transfer to a CSU.

History (3 units minimum) – choose from:

HIST 8A	History of the Americas (3)
HIST 8AH	Honors History of the Americas (3)
HIST 8B	History of the Americas (3)
HIST 8BH	Honors History of the Americas (3)
HIST 10	Hist./Early America (Colonial- Reconstr) (3)
HIST 10H	Honors History/Early America (3)
HIST 11	Hist./Modern America (Reconstr- Present) (3)
HIST 11H	Honors History/Modern America (3)

Political Science (3 units minimum) – choose from:

POLSC 1	Introduction to Government (3)
POLSC 1H	Honors Introduction to Government (3)

NOTES: 1) Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either 8A/8AH or 8B/8BH to meet the History portion of the U.S. History, Constitution, and American Ideals Graduation Requirement. (Retroactive to Fall 2004). 2) HIST 8A, 8AH, 8B, 8BH, 10, 10H, 11, 11H, POLSC 1, 1H may be used for GE and the U.S. History, Constitution and American Ideals requirement (Retroactive to Fall 2011).

Plan C: Completion and Certification of University of California and California State University Intersegmental General Education Transfer Curriculum

Plan C, the Intersegmental General Education 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 Long Beach City College. 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 general education requirements at any CSU or UC campus.
2. The IGETC provides an option to the California State University general education 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 general education 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 general education 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 general education and proficiency requirements.
5. Students must maintain continuous attendance.

Long Beach City College 2017-2018 General Education Requirements Intersegmental General Education Transfer Curriculum (IGETC) – Plan C

LEGEND

◆ Denotes laboratory class.

* Indicates course limitations may exist. For an explanation of limitation, please refer to the UC Transfer Course Agreement, which is available on the ASSIST web site at www.assist.org.

• Cross-listed courses. A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plan C:

ECON 5 = GEOG 5: The Global Economy

HUMAN 1/1H = SOCS 1/1H: Comparative World Cultures/Honors CWC

HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion

HUMAN 7 = SOCS 7: American Pluralism and Identity

HLED 10 = PSYCH 10: Human Sexuality

Area Requirements

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

AREA 1A: ENGLISH COMPOSITION

One Class Required (3 units minimum)—choose from:

ENGL 1 Reading and Composition (4)
ENGL 1H Honors Reading and Composition (4)

AREA 1B: CRITICAL THINKING AND COMPOSITION

One Class Required (3 units minimum)—choose from:

ENGL 3 Argumentative and Critical Writing (4)
ENGL 3H Honors Argumentative and Critical Writing (4)
ENGL 4 Critical Analysis of Literature (4)
ENGL 4H Honors Critical Analysis of Literature (4)

AREA 1C: ORAL COMMUNICATION

NOTE: This area required by CSU only.

One Class Required (3 units minimum)—choose from:

COMM 10 Elements of Public Speaking (3)
COMM 10H Honors Elements of Public Speaking (3)
COMM 30 Elements of Group Communications (3)
COMM 60 Elements of Argumentation and Debate (3)

AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

One Class Required (3 units minimum)—choose from:

*MATH 37 Finite Mathematics (3)
*MATH 37H Honors Finite Mathematics (3)

*MATH 45 College Algebra (4)
*MATH 47 Calculus for Business (3)
*MATH 50 Precalculus Math (5)
*MATH 50H Honors Precalculus Math (5)
*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 & Line Alg (5)
STAT 1 Elementary Statistics (3)
STAT 1H Honors Elementary Statistics (3)

AREA 3: ARTS AND HUMANITIES

Three Classes Required (9 units minimum).

NOTE: Students must complete one class from both the Arts and Humanities lists and a second course from either list (for a total of 3 classes).

AREA 3A: ARTS

One Class Minimum Required – choose from:

ART 1 Art and Civilization (3)
ART 1H Honors Art and Civilization (3)
ART 2 Art and Civilization (3)
ART 2H Honors Art and Civilization (3)
ART 3 Modern and Contemporary Art (3)
ART 3H Honors Modern and Contemporary Art (3)
ART 4 African, Oceanic, Native American Art (3)
ART 4H Honors African, Oceanic, Native American Art (3)
ART 5 History of Asian Art (3)
ART 5H Honors History of Asian Art (3)
ART 10 Art Appreciation (3)
ART 11 Latin American Art (3)
ART 11H Honors Latin American Art and Architecture (3)
CART 41 The Arts and Modern Man (3)
DANCE 1 Dance Forms Through the Ages (3)
DANCE 19 Hip Hop Dance History (3)
FILM 1 Introduction to Film Studies (3)
FILM 2A Film History I (3)
FILM 2B Film History II (3)
FILM 10 Film Genres (3)
MUSIC 30A Music History: Antiquity to 1750 (3)
MUSIC 30B Music History: 1750-Present (3)
MUSIC 32 History of Jazz (3)
MUSIC 33B Intercultural Music (3)
MUSIC 35 Music of Multicultural America (3)
MUSIC 40 Appreciation of Music (3)
MUSIC 40H Honors Appreciation of Music (3)

MUSIC 89	History of Rock (3)
PHOT 10	History of Photography (3)
TART 25	Introduction to Theatre (3)
TART 30	Introduction to Dramatic Literature (3)

AREA 3B: HUMANITIES

One Class Minimum Required – choose from:

ENGL 32	Masterpieces/Asian Literature (in English) (3)
ENGL 33	Mythology (4)
ENGL 33H	Honors Mythology (4)
ENGL 35	Interpreting the Short Story (3)
ENGL 36	The Novel (3)
ENGL 37	Science Fiction, Fantasy and Horror (3)
ENGL 38	The Bible as Lit: The Old Testament (3)
ENGL 39	The Bible as Lit: Apocrypha/New Testament (3)
ENGL 41	American Literature I (4)
ENGL 42	American Literature II (4)
ENGL 43A	Introduction to Shakespeare (4)
ENGL 43B	Introduction to Shakespeare (4)
ENGL 44	World Literature I (4)
ENGL 44H	Honors World Literature I (4)
ENGL 45	World Literature II (4)
ENGL 45H	Honors World Literature II (4)
ENGL 46	Survey of British Literature I (4)
ENGL 47	Survey of British Literature II (4)
ENGL 48	Modern & Contemporary Literature (3)
ENGL 48H	Honors Modern/Contemporary Literature (3)
* ENGL 49	Film and Literature (3)
*ENGL 49H	Honors Film and Literature (3)
FREN 3	Intermediate French (5)
FREN 4	Intermediate French (5)
FREN 25A	Advanced French: Culture in Literature (3)
HIST 1A	History: Western (European) Civilization (3)
HIST 1AH	Honors History of Western European Civilization (3)
HIST 1B	History: Western (European) Civilization (3)
HIST 1BH	Honors History of Western European Civilization (3)
HIST 2B	World History to 1500 (3)
HIST 2C	World History Since 1500 (3)
HIST 2CH	Honors World History Since 1500 (3)
HIST 5A	History of England and Great Britain (3)
HIST 5B	History of England and Great Britain (3)
HIST 8A	History of the Americas (3)
HIST 8AH	Honors History of the Americas (3)
HIST 8B	History of the Americas (3)
HIST 8BH	Honors History of the Americas (3)
HIST 9A	History of China (3)
HIST 9B	History of Japan and Korea (3)

HIST 9C	History of India and Southeast Asia (3)
*HIST 10	Hist./Early America (Colonial-Reconstr) (3)
*HIST 10H	Honors History/Early America (3)
*HIST 11	Hist./Modern America (Reconstr-Present) (3)
*HIST 11H	Honors History/Modern America (3)
HIST 18	History of Mexico (3)
HIST 25	History of American Women (3)
HIST 27A	History of the African-American to 1877 (3)
HIST 27B	Hist/African-American (Reconstr-Present) (3)
● HUMAN 1	Comparative World Cultures (3)
● HUMAN 1H	Honors Comparative World Cultures (3)
● HUMAN 7	American Pluralism and Identity (3)
JAPAN 3	Intermediate Japanese (5)
LING 1	Linguistics 1 (3)
● PHIL 3	Intro to Issues/Phil, Psych & Religion (3)
PHIL 6	Introduction to Philosophy (3)
PHIL 6H	Honors Introduction to Philosophy (3)
PHIL 7	Introduction to Ethics (3)
PHIL 7H	Honors Introduction to Ethics (3)
PHIL 8	Introduction to Non-Western Phil (3)
PHIL 9	Introduction to Existentialism (3)
PHIL 10	Introduction to Feminist Philosophy (3)
PHIL 14	Philosophy of Religion (3)
PHIL 15	Introduction to Political Philosophy (3)
PHIL 16	Introduction to Business Ethics (3)
● SOCS 1	Comparative World Cultures (3)
● SOCS 1H	Honors Comparative World Cultures (3)
● SOCS 7	American Pluralism and Identity (3)
* SPAN 3	Intermediate Spanish (5)
* SPAN 4	Intermediate Spanish (5)
* SPAN 9	Spanish for Spanish Speakers (3)
* 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)

AREA 4: SOCIAL AND BEHAVIORAL SCIENCES

Three Classes Required (9 units minimum)

Students must take courses from at least 2 different disciplines.

NOTE: Effective Fall 2016, Area 4 (Social and Behavioral Sciences) will no longer be categorized by sections 4A-4J.

ANTHR 2	Cultural Anthropology (3)
ANTHR 2H	Honors Cultural Anthropology (3)
ANTHR 3	Intro to Archaeology (3)
ANTHR 3H	Honors Intro to Archaeology (3)
ANTHR 10	Magic, Witchcraft and Religion (3)
COMM 25	Elements of Intercultural Communication (3)
ECON 1	Macro Economic Analysis (3)
ECON 1H	Honors Macro Economic Analysis (3)
ECON 2	Micro Economic Analysis (3)
ECON 2H	Honors Micro Economics Analysis (3)
ECON 3	General Concepts in Economics (3)
ECON 4	Contemporary Economic Issues (3)
◆*ECON 5	The Global Economy (3)
GEOG 2	Elements of Cultural Geography (3)
◆* GEOG 5	The Global Economy(3)
GEOG 40	World Regional Geography (3)
◆HUMAN 1	Comparative World Cultures (3)
◆HUMAN 1H	Honors Comparative World Cultures (3)
◆HUMAN 7	American Pluralism and Identity (3)
◆PHIL 3	Intro to Issues/Phil, Psych & Religion (3)
PHIL 10	Introduction to Feminist Philosophy (3)
PHIL 15	Introduction to Political Philosophy (3)
PHIL 16	Introduction to Business Ethics (3)
POLSC 1	Introduction to Government (3)
POLSC 1H	Honors Introduction to Government (3)
POLSC 2	Comparative Government (3)
POLSC 3	Issues of American Government (3)
POLSC 4	World Politics (3)
POLSC 9	The Constitution, Law and Society (3)
POLSC 10	Introduction to Political Science (3)
POLSC 11	Introduction to Political Theory (3)
PSYCH 1	Introduction to Psychology (3)
PSYCH 1H	Honors Introduction to Psychology (3)
PSYCH 11	Social Psychology (3)
PSYCH 14	Abnormal Psychology (3)
SOCIO 1	Introduction to Sociology (3)
SOCIO 1H	Honors Introduction to Sociology (3)
SOCIO 2	Modern Social Problems (3)
SOCIO 11	Race & Ethnic Relations in the U.S. (3)
SOCIO 13	Sociology of Latinos (3)
SOCIO 40	Sociology of the Family (3)
◆SOCSC 1	Comparative World Cultures (3)
◆SOCSC 1H	Honors Comparative World Cultures (3)
◆SOCSC 7	American Pluralism and Identity (3)

AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES

Two Classes Required (7 units minimum).

◆--Denotes Laboratory Classes.

NOTE: One class in this area must include an associated laboratory component (Area 5C).

Area 5A—Physical Sciences

One Class Required (3 units minimum) – choose from:

ASTR 1	Astronomy (3)
ASTR 1H	Honors Elementary Astronomy (3)
◆ ASTR 1L	Astronomy Laboratory (2)
◆ CHEM 1A	General Chemistry (5.5)
◆ CHEM 1B	General Chemistry (5.5)
◆ * CHEM 2	Elementary Chemistry (4.5)
◆ CHEM 3	Intro to Gen, Organic & Biochemistry (5)
◆ * GEOL 1	General Physical Geology (4.5)
◆ * GEOL 1H	Honors General Physical Geology (4.5)
◆ * GEOL 2	General Geology, Physical (3)
◆ GEOL 2L	General Geology, Physical Geology Lab (1.5)
◆ GEOL 3	Historical Geology (4.5)
◆ GEOL 3H	Honors Historical Geology (4.5)
GEOL 5	Environmental Geology (3)
GEOL 18	Geography of California (3)
PGEOG 1	Physical Geography (3)
◆ PGEOG 1L	Physical Geography Lab (1.5)
PGEOG 2	Weather and Climate (3)
◆ * PHYS 2A	General Physics (4)
◆ * PHYS 2B	General Physics (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)

Area 5B—Biological Sciences

One Class Required (3 units minimum) – choose from:

◆ * ANAT 1	Human Anatomy (4)
◆ * ANAT 41	Anatomy & Physiology (5)
ANTHR 1	Physical Anthropology (3)
ANTHR 1H	Honors Physical Anthropology (3)
◆ BIO 1A	Biology for Science Majors (5)
◆ BIO 1B	Biology for Science Majors (5)
◆ BIO 2	General Microbiology (5)
◆ BIO 5	Plant Biology (4)
◆ BIO 20	Marine Biology (4)
◆ BIO 20H	Honors Marine Biology (4)
◆ * BIO 30	Wildlife Biology (4)
*BIO 41	Contemporary Biology (3)
*BIO 41H	Honors Contemporary Biology (3)
◆ *BIO 41L	Contemporary Biology Lab (3)
◆ * BIO 41LH	Honors Contemporary Biology Lab (3)
*BIO 60	Human Biology (4)
◆ * BIO 60L	Human Biology Laboratory (4)
* BIO 61	Human Biology 2 (3)

◆ * PHYSI 1 Human Physiology (5)

AREA 6: LANGUAGE OTHER THAN ENGLISH PROFICIENCY

(Required by UC Only)

Proficiency equivalent to two years of high school study in the same language.

This requirement may be met by any ONE of the following options:

- Completion of two years of foreign language in high school with a grade of “C” or better. OR
- Performance on foreign language proficiency tests administered at a campus of the UC. OR
- Earn a score of 550 on an appropriate College Board Achievement Test. OR
- Satisfactory score, 3 or higher, on the College Board Advanced Placement examinations in languages other than English. OR
- Satisfactory score, 5 or higher, on the International Baccalaureate Higher Level Examinations in languages other than English. OR
- Completion of a second or more advanced level of foreign language course offered at LBCC, chosen from:

CHIN 2	Elementary Chinese 2 (5)
FREN 2	Elementary French (5)
FREN 3	Intermediate French (5)
FREN 4	Intermediate French (5)
GER 2	Elementary German (5)
ITAL 2	Elementary Italian (5)
JAPAN 2	Elementary Japanese (5)
JAPAN 3	Intermediate Japanese (5)
SIGN 1B	American Sign Language, Beginning 2 (3)
SIGN 2A	American Sign Language, Intermediate 1 (3)
SIGN 2B	American Sign Language, Intermediate 2 (3)
SPAN 2	Elementary Spanish (5)
SPAN 3	Intermediate Spanish (5)
SPAN 4	Intermediate Spanish (5)
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)
VIET 2	Elementary Vietnamese (5)

AREA 7: CSU U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS GRADUATION REQUIREMENT (Required by CSU Only)

CSU Graduation Requirement

Only courses completed at LBCC may be used to certify this requirement.

Students may complete this requirement after transferring to a CSU.

Complete both the History and Political Science sections below:

φ **History:** 3 Units Minimum Required – choose from:

HIST 8A	History of the Americas (3)
HIST 8AH	Honors History of the Americas (3)
HIST 8B	History of the Americas (3)
HIST 8BH	Honors History of the Americas (3)
HIST 10	Hist/Early America (Colonial-Reconstr) (3)
HIST 10H	Honors Hist/Early America (Colonial-Reconstr) (3)
HIST 11	Modern U.S. History (Reconstr-Present) (3)
HIST 11H	Honors Modern U.S. History (Reconstr-Present) (3)

Political Science: 3 Units Minimum Required – choose from:

POLSC 1	Introduction to Government (3)
POLSC 1H	Honors Introduction to Government (3)

φ *NOTES:* 1) Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either 8A/8AH or 8B/8BH to fulfill the History portion of the U.S. History, Constitution, and American Ideals requirement. (Retroactive to 2004). 2) HIST 8A, 8AH, 8B, 8BH, 10, 10H, 11, 11H, POLSC 1, 1H may be used for GE and the U.S. History, Constitution and American Ideals requirement (Retroactive to Fall 2011).

Associate Degrees

Long Beach City College offers the following four types of degrees:

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

The awarding of an associate degree at Long Beach City College 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 in Arts for Transfer (A.A.-T), and Associate in Science for Transfer (A.S.-T):--Student Transfer Achievement Reform Act

Long Beach City College 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. Long Beach City College 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 General Education-Breadth pattern) or Plan C (Intersegmental General Education Transfer Curriculum pattern) is required. After completion of a general education 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 general education 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 other local graduation requirements must be fulfilled for the transfer degree.**

Associate of Arts (A.A.) and Associate of Science (A.S.) Requirements

Students may be granted an A.A. or A.S. degree as well as be certified for general education based on the requirements in effect at any time between their initial enrollment at Long Beach City College 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 general education 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 Long Beach City College in order for the college to grant an associate of arts or an associate of 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 general education pattern, and the proficiency requirements must be those in effect for the same year. Per Title 5, section 55063 (a) (2) and effective as of Fall 2009, students

must complete each course counted toward the major or area of emphasis with a grade of C or better or P if the course is taken on a “Pass/No Pass” basis. Students who enrolled prior to Fall 2009 and who maintain continuous enrollment are not subject to this standard, but they must meet any minimum grade standards already established by the program as published in the catalog.

5. **General education and proficiency requirements**
– See Plan A for the requirements in general education and proficiency in reading, writing, mathematics, and information competency. The field of concentration, the general education pattern, and the proficiency requirements must be those in effect for the same year. A student may use a course to fulfill a general education requirement in effect at the time the course was completed, even though the course may have been subsequently removed from the list of approved general education 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 Long Beach City College catalog rights for which they are eligible.

Certificate Requirements

Long Beach City College 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.

A certificate of achievement is a course of study consisting of at least 18 units and is placed on a transcript.

A certificate of accomplishment is a course of study consisting of less than 18 units and is not noted on a student’s transcript.

A certificate of completion or competency is a noncredit certificate and is not noted on a transcript nor does it have unit value.

To earn a certificate at Long Beach City College, a student must do the following:

1. Each of the required courses listed on the program of study must be completed with a grade of C or better. A certificate of completion or competency will require a minimum number of hours, mastery of content, or both.
2. Required courses for a noncredit certificate must be completed based on the required number of student contact hours and mastery of skills in the course outline.
3. Fifty percent or more of the requirements for the field of concentration must be completed in residence. Credit earned by exam, where applicable, may be included.
4. The certificate application form must be completed and submitted to the Admissions and Records Office during the final semester of coursework. This form is available in the Admissions and Records Office or online at www.admissions.lbcc.edu. Students should refer to the schedule of classes at www.schedule.lbcc.edu 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.

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 other 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.

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 5 Community and Human Relations	3
ADJUS 20 Introduction to Corrections	3
ADJUS 14 Juvenile Law and Procedures	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 General 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: I800)

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.
- Apply criminological/criminal justice theories, principles, and concepts to address real-life situations in the field.
- Recognize the importance and practice of legal and ethical behavior in a professional criminal justice work setting.
- Analyze, interpret, and evaluate criminological/criminal justice theories, policies, practices and procedures to develop strategies to control and prevent crime.

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 Outcomes:

- 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 Fundamental of Writings	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

IN ADDITION, complete SIX (6) units from the following courses: Any Foreign Language	
Any Computer and Office Studies (COS)	
Any Other Administration of Justice Courses (ADJUS)	
Subtotal Units	6
Total Units	30

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.

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.

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

Administrative Assistant

The Administrative Assistant program at Long Beach City College is a comprehensive offering of courses created and designed for the purpose of educating

and training diverse groups students for careers as Administrative Assistants and enhance skills for those who are currently employed in that area.

Program Student Learning Outcomes:

- Create a variety of documents using Office Suite Software.
- Demonstrate and apply effective written, oral, and nonverbal communication techniques to a variety of organizational situations.

Associate in Science (A.S.) Degree, Administrative Assistant (Plan Code: 2170)

The AS degree is designed for students who want to earn a two-year college degree in career/technical training or specific employment; to achieve a personal or career goal; or to prepare for transfer to the UC, CSU, or a private or out-of-state university. Students who intend to earn an associate degree are advised to consult with the counselor as early as possible to develop a transfer plan.

REQUIRED COURSES	UNITS
BCOM 15 Business Communications	3
BCOM 25 Digital and Social Media	3
BCOM 260 Business Telephone Procedures	1
BCOM 262 Soft Skills for the Workplace	1
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 214 Records Management and Filing	2
COSA 215 Microsoft Outlook for Windows	3
COSK 200 Beg Keyboarding & Document Prod.	3
OR	
COSK 233 Computer Keyboarding Skills	1
Subtotal Units	26-28
IN ADDITION, complete TWO (2) courses from the following:	
ACCTG 200A Introduction to Accounting	3
BCOM 222 Job Search Skills	3
BCOM 263 Customer Service	3
COSA 20 Microsoft PowerPoint for Windows	3
COSA 25 Microsoft Access for Windows	3
COSA 35 Microsoft Office	3
COSA 210 Intro to Project Management for IT	3
COSK 209 Speed/Accuracy Bldg. for Typist	1
Subtotal Units	4-6
Total Units in the Major	30-34

Completion of General Education Requirements (Plan A) 19 Units minimum. Additional elective units may be required to meet the 60 degree-applicable unit minimum total. Students should consult with a counselor for course selections.
Total Degree Units 60 Units minimum

Certificate of Achievement, Administrative Assistant (Plan Code: 3170)

This state-approved certificates acknowledge workplace competencies and job readiness in a specified program or specified courses.

REQUIRED COURSES—Complete the 30-34 units of required courses as listed in the Associate Degree major requirements.

Certificate of Accomplishment, Business Communications (Plan Code: 4070)

Students will learn how to communicate effectively in the workplace.

REQUIRED COURSES	UNITS
BCOM 15 Business Communications or	3
BCOM 20 Business Writing	3
BCOM 262 Soft Skills for the Workplace	1
Total Units	7

Certificate of Accomplishment in Computer & Office Skills (Plan Code: 4074)

This certificate prepares students for a career in office administration by mastering the technical and soft skills that today’s employers require.

REQUIRED COURSES	UNITS
COSA 5 Microsoft Windows Operating Systems	3
COSA 30 Introduction to Computers	3
COSA 214 Records Management and Filing	2
BCOM 260 Business Telephone Procedures	1
COSK 200 Beginning Keyboarding & Document Prod	3
Total Units	12

Certificate of Accomplishment, Microsoft Office (Plan Code: 4077)

Students will learn to use Microsoft Word, Excel, Access, and PowerPoint to prepare for industry certification and employment.

REQUIRED COURSES	UNITS
COSA 35 Microsoft Office	3

Total Units 3

Certificate of Accomplishment, Computing and Internet Literacy (Plan Code: 4095)

Students will learn how to utilize computers and related technology efficiently.

REQUIRED COURSES	UNITS
COSA 30 Introduction to Computers	3
COSA 35 Microsoft Office	3
Total Units	6

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, Law Office Procedures (Plan Code 4075)

Prepare for a job as a legal assistant in a law office environment.

REQUIRED COURSES	UNITS
COSA 10 Microsoft Word for Windows	3
Total Units	3

Advanced Transportation Technology-Alternate Fuels

The Alternative Fuels program is to provide students with state of the art training in servicing and maintaining Alternative Fueled vehicles in the light/medium and heavy duty engine platforms leading to a certificate and/or an AS Degree in Alternative Fuels.

Associate in Science (A.S.) Degree, Advanced Transportation Technology – Alternate Fuels (Plan Code: 2943)

Students prepare for a career in alternative fuel vehicle conversion, maintenance and repair using state-of-the-art-equipment. Computerized engine management is emphasized.

Program Student Learning Outcomes:

- Safely work on high pressure and low temperature fuels without injury.
- Diagnose and repair computer controlled and gaseous fueled engines.
- Understand and comply with regulations regarding installations and inspections of systems and their related components.

REQUIRED COURSES	UNITS
ATT 490 Introduction to Alternative Fuels	3.5
ATT 491 Heavy Duty Alternative Fuels	3.5
ATT 492 HD Alt Fuel Engine Diagnosis & Repair	3.5
ATT 493 Alt Fuels Conversion, Diagnosis & Repair	3.5
Subtotal Units	14

IN ADDITION, complete at least FOUR (4) units from the following:

AC_R 236A Automobile Air Conditioning	2.5
AMECH 438 Auto Emission Controls (F-night)	6
AMECH 461 A-1 Engine Repair Specialty	6
ATT 480 Intro to Hybrid & Electric Vehicles	3.5
ATT 481 Advanced Hybrid & Electric Vehicles	3.5
ATT 483 Advanced Hybrid Diagnosis & Repair	3.5
DIESL 391B Heavy Equipment Electrical Systems	5
DIESL 293 General Engines	4
FORK 801 Forklift Safety and Operation	1
MTFAB 50 Introduction to Metalworking	4
WELD 50 Introduction to Welding	4
Subtotal Units	4-6
Total Units in the Major	18-20

Students should consult with a counselor for course selections.

Certificate of Achievement, Advanced Transportation Technology – Alternate Fuels (Plan Code: 3943)

The certificate program will prepare students for an entry-level position as a light/medium and heavy duty technician in such fields as car, bus, truck, and specialty equipment diagnosis and repair industry.

REQUIRED COURSES	UNITS
ATT 490 Introduction to Alternative Fuels	3.5
ATT 491 Heavy Duty Alternative Fuels	3.5
ATT 492 HD Alt Fuel Engine Diagnosis & Repair	3.5
ATT 493 Alt Fuels Conversion, Diagnosis & Repair	3.5
Subtotal Units	14

IN ADDITION, Complete a minimum of SIX (6) units from the courses below:

ATT 801 Quick Service Tech – Lubrication Service	2
ATT 802 Quick Service Tech– Tire Service	2
ATT 803 Quick Service Tech– Brake Inspection	2
Subtotal Units	6
Total Units	20

Certificate of Accomplishment, Advanced Transportation Technology – Light/Medium Duty Alternate Fuels (Plan Code: 4102)

Students receive training in the specialty field of Light/Medium alternative fuel vehicle maintenance and repair using state-of-the-art equipment.

REQUIRED COURSES	UNITS
ATT 490 Introduction to Alternative Fuels	3.5
ATT 493 Alt. Fuels Conversion, Diagnosis & Repair	3.5
Total Units	7

Certificate of Accomplishment, Advanced Transportation Technology - Heavy Duty Alternate Fuels (Plan Code: 4104)

Students receive training in the specialty field of Heavy Duty alternative fuel maintenance and repair using state-of-the-art equipment.

REQUIRED COURSES	UNITS
ATT 491 Heavy Duty Alternative Fuels	3.5
ATT 492 HD Alt Fuel Engine Diagnosis & Repair	3.5
Total Units	7

Advanced Transportation Technology-Electric Vehicles

The Electric Vehicle program provides students with state of the art training in servicing and maintaining Electric Vehicles leading to a Certificate and/or an A.S. Degree in Electric Vehicles.

Associate in Science (A.S.) Degree, Advanced Transportation Technology - Electric Vehicles (Plan Code: 2945)

Students prepare for a career in hybrids, fuel cells and electric vehicle conversion, maintenance and repair using state-of-the-art equipment.

Program Student Learning Outcomes:

- Safely work on the high Voltages present in Electric Vehicles without injury.
- Diagnose and repair computer controlled Electric Vehicles including hybrids, fuel cells, and plug in electrics, regarding installations and inspections of systems and their related components.
- Compare the differences, advantages, and limitations of the various Electric Vehicles to determine proper application of each technology.

REQUIRED COURSES	UNITS
ATT 480 Intro to Hybrid and Electric Vehicles	3.5
ATT 481 Advanced Hybrid & Electric Vehicles	3.5
ATT 483 Advanced Hybrid Diagnosis & Repair	3.5
ATT 490 Introduction to Alternative Fuels	3.5
Subtotal Units	14

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

AMECH 438 Auto Emission Controls	6
AMECH 461 A-1 Engine Repair Specialty	6
DIESL 391B Heavy Equipment Electrical Systems	5
DIESL 293 General Engines	4
AC_R 236A Automobile Air Conditioning	2.5
FORK 801 Forklift Safety and Operation	1
MTFAB 50 Introduction to Metalworking	4
WELD 50 Introduction to Welding	4
Subtotal Units	6
Total Units in the Major	20

Certificate of Achievement, Advanced Transportation Technology - Electric Vehicles (Plan Code: 3945)

Students receive a specialty field certificate in hybrids, fuel cells and electric vehicle conversion, maintenance and repair using state-of-the-art equipment.

REQUIRED COURSES	UNITS
ATT 480 Intro to Hybrid and Electric Vehicles	3.5
ATT 481 Advanced Hybrid & Electric Vehicles	3.5
ATT 483 Advanced Hybrid Diagnosis & Repair	3.5
ATT 490 Introduction to Alternative Fuels	3.5
Subtotal Units	14

In Addition, Complete SIX (6) units from the courses below:

ATT 801 Quick Service Tech – Lubrication	2
ATT 802 Quick Service Tech– Tire Service	2
ATT 803 Quick Service Tech– Brake Inspection	2
Subtotal Units	6

Total Units 20

Certificate of Accomplishment, Advanced Transportation Technology - Electric Vehicle (Plan Code: 4100)

Students receive training in the specialty field of hybrids and electric vehicle maintenance and repair using state-of-the-art equipment.

REQUIRED COURSES	UNITS
ATT 480 Intro to Hybrid and Electric Vehicles	3.5
ATT 481 Advanced Hybrid & Electric Vehicles	3.5
Total Units	7

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.

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 Fieldwork in Human Services (A)	3
HS 72B Fieldwork in Human Services (B)	3
Subtotal Units	18

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	27

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 SIX (6) units from the following:

HS 72A Fieldwork in Human Services (A)	3
HS 72B Fieldwork in Human Services (B)	3
Subtotal Units	6
Total Units	40

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.

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

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. Archaeology 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
ANTHR 1/1H Physical Anthropology/Honors	3
ANTHR 2/2H Cultural Anthropology/Honors	3
ANTHR 3/3H Introduction 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-FIVE (3-5) units from LIST B:

LIST B	
ANAT 1 Human Anatomy	4
GEOL 1/1H General Physical Geology/Honors	4.5
GEOG 10 Intro to Geographic Information Systems	3
Subtotal Units	3-5

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

Any LIST A or B course not used above	3
ANTHR 4 Linguistic Anthropology	3
ANTHR 10 Magic, Witchcraft, and Religion	3
ANTHR 20 Archaeological Field Survey Methods	3
COMM 25 Elements of Intercultural Communication	3
GEOG 2 Elements of Cultural Geography	3
PHIL 14 Philosophy of Religion	3
SOCIO 1/1H Introduction to Sociology/Honors	3
SOCIO 11 Race Ethnicity Relations in the US	3
Subtotal Units	3
Total Units in the Major	19-20.5

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 and 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
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, Associate Degree, a studio art certificate or vocational certificate. Students can pursue their individual interest in the visual arts through an array of foundation 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 for Transfer in Art History (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 COURSES	UNITS
ART 1/1H Art and Civilization/Honors	3
ART 2/2H Art and Civilization/Honors	3
ART 15 Beginning Drawing	3
Subtotal Units	9

Select One (1) course from List A below:

LIST A:

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

Select One (1) course from List B below:

LIST B:

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	4
ART 80 Elements of Photography	3
ART 81 Introduction to Fine Art Photography	3
OR	
PHOT 31 Basic Photography: Black and White	4
OR	
ART 23 Beginning Painting	3
Subtotal Units	3

Select One (1) course from List C below: LIST C:

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 for Transfer Degree in Studio Arts (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 Art Program create and refine their portfolios to meet academic and professional standards as they develop as artists.

Program Student Learning Outcomes:

- Produce artwork that demonstrates skill, craftsmanship, comprehension of visual design and aesthetic conceptual rigor.
- Create original artwork using a foundation of skills, craft, traditional and digital technologies.
- Analyze, interpret and exercise aesthetic judgment in the critical evaluation of visual art forms.

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

Select One (1) course from List A below:

LIST A:

ART 1/1H Art and Civilization/Honors	3
ART 4/4H African, Oceanic, Native American Art	3
ART 5 History of Asian Art	3
Subtotal Units	3

Select Three (3) course from List B below:

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	4
ART 70 Printmaking, Silkscreen	3
PHOT 31 Basic Photography: Black and White	4
OR	
PHOT 32 Introduction to Digital Photography	4
ART 34 Applied Design/Crafts	3
OR	
ART 35 Jewelry/Metalsmithing I	4
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 (38) 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	4
ART 81 Introduction to Fine Art Photography	3
ART 292 Professional Skills for Artists	3
Subtotal Units	38

a. 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

b. 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

c. 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 Graphic Design Tools & Techniques	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

d. 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

e. 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 Graphic Design Tools & Techniques	3
ART 55 Introduction to Graphic Design	3
ART 56 Introduction to Typography	1.5
Subtotal Units	6

f. 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

g. 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

h. 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

i. FINE ART PHOTOGRAPHY OPTION

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

PHOT 31 Basic Photography: Black and White	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	44-46

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.

- Develop a foundation of skills across photography, graphic design, filmmaking and postproduction using digital technologies.
- 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 Outcomes:

- 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 Graphic Design Tools & Techniques	3
ART 55 Introduction to Graphic Design	3
ART 56 Introduction to Typography	1.5
Total Units	16.5

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

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)	
GEOG	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 (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 bachelors 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
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 Science & Engineering-Mechanics	4.5
PHYS 3B	Physics for Science & Engineering-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 (3-4) units from LIST A:

LIST A	
STAT 1 Elementary Statistics	3
STAT 1H Honors Elementary Statistics	4
MATH 37/H Finite Math/Honors	3
MATH 47 Calculus for Business	3
Subtotal LIST A Units	3-4

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

LIST B	
Any LIST A course not used above	3
GBUS 5 Intro to Business	3
COSA 30 Introduction to Computers	3
OR COSA 50 Introduction to IT Concepts & Apps.	4
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 Administration 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.

Program Student Learning Outcomes:

- Ensure that 85% of all courses meet or exceed their outcome/assessment goals and develop appropriate action plans for continuous improvement.
- Develop strategies throughout all concentrations/ courses to enhance the development of our students' critical-thinking skills: their ability to reason, ask appropriate questions and make strong decision.
- Develop assignments and/or exercises to enhance students' verbal and non-verbal skills: their ability to reflect, write, speak and respond in a personal and professional manner.
- Improve the level of student success and student retention as well as increase the number of degrees and certificates.
- To develop a strong working relationship with local businesses through the formation of an Industry Council for the purpose of advisement and collaboration in order to ensure that our course offerings are providing our students with the strongest preparation for entering the workforce. Additionally, it would be our goal for this Council to develop strong feelings for LBCC students and to evolve these feelings into actual job opportunities.

REQUIRED CORE 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: I100)

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

Recommended Electives for students choosing this concentration are LAW 18B, ACCTG 200A, ECON 1, ECON 2.

Business: General Business Concentration (Plan Code: I111)

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

Recommended Electives for students choosing this concentration are ECON 1 or ECON 4.

Business: International Business Concentration (Plan Code: I151)

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

Recommended Electives for students choosing this concentration are LAW 18B, ECON 1, ECON 5.

Business: Management Concentration (Plan Code: I143)

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	15

Recommended Electives for students choosing this concentration are LAW 18B, ECON 2.

Business: Marketing Concentration (Plan Code: I153)

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

Recommended Electives for students choosing this concentration are LAW 18B, ECON 2.

Elective Units (SEE ABOVE FOR RECOMMENDATIONS) 6
Total Units in the Major (depends on the concentration) 27-32

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
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	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
IBUS 52 Introduction to Supply Chain Management	3
Total Units	26

**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

REAL 253 Property Management	3
Total Units	12

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

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 Broker license. Upon successfully passing the examination, a Real Estate Broker license will be approved by the CalBRE. For additional information regarding the Real Estate Broker 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

Business Information Professional

The Business Information Professional 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 Professional (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.
- Demonstrate effective written and oral communication skills.

REQUIRED COURSES	UNITS
BCOM 15 Business Communications	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 50 Intro to IT Concepts & Applications	4
COSA 215 Microsoft Outlook for Windows	3
COSK 200 Beginning Keyboarding and Doc. Production	3
Total Units in the Major	25

Certificate of Achievement, Business Information Professional (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 Outcomes:

- Create a variety of business documents using business application software packages.
- Demonstrate effective written and oral communication skills.

REQUIRED COURSES	UNITS
BCOM 15 Business Communications	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 50 Intro to IT Concepts & Applications	4
COSA 215 Microsoft Outlook for Windows	3
COSK 200 Beginning Keyboarding and Doc. Production	3
Total Units in the Major	25

Child Development: Early Childhood Education (CDECE)

The Child and Adult Development and Educational Studies 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 53 Principles and Practices DS3	3
CDECE 50 Intro to Curriculum for Young Children	3
CDECE 61 Teaching in a Diverse Society DS3	3
CDECE 66 Observation and Assessment D3	3
CDECE 68 Practicum D3	3
Total Units	24

Associate in Arts (A.A.) Degree, Early Childhood Education (Plan Code: I302)

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

REQUIRED COURSES	UNITS
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.

a. Child Behavior Option	
CDECE 59 Guiding Young Children DS3	3
CDECE 259 Challenging Behaviors in Early Childhood	3
Subtotal Units	6
b. 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
c. Family Child Care Option	
CDFDC 212A Family Child Care Management A	3
CDFDC 212B Family Child Care Management B	3
Subtotal Units	6
d. 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
e. Infant/Toddler Option	
CDECE 40 Infant Development & Educaring D4	3
CDECE 41 Toddler Development & Educaring D4	3
Subtotal Units	6
f. Early Literacy Option	
CDECE 34 Children’s Literature DS3	3
CDECE 58 Language & Literacy in Early Childhood	3
Subtotal Units	6
g. 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
h. 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, 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 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, CDCE: 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, CDCE: 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, CDCE:
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
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
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 children’s individual needs in an inclusive and natural environment.

REQUIRED COURSES	UNITS
Choose SIX (6) units from the following:	
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 and Educational Studies 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, 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 DS	3
CDESED 5 Community Resources/Special Education	3
CDESED 67 Intro to Children with Special Needs	3
CDESED 70 Curriculum for Special Needs	3
CDESED 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, 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 Workforce Readiness

Long Beach City College offers certificates of competency in the noncredit program for adults seeking to learn English as a Second Language (ESL). 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	UNITS
BAE 601A Basic Skills Development	0
BAE 601B Basic Skills Development II	0
Total Units	0

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.

Noncredit Certificate of Competency, English for Everyday (Plan Code: 4116)

Students completing English for Everyday certificate 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. (Students must complete a minimum of 234 hours.)

REQUIRED COURSES	UNITS
ESL 645 English for Everyday 5	0

AND students choose from either of the course options to complete the certificate:

Option 1:

Select two from the following list:

ESL 640 English for Everyday 0	0
ESL 641 English for Everyday 1	0
ESL 642 English for Everyday 2	0
ESL 643 English for Everyday 3	0
ESL 644 English for Everyday 4	0
ESLLC 699 Basic Skills for ESL Students (at least 18 hours)	0

OR

Option 2:

ESLLC 699 Basic Skills for ESL Students (at least 18 hours)	0
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AND Select one of the following:

ESL 640 English for Everyday 0	0
ESL 641 English for Everyday 1	0
ESL 642 English for Everyday 2	0
ESL 643 English for Everyday 3	0
ESL 644 English for Everyday 4	0
Total Units	0

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 (Plan Code: 4117)

Students completing the certificate 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. (Students must complete a minimum of 72 hours)

REQUIRED COURSES	UNITS
ESL 602F Reading Skills for ESL Students 6	0

AND students choose from either of the course options (option 1 OR 2) to complete the certificate:

Option 1: Select two of the following courses:

ESL 602A Reading Skills for ESL Students 1	0
ESL 602B Reading Skills for ESL Students 2	0
ESL 602C Reading Skills for ESL Students 3	0
ESL 602D Reading Skills for ESL Students 4	0
ESL 602E Reading Skills for ESL Students 5	0

OR

Option 2:

ESLLC 699 Basic Skills for ESL Students (at least 18 hours)	0
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AND Select one of the following:

ESL 602A Reading Skills for ESL Students 1	0
ESL 602B Reading Skills for ESL Students 2	0
ESL 602C Reading Skills for ESL Students 3	0
ESL 602D Reading Skills for ESL Students 4	0
ESL 602E Reading Skills for ESL Students 5	0
Total Units	0

Students must master 70% or higher of the course concepts in order to be promoted into the next course in the sequence.

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 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	3
PSYCH 1/1H Introduction to Psychology	3
SOCIO 1/1H Introduction to Sociology	3
ENGL 2 Introduction to Literature/Composition	3
OR	
ENGL 3/3H Argumentative & Critical Writing	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: I240)

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

Program Student Learning Outcomes:

- Develop and apply critical thinking and persuasive communication strategies.
- Formulate and implement effective oral presentations.

REQUIRED COURSES	UNITS
COMM 10 Elements of Public Speaking	3
COMM 20 Elements of Interpersonal Communication	3
COMM 25 Elements of Intercultural Communication	3
COMM 30 Elements of Group Communication	3
COMM 60 Elements of Argumentation & 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, Computer Science (A.S.), (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++ OR	4
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 38 Database Concepts	4
COSP 230 Android App Development in Java	3
Total Units	11

COSN 299 Security and Networking Capstone	4
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	6-8
Total Units in the Major	31-33

Computer Security & 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 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
COSS 271 Networking Security Fundamentals	3
Subtotal Units	25

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

BCOM 222 Job Search Skills	3
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

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 31-33 units of required courses as listed in the

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 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 Dominguez 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.

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.

PROGRAM PREREQUISITES:

1. CULAR 20: Applied Food Services-Sanitation in Hotel & Restaurant Management (3 units) Students must complete CULAR20 prior to enrolling in the remaining courses in the Culinary Arts Program.
2. Students must provide proof of valid/current ServSafe® Food Protection Manager Certification before entering or continuing the Culinary Arts Program. If certificate is expired, or expires during program, students must re-certify/re- enroll in CULAR 20 (which results in an FPM Certificate for

every student who successfully passes the course).

3. Students must provide annual proof of TB (Tuberculosis) clearance before entering or continuing the Culinary Arts program.
4. A school-specific chef's uniform, discipline-specific tools and equipment, and some baking ingredients are program requirements.

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.

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	5.5
CULAR 211 Intermed Culinary Skills & Principles	5.5
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	34

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	3
CULAR 230 Baking & Pastry Skills for Cul Students	3
Subtotal Units	6
Total Units in the Major	40

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 Outcomes:

- 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 40 units of required courses as listed in the Associate Degree major requirements.

Customer Support

The Customer Support program at Long Beach City College is a comprehensive offering of courses to prepare students for careers in Customer Support and Help Desk technicians and will enhance skills for those who are currently employed in the field.

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

The Customer Support program at Long Beach City College is a comprehensive offering of courses to prepare students for careers in Customer Support and Help Desk technicians and will enhance skills for those who are currently employed in the field.

Program Student Learning Outcomes:

- Demonstrate and apply effective written and oral communication techniques to a variety of customer services situations.
- Problem solve common information technology failures.

REQUIRED COURSES	UNITS
BCOM 15 Business Communications	3
BCOM 260 Business Telephone Procedures	1
BCOM 263 Customer Service	3
COSA 50 Intro to IT Concepts & Applications	4
COSA 270 Help Desk Concepts	2
COSK 250 Data Processing	3
COSN 5 Computer Hardware Fundamentals	4
COSN 10 Networking Fundamentals	4
Subtotal Units	24

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

BCOM 25 Digital and Social Media	3
BCOM 262 Soft Skills for the Workplace	1
COSA 35 Microsoft Office	3
COSK 200 Beginning Keyboarding and Doc. Production	3
COSS 271 Networking Security Fundamentals	4
Subtotal Units	4-7
Total Units in the Major	28-31

Certificate of Achievement, Customer Support (Plan Code: 3123)

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

REQUIRED COURSES – Complete 28-31 units in the major.

Certificate of Accomplishment, Business Communications (Plan Code: 4070)

Students will learn how to communicate effectively in the workplace.

Program Student Learning Outcomes:

- Apply effective written, oral, and nonverbal communication techniques to organizational situations.

REQUIRED COURSES	UNITS
BCOM 15 Business Communications	3
OR	
BCOM 20 Business Writing	3
BCOM 262 Soft Skills for the Workplace	1
Total Units	7

Certificate of Accomplishment, Data Entry (Plan Code: 4071)

Students are prepared for data entry job positions by learning how to enter customer and account data.

Program Student Learning Outcomes:

- Demonstrate speed and accuracy proficiency by typing a minimum of 8,000 keystrokes per hour with five or less errors on a five-minute Alphanumeric Timing.
- Identify and use the appropriate software to accurately and ethically enter, edit, and manipulate

the data from a source document.

REQUIRED COURSES	UNITS
COSA 25 Microsoft Access for Windows	3
COSK 209 Speed/Accuracy Bldg for Typists	1
COSK 233 Computing Keyboarding Skills	1
Total Units	5

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: I260)

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 41/1Dance 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

This program will 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 25 Microsoft Access for Windows	3
COSP 7 Programming Concepts and Methodologies	4
COSP 36 System Analysis and Design	4
COSP 38 Database Concepts	4
COSP 238 Database Cloud Technologies	3
COSW 30 Web Development with PHP/MySQL	4
Total Units	25

IN ADDITION, Complete a MINIMUM of SIX (6) units from the following:

COSA 210 Intro to Project Management for IT	3
COSN 205 UNIX/LINUX Fundamentals	4
COSN 225 Microsoft Windows Client	3
COSN 230 Microsoft Windows Server	4
Subtotal Units	6-8
Total Units in the Major	31-33

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 31-33 units of required courses as listed in the Associate Degree requirements.

Certificate of Accomplishment, Database Specialist (Plan Code: 4080)

Students learn how to use Microsoft Access, MySQL, and Microsoft SQL Server. Create your own databases, forms and reports using SQL.

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, Android App Developer (Plan Code: 4119)

Students 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++	4
COSP 38 Database Concepts	4
COSP 230 Android App Development in Java	3
Total Units	11

Certificate of Accomplishment, PHP Web Programmer (Plan Code: 4129)

Students will learn how to build robust web applications with PHP and MySQL.

REQUIRED COURSES	UNITS
COSP 38 Database Concepts	4
COSW 10 Beginning Website Development	4
COSW 200 Introduction to JavaScript	3
COSW 30 Web Development with PHP/MySQL	3
Total Units	14

Diagnostic Medical Imaging Sciences (Radiologic Technology)

The Diagnostic Medical Imaging program 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.

Program Admission Requirements

Applications are not accepted until the following

prerequisites are met:

1. Graduation from an accredited high school, or the equivalent.
2. Before students may begin the program, the following proficiencies must be met:

READING:

- a. A passing score on the reading section of the Long Beach City College assessment test
- OR
- b. Completion READ 82 or 83 at Long Beach City College with a grade of “C” or better,
- OR
- c. Documentation from LBCC Counseling stating proficiency has been met.

MATHEMATICS:

- d. A passing score on the Elementary Algebra Diagnostic Test (part of the LBCC Assessment Test,
- OR
- e. Successful completion of a math course at the level of intermediate algebra (Math 130A or 130) or higher,
- OR
- f. Documentation from LBCC Counseling stating proficiency has been met.

3. High school grade point average or current GPA is considered.
4. Completion of AH 60, AH 61, and ANAT 41 within seven years with a letter grade of “C” or better.
5. C.P.R. for Health Care Providers (American Heart Association Only) certification is required before the practicum phase, which begins 1st Fall semester.
6. Evidence of physical and emotional fitness by medical examination and personal interview. This is submitted in the Summer of the 1st year in DMI 20.
7. 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.
8. A current background check is required to be submitted during the 1st spring semester.

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 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 Sciences (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

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:

General Ed. Course (see explanation in footnote)	3
General Ed. Course (see explanation in footnote)	3

Computer Class - Any class which satisfies the computer portion of Information Competency Requirement for graduation.
Recommended course: COSA 1. 1-4
For complete listing see General Education Course Pattern Guide.

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	18.5-21.5

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

General Ed. Course (see explanation in footnote)	3
DMI 15 Computer Applications in Radiology	3
DMI 40D Clinical Radiography	11
DMI 222 Venipuncture for Medical Imaging	.5
Subtotal Units	17.5

Spring Semester REQUIRED COURSES:

General Ed. Course (see explanation in footnote)	3
DMI 14 Trends and Self-Assessment in Rad Tech	3
DMI 40E Clinical Radiography	11
DMI 61 Fluoroscopy	2
Subtotal Units	19

RECOMMENDED but not required courses:

DMI 62 Mammography	3.5
LEARN 11 Learning and Academic Strategies	2
Total Units (in program)	89-92
Total Units (including Prerequisite)	99-102

Certificate of Achievement, Diagnostic Medical Imaging Sciences (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 CRT, Fluoroscopy Permit, and ARRT.

REQUIRED COURSES—Complete the 89-92 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

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 Arts (A.A.) Degree, Dietetic Service Supervisor (Plan Code: I320)

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 230 Clinical Field Experience I (2 semesters required)	2,2
F_N 231 Menu Planning and Food Purchasing	3
F_N 232 Therapeutic Diets	3
Total Units in the Major	29

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: I321)

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 29-unit program, Nutrition Assistant program courses 11 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 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 Seminar	1
F_N 240 Clinical Field Experience II (2 semesters required)	2,2
Subtotal Units	11

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 for Culinary Arts	2
F_N 253 Food Handler 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
Total Units in the Major	40

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 230 Clinical Field Experience I (2 semesters required)	4
F_N 231 Menu Planning and Food Purchasing	3
F_N 232 Therapeutic Diets	3
Total Units in the Major	29

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 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

Digital Design & 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
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 34AD 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 (Occupational Program)

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 (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 draftsman 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 draftsman 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
TEC 10 Introduction to Engineering Technology	1
DRAFT 51A Industrial Drafting I	3
DRAFT 51B Industrial Drafting II	3
DRAFT 52A Advanced Industrial Drafting	3
Subtotal Units	10

In addition, pick either Option A or B.

Option A: Intended for students that wish to enter the field upon completion. Complete 3-4 units

AND Complete one of the following application (software) options

1) CATIA (choose 2)

DRAFT 220 Introduction to CATIA 3

DRAFT 221 Intermediate CATIA 3

DRAFT 222 Advanced CATIA 3

OR

2) SolidWorks (choose 2)

DRAFT 230 Introduction SolidWorks Level 1 3

DRAFT 231 Intermediate SolidWorks Level 2 3

DRAFT 232 Advanced SolidWorks Level 3 3

OR

3) AutoCAD (choose 2)

DRAFT 202 AutoCAD I, Fundamentals 4

DRAFT 203 AutoCAD II, Advanced Concepts	4
DRAFT 204 3D Visualization/Animation	4
Option A Subtotal	9-12

OR

Option B: Intended for students seeking to enter advanced coursework.

DRAFT 52B Descriptive Geometry	3
DRAFT 60 Geometric Dimension & Tolerancing	3
TEC 60 Computer Aided Design and Drafting (CADD)	4
Option B Subtotal Units	10

Recommended but not required

DRAFT 201 Introduction to Drafting 4

Total Units in the Major 18-21

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
DRAFT 51A Industrial Drafting I	3
DRAFT 51B Industrial Drafting II	3
DRAFT 52A Advanced Industrial Drafting	3
DRAFT 210 3D Printing Fundamentals I (FDM)	1.5
DRAFT 211 Laser Cutting Fundamentals	1.5
TEC 10 Introduction to Engineering Technology	1
TEC 211 Print Reading for Industry	3
Subtotal Units	16
AND Complete one of the following application (software) options	
1) CATIA (choose 1)	
DRAFT 220 Introduction to CATIA	3
DRAFT 221 Intermediate CATIA	3
DRAFT 222 Advanced CATIA	3
OR	
2) SolidWorks (choose 1)	
DRAFT 230 Introduction SolidWorks Level 1	3
DRAFT 231 Intermediate SolidWorks Level 2	3
DRAFT 232 Advanced SolidWorks Level 3	3
OR	
3) AutoCAD (choose 1)	
DRAFT 202 AutoCAD I, Fundamentals	4
DRAFT 203 AutoCAD II, Advanced Concepts	4
DRAFT 204 3D Visualization/Animation	4

Recommended but not required	
DRAFT 52B Descriptive Geometry	3
DRAFT 201 Introduction to Drafting	4
TEC 60 Computer Aided Design and Drafting (CADD)	4
Total Units	19-20

Certificate of Achievement, Drafting: Mechanical Design - Advanced Skills (Plan Code: 3913)

The Advanced Skills Certificate will prepare student for an advanced position as a mechanical drafter or intermediate level drafting position in a variety of design professional settings and will serve as a foundation for specialization.

REQUIRED COURSES	UNITS
DRAFT 51A Industrial Drafting I	3
DRAFT 51B Industrial Drafting II	3
DRAFT 52A Advanced Industrial Drafting	3
DRAFT 60 Geometric Dimension & Tolerancing	3
TEC 10 Introduction to Engineering Technology	1
TEC 211 Print Reading for Industry	3
Subtotal Units	16

AND Complete one of the following application (software) options

1) CATIA	
DRAFT 220 Introduction to CATIA	3
DRAFT 221 Intermediate CATIA	3
DRAFT 222 Advanced CATIA	3
OR	
2) SolidWorks	
DRAFT 230 Introduction SolidWorks Level 1	3
DRAFT 231 Intermediate SolidWorks Level 2	3
DRAFT 232 Advanced SolidWorks Level 3	3
OR	
3) AutoCAD (choose 2)	
DRAFT 202 AutoCAD I, Fundamentals	4
DRAFT 203 AutoCAD II, Advanced Concepts	4
DRAFT 204 3D Visualization/Animation	4
Subtotal Units	8-9

IN ADDITION, select one of the following courses:

DRAFT 52B Descriptive Geometry	3
TEC 60 Computer Aided Design and Drafting (CADD)	4
Subtotal Units	3-4

IN ADDITION, select one of the following courses:

ELECT 225 Algebra & Trigonometry for Technicians	4
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MATH 110 First Course in Algebra	5
OR	
Any Math course higher than Math 110	
Subtotal Units	4-5

IN ADDITION, Select one of the following courses

Recommended but not required:

DRAFT 201 Introduction to Drafting	4
Total Units	31.5-34.5

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 COURSES	UNITS
DRAFT 202 AutoCAD I, Fundamentals	4
Total Units	4

Certificate of Accomplishment, AutoCAD II, Advanced Certificate (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 COURSES	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 (DRAFT 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
DRAFT 202 AutoCAD I, Fundamentals	4
DRAFT 203 AutoCAD II, Advanced Concepts	4
DRAFT 204 3D Visualization/Animation	4
Total Units	12

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 be required 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	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 (204 and 210A must be taken concurrently)	1
ELECT 225 Algebra & Trigonometry for Technician	4
ELECT 209 Second Sem. Fund of Motor/Generators	3
ELECT 210B Laboratory Practices 2 (209 and 210B must be taken concurrently)	1
ELECT 240 Introduction to the National Electrical Code	3
ELECT 212 Third Sem. Fund of AC Electricity	3
ELECT 210C Laboratory Practices 3 (212 and 210C must be taken concurrently)	1
ELECT 435A Electric Motor Control 1	2
ELECT 214 Fourth Semester AC Principles & Pract	3
ELECT 210D Laboratory Practices 4 (214 and 210D must be taken concurrently)	1
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

The following is REQUIRED for the NATURAL SCIENCES requirement: Complete any one course (3 units minimum) appearing on the current CSU-GE Breadth List (Plan B) in areas B1 or B2.

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 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 I (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

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
OR	
ENGR 11 Digital Logic Design	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

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 experiences, arguing positions, reevaluating beliefs, celebrating creativity, and exploring the limits of the self. Our 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/5003C)

The Associate in Arts in English for Transfer Degree at Long Beach City College is designed to prepare students for upper division study in critical reading, writing, and thinking with possible emphases in English or comparative literature, creative 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, complete TWO (2) courses: UNITS

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 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, Language & Literature (Plan Code: I395)

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 Outcomes:

- 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 or 44H World Literature I/Honors	4
ENGL 45 or 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 (6) units of the following courses:

ENGL 3 or 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 or 48H Modern & Contemp. Literature/Honors	3
ENGL 49 or 49H Film and Literature/Honors	3
Subtotal Units	6

IN ADDITION, complete SIX (6) units from any of the courses listed in the Creative Writing Degree.

Subtotal Units	6
Total Units in the Major	26

Associate in Arts (A.A.) Degree, Creative Writing (Plan Code: I396)

The Creative Writing sequence prepares the student for possible publication.

Program Student Learning Outcomes:

- 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
ENGL 53A Introduction to Creative Nonfiction	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

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: I335)

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
FD 20 Introduction to Fashion Merchandising	3
F_N 20 Nutrition and Life	3
F_N 21 Food Selection and Meal Preparation	4
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 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.
- 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 or fabric to develop a fashion line for a target customer.

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 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 200 Fashion Prediction/Promotion: Crit View	1
FD 214 Quick Sketch Croquis Drawing	2
OR	
FD 215 Fashion Sketching I	2
FD 24 Beginning Sewing	1.5
OR	
FD 25 Intermediate Sewing	1.5
OR	
FD 26 Advanced Sewing	2
Subtotal Units	17.5-18

INTERMEDIATE LEVEL CLASSES**REQUIRED COURSES**

	UNITS
FD 10 Textile Fibers and Fabrics	3
FD 20 Introduction to Fashion Merchandising	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 Computer Applications in Fashion	1.5
Subtotal Units	18
Total Units in the Major	35.5-36

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/Merchandise Buying	3
FD 29 Tailoring	2
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
FD 258 Swimwear	1
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 (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**

	UNITS
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 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 Computer Applications in Fashion	1.5
FD 200 Fashion Prediction/Promotion: Crit View	1

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	19-19.5

IN ADDITION, complete the following INTERMEDIATE LEVEL course:

FD 9 Clothing Selection	3
FD 45B Advanced Computer Fashion Illustration	1.5
Subtotal Units for Intermediate Level	4.5
Total Units in the Major	23.5-24

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 Fashion Merchandising	3
FD 23 Fashion/Merchandising Buying	3
FD 29 Tailoring	2
FD 41 Fashion Show Production	2.5
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.

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 37A Pattern Draping I: Basic Sloper	1.5
FD 37B Pattern Draping II: Sloper Manipulations	1.5
FD 200 Fashion Prediction/Promotion: Crit View	1
FD 214 Quick Sketch Croquis Drawing	2
OR	
FD 215 Fashion Sketching I	2
Subtotal Units	15

Complete TWO (2) from the following:

FD 24 Beginning Sewing	1.5
FD 25 Intermediate Sewing	1.5
FD 26 Advanced Sewing	2
FD 29 Tailoring	2
Subtotal Units	3-4

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES

	UNITS
FD 5 Intro Manufacturing for Design/Merchan	2
FD 9 Clothing Selection	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 Computer Applications in Fashion	1.5
FD 45B Advanced Computer Fashion Illustration	1.5
FD 244 Computer Patternmaking	1
FD 20 Introduction to Fashion Merchandising	3
OR	
IBUS 1 Intro to International Business	3
FD 70 Work Experience Issues-Fashion Design	1
FD 71 Work Experience-Fashion Design	1
FD 258 Swimwear	1
Subtotal Units	28

ADVANCED LEVEL CLASSES

REQUIRED COURSES

	UNITS
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 10.5

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 29 Tailoring	2
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
Total Units	56.5-57.5

Certificate of Achievement, Fashion Design: Assistant Designer (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.

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 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 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	19.5-20

IN ADDITION, complete the following INTERMEDIATE LEVEL courses:

FD 5 Intro Manufacturing for Design/Merchan	2
FD 9 Clothing Selection	3
FD 38A Fashion Design I	3
FD 39A Garment Technical Packages	1
FD 244 Computer Patternmaking	1

FD 45A Computer Applications in Fashion	1.5
FD 45B Advanced Computer Fashion Illustration	1.5
FD 216 Fashion Portfolio Development	2
FD 70 Work Experience Issues – Fashion Design	1
FD 71 Work Experience – Fashion Design	1
Subtotal Units for Intermediate Level	17
IN ADDITION, complete the following ADVANCED LEVEL courses:	
FD 38B Fashion Design II	3
Total Units	39.5

Certificate of Achievement, Fashion Design: Patternmaker (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
OR	
FD 25 Intermediate Sewing	1.5
OR	
FD 26 Advanced Sewing	2
Subtotal Units for Entry Level	12.5-13

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES	UNITS
FD 5 Intro Manufacturing Design/Merchand	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 45A Computer Applications in Fashion	1.5
FD 244 Computer Patternmaking	1
Subtotal Units for Intermediate Level	9

ADVANCED LEVEL CLASSES

REQUIRED COURSES	UNITS
FD 38A Fashion Design I	3
FD 39A Garment Technical Packages	1
FD 40 Advanced and Production Pattern Drafting	1.5
FD 70 Work Experience Issues-Fashion Design	1

FD 73 Vocational Work Experience	3
Subtotal Units for Advanced Level	9.5
Total Units	31-31.5
RECOMMENDED but not required courses:	
ART 1 or 2 Art and Civilization	3
ART 15 Beginning Drawing	3
FD 20 Introduction to Fashion Merchandising	3
FD 38B-D Fashion Design	3
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.

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/Merchand	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 Computer Applications in Fashion	1.5
Subtotal Units	12-12.5

INTERMEDIATE LEVEL CLASSES

REQUIRED COURSES	UNITS
FD 27 Production Sewing	3
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 72 or 73 Work Experience-Fashion Design	2-3
Subtotal Units	9-10
Complete THREE-FOUR (3-4) units from:	
BCOM 222 Job Search Skills	3
FD 26 Advanced Sewing	2
FD 29 Tailoring	2
FD 258 Swimwear	1
Subtotal Units	3-4

RECOMMENDED but not required courses:	
ART 1 or 2 Art and Civilization	3

ART 15 Beginning Drawing	3
FD 20 Introduction to Fashion Merchandising	3
FD 230 Fashion Design Laboratory	2
FD 244 Computer Patternmaking	1
Total Units	24-26.5

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 Merchandising	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 Computer Applications in Fashion	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 Computer Fashion Illustration	1.5
Subtotal Units	4.5

RECOMMENDED but not required courses:

FD 24 Beginning Sewing	1.5
IBUS 52 International Marketing	3
COSA 50 Intro to IT Concepts & Applications	4
Total Units in the Major	26

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 Merchandising	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 1	6.5

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 Computer Applications in Fashion	1.5
FD 45B Advanced Computer 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

RECOMMENDED but not required courses:

FD 24 Beginning Sewing	1.5
IBUS 52 International Marketing	3
COSA 50 Intro to IT Concepts & Applications	4
Total Units	47-48.5

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	2.5
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 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
MUSIC 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, TV and 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 for Transfer (A.S.-T) Degree, Film, TV & Electronic Media (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 CORE COURSES UNITS

Select two classes (6 units) from below:

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

LIST A: Select one from each area (for a total of at least 6 units):

AREA 1: Audio

MUSIC 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	2.5
R_TV 13 Television Production	2.5
FILM 21 Intermediate Digital Film Production	3
Subtotal Units	6

LIST B: Select one course (3 units)

Any course not already used above or one of the following courses:

ART 10 Art Appreciation	3
ART 2 Art and Civilization	3
FILM 2A Film History I	3
FILM 25 Introduction to Digital Cinematography	3
Subtotal Units	3

LIST C: Select one course (3 units)

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	2.5
R_TV 37 Radio/TV Management & Sales	3
FILM 10 Film Genres	3
FILM 11 Film Directors and Artists	3
Subtotal Units	3

Total Units in the Major

18-22

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 CORE 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 203 Fire Tools, Equipment & Related Tech	1
FIRE 240 Firefighter I Physical Agility	.5
EMT 251 Emergency Medical Technician	3
EMT 251L Emergency Medical Technician Lab	1.5
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
OR	
HORT 15A Basic Horticulture	2
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

REQUIRED COURSES	UNITS
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: I420)

Students following the Proficiency Emphasis develop a competency in at least one foreign language, providing an important entry-level skill for those aspiring to work in the international arena as well as preparing for baccalaureate work. The degree would benefit those wishing to enter a variety of industries or business settings that compete in an international market, and may prepare students for transfer to a four-year university in a foreign language program. The degree also offers an added dimension of cultural knowledge and understanding in regions where the language is spoken.

Program Student Learning Outcomes:

- 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)	5
OR	
SPAN 9/9H Spanish for Spanish Speakers	5
Intermediate Language 4 (FREN or SPAN)	5
OR	
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
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.

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
ECON 5 The Global Economy	3
STAT 1/1H Elementary Statistics/Honors	4
ANTHR 2/2H Cultural Anthropology/Honors	3
GEOL 2 General Geology, Physical	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 First Calculus Course	5
MATH 70 Second Calculus Course	5
Total Units in the Major	30-31.5

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

LIST A

Select a total of 6 units or 2 courses (1 course or 3 units from each section):

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

LIST B

Select 6 units; 1 course from each of the following 2 areas:

GROUP 1-Complete ONE (1) course not used in LIST A or any course below:

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:

HIST 5A History of England & Great Britain	3
HIST 5B History of England & Great Britain	3
HIST 8A/8AH History of the Americas	3
HIST 8B/8BH History of the Americas	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 CORE COURSES

UNITS

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

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.

REQUIRED COURSES—Complete the 24 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 COURSES

UNITS

Select One (1) course from List A below: 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

Select TWO (2) courses from List B below:

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
POLSC 1/1H Intro to American Government/Honors	3
POLSC 2 Comparative Government	3
ENGL 3/3H Argumentative and Critical Writing/Honors	3
PHIL 12 Introduction to Logic	3
OR	
PHIL 22 Symbolic Logic	3
COMM 60 Elements of Argumentation and Debate	3
Subtotal Units	6-7
Total Units in the Major	20-22

Other degree requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following: (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California

State University General Education – Breadth Requirements.

- A minimum of 18 semester units in the major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

Associate in Arts (A.A.) in Journalism – Newspaper/Magazine Emphasis (Plan Code: I411)

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 Emphasis (Plan Code: I412)

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
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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 – Publication Specialist Emphasis (Plan Code: I413)

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

All Associate in Arts degrees require:

Completion of General Education Requirements (Plan A)

25 Units minimum

Additional elective units may be required to meet the 60 degree-applicable unit minimum total. Students should consult with a counselor for course selections.

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	3
PHOT 32 Introduction to Digital Photography	3
PHOT 35 Photography for Publication	3
Subtotal Units	13

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

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 Dance Aerobics 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: I701)

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

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

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 Dance Aerobics	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 Power Lifting	1
KINPF 53B Power Lifting	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 Outcomes:

- 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 Fieldwork Observation in Kinesiology	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 Arts, Library Technician (A.A.), (Plan Code: 1030)

The Long Beach City College Library Technician Associate of Arts Degree is designed to teach the fundamentals of knowledge and skills needed for today's Library Technicians. Students can earn this degree by completing the 18 units of required Library Technician courses, in addition to completing the 42 general requirement and electives units that LBCC offers. 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 the Internet.

Program Student Learning Outcomes:

- Students will identify and synthesize the theoretical knowledge and practical skills of all components of a working library in regards to their standards, principles, organization, and practices.
- Develop the necessary skills to access and evaluate information from various sources and demonstrate the skills required to work and perform at the level of a library technician. Examine and compare information from various sources to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias.

REQUIRED COURSES	UNITS
LIB 3 Library, Technology and Internet Literacy	3
LIB 201 Introduction to Cataloging	3
LIB 202 Introduction to Access Services	3
LIB 203 Introduction to Acquisitions	3
LIB 204 Introduction to Reference Services	3
Subtotal Units	15

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

COSA 30 Introduction to Computers	3
COSA 35 Microsoft Office	3
Subtotal Units	3
Total Units in the Major	18

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. It 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 the Internet.

REQUIRED COURSES—Complete the 18 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: I398)

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 2B	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 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++I	4
CS 21 Introduction to Computer Science-Java	4
STAT 1/1H Elementary Statistics/Honors	4
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:
Administrative / Clinical**

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
Program: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 Course(s) 4
Students choose either the accounting option or the database option. When an option is chosen, the student must complete 4 units from that option each semester.

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	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
Complete Administrative Option Course(s)	4

Students finish any remaining units from the option chosen in the previous semester.

Subtotal Units	16
Total Units in the Major	30-31

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 30-31 units of required courses listed in the Associate Degree requirement box.

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 Course(s) 4
 Students choose either the accounting option or the database option. When an option is chosen, the student must complete 4 units from that option each semester.

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	11-12

SECOND SEMESTER

REQUIRED COURSES	UNITS
AH 276 Health Care Law	1
MA 284A Medical Assisting Clinical Practicum	2
MA 288 Medical Assisting Practicum Seminar	1
MA 290 Basic Medical Insurance Billing	3
Complete Administrative Option Course(s)	4

Students finish any remaining units from the option chosen in the previous semester.

Subtotal Units	11
Total Units	26-27

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	3
EMT 251L Emergency Medical Technician Laboratory	1.5
Total Units	4.5

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.

Completion of General Education Requirements (Plan A) 19 Units minimum Additional elective units may be required to meet the 60 degree-applicable unit minimum total. Students should consult with a counselor for course selections.

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 421 Metal Fabrication and Layout	1
WELD 50 Introduction to Welding	4

RECOMMENDED but not required:

DRAFT 201 Introduction to Drafting	4
FORK 801 Forklift Safety & Operations	1
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
Total Units	21

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
FORK 801 Forklift Safety & Operation	1

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 SMAW Flat/Horz Groove Welds with Backing	2
OR	
WELD 414 SMAW Vert & OHV/HD Grv Welds w/Backing	2
OR	
WELD 415 SMAW Flat/Horz Open Root Groove Welds	2
OR	
WELD 416 SMAW Vert & O/H Open Root Groove Welds	2
WELD 221 Arc Welding Structural Certification	3
OR	
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 Introduction to Semi-Automatic Welding	4
OR	
WELD 480 Welding (Inert Gas)	2
OR	
WELD 482 Gas Tungsten Arc Welding Basic Joints	2
OR	
WELD 483 Gas Metal Arc/Flux Core Arc Welding	2
OR	
WELD 221 Arc Welding Structural Certification	3
OR	
MTFAB 270 Metallurgy	3

RECOMMENDED but not required for the ADVANCED SKILLS Certificate:

FORK 801 Forklift Safety & Operation	1
Total Units	35-37

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.

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 COURSES	UNITS
MUSIC 6 Introduction to Music Theory	3
MUSIC 1A Music Theory I	3
MUSIC 1B Music Theory II	3
MUSIC 2A Music Theory III	3
MUSIC 5 Musicianship I	1
MUSIC 9 Musicianship II	1
MUSIC 10 Musicianship III	1
MUSIC 16 Musicianship IV	1
MUSIC 92AD Applied Vocal & Instrumental Music	0.5
Subtotal Units	18

IN ADDITION, complete SIX (6) units in ONE of the following performance groups:

MUSIC 11AD Long Beach City College Viking Chorale	1.5
OR	
MUSIC 13AD College Symphony Orchestra	1.5
OR	
MUSIC 38AD Wind Ensemble	1.5
MUSIC 23AD Jazz Choir	1.5
OR	
MUSIC 24AD Vocal Jazz Ensemble	1.5
OR	
MUSIC 54AD Jazz Big Band	1.5
Total Units in the Major	24

Associate in Arts (A.A.), Music (Plan Code: I220)

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 Adv. 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 COURSES	UNITS
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)

REQUIRED COURSES	UNITS
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

REQUIRED COURSES	UNITS
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
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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.

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	6

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

1. 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.
2. 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	2.5
ADN 45AL Advanced Medical/Surgical Nursing Lab	3
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	12
Total Units	
(10 Prerequisites + 20 Required Certificate Courses)	32.5

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 Degree (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
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.

1. Starting Fall 2014 Application Period— Completion of English 105 or higher required.
2. 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.
3. Writing Proficiency: Met for graduation: Qualification for English 1 or completion of English 105. Starting Fall 2014
4. 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.
5. Grade Point Average: If previous college work has been completed, a GPA of 2.0 must be achieved.
6. Information Meeting: Applicants should attend an information meeting prior to submitting an application.
7. 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.
8. 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. Background Check: Vocational nursing.
9. Students must obtain a clear criminal background check prior to the first day of clinical experience. Vocational nursing graduates send fingerprints with the application for licensure.
10. A social security card is required by the California Board of Nursing in order to take the NCLEX. In addition, a social security card is required by some clinical agencies. Inability to provide proof of social security card may jeopardize a student from completing clinical requirements.

Program Information

1. Applications, along with all required documents, must be submitted the 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:

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	0.5
AH 60 Medical Terminology	3
AH 222 Intravenous Therapy & Blood Withdrawal	1
AH 225 Basic Arrhythmia Recognition	0.5
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 Certificate (Plan Code: 4630)

This certificate prepares students in basic-entry level fundamental nursing skill sets. Completion of course VN215 prepares students to test for the state competency examination for a Certified Nursing Assistant. (C.N.A.)

REQUIRED COURSES	UNITS
VN 215 Fundamentals of Nursing	6
Total Units	6

Certificate of Accomplishment, Home Health Aide Certificate (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 & Dietetics

Associate in Science for Transfer (A.S.-T) Degree, Nutrition and Dietetics (Plan Code: 5506)

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: Select two courses:

CHEM 12A Organic Chemistry	5.5
ANAT 1 Human Anatomy	4
STAT 1 Elementary Statistics	4
Subtotal Units	8-9.5

List B:

F_N 21 Food Selection and Meal Preparation	4
Subtotal Units	4
Total Units in the Major	28.5-3.0

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 (A.A.-T.) (Plan Code: 5012B/C)

Associate in Arts in Philosophy for Transfer is designed to guide students in the exploration of a diversity of philosophical ideas, and to enhance their critical thinking, logic, and imaginative skills. Students who complete the philosophy degree will be able to explain, analyze, and assess a wide variety of philosophical issues. A second purpose is to prepare students for transfer to a university. Upon completion of their program, philosophy majors will be able to describe and analyze various philosophical problems with both academic and practical applications. They will be able to utilize critical thinking and logic skills in philosophical contexts as well as other academic and non-academic areas.

Program Student Learning Outcomes:

- Describe philosophical problems and apply critical thinking and logic skills to analyze them.

REQUIRED COURSES	UNITS
Select TWO (2) courses below:	
PHIL 22 Symbolic Logic	3
PHIL 6 Introduction to Philosophy	3
PHIL 6H Honors Introduction to Philosophy	3
PHIL 7 Introduction to Ethics	3
PHIL 7H Honors Introduction to Ethics	3
Subtotal Units	6
IN ADDITION, complete ONE (1) course from LIST A:	
LIST A	
Any REQUIRED CORE not already used.	3
PHIL 9 Introduction to Existentialism	3
OR	
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

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 of Arts in Political Science for Transfer Degree (A.A.-T.), (Plan Code: 5005B/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 COURSES	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

Other degree requirements:

- Completion of 60 semester units that are eligible for transfer to the California State University.
- The CSU General Education - Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferrable coursework.
- All courses in the major must be completed with a grade C or better, a "P" (Pass) grade is not an acceptable grade for courses in the major.

Certificate of Accomplishment, Political Science - General (Plan Code: 4820)

This certificate will provide recipients an advantage, above those without any college, in applying for any type of government job, especially positions that do not require a college degree. In addition, many government entities, if not most, require applicants for employment to have completed Political Science I – Introduction to American Government as a requirement of employment. This certificate will make applicants more attractive to government employers, especially for low-skill or no-skill positions.

REQUIRED COURSES	UNITS
POLSC 1/1H Introduction to Government/Honors	3
POLSC 3 Issues of American Government	3
POLSC 9 The Constitution, Law and Society	3
POLSC 10 Introduction to Political Science	3
POLSC 11 Introduction to Political Theory	3
Total Units	15

Certificate of Accomplishment, Political Science - Global (Plan Code: 4821)

This certificate will provide recipients an advantage, above those without any college, in applying for any type of government job. In addition, many government entities, if not most, require applicants for employment to have completed Political Science I – Introduction to American Government as a requirement of employment. This certificate will make applicants more attractive to government employers, specifically for jobs concerning the global economy and not requiring a degree.

REQUIRED COURSES	UNITS
POLSC 1/1H Introduction to Government/Honors	3
POLSC 2 Comparative Government	3
POLSC 3 Issues of American Government	3
POLSC 4 World Politics	3
POLSC 9 The Constitution, Law and Society	3
Total Units	15

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 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
PSYCH 14 Abnormal Psychology	3
PSYCH 33 Psychology of Personality	3
Subtotal LIST B Units	3

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

Any course not selected above.	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

Radio / Television

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	2.5
R_TV 70 Fieldwork in Radio/Television	3
Subtotal Units	13.5

REQUIRED COURSES FOR SPECIALITY

R_TV 14 Electronic Field Production	2.5
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	12.5

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	33.5

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 33.5 units of required courses as listed in the Associate Degree requirements.

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	2.5

R_TV 70 Fieldwork in Radio/Television	3
Subtotal Units	13.5

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	2.5
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	31

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 31 units of required courses as listed in the Associate Degree requirements.

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	2.5
R_TV 70 Fieldwork in Radio/Television	3
Subtotal Units	13.5

REQUIRED COURSES FOR SPECIALITY

R_TV 4 Writing and Production Planning	3
R_TV 14 Electronic Field Production	2.5
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
Subtotal Units	13

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	2.5
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	34

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 34 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	2.5
R_TV 70 Fieldwork in Radio/Television	3
Subtotal Units	13.5

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	2.5
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	26.5

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 COURSES	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: 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 for Transfer (A.A.-T), Theatre Arts (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.

REQUIRED COURSES	UNITS
TART 25 Introduction to Theatre	3
TART 1 Acting 1-Introduction to Acting	3.5
TART 49 Rehearsal and Performance	2.5
OR	
TART 39AD Theatre Practicum	1
Subtotal Units	9

LIST A: Select three courses (9 units minimum):	
TART 2 Acting 2- Techniques 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
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

Select a minimum of NINE (9) units from the following:

TART 2 Acting 2- Techniques & 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 Arts: 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.

FIRST SEMESTER

REQUIRED COURSES UNITS

TART 1 Acting 1-Introduction to Acting	3.5
TART 25 Introduction to Theatre	3
TART 39 AD Theatre Practicum	1
TART 49 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 Technique & Characterization	3.5
TART 39AD Theatre Practicum	1
OR	
TART 49 Rehearsal and Performance	2.5
TART 51 Theatre Forum	1
Subtotal Units	11.5-13

FIRST 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 49 Rehearsal and Performance	2.5
TART 50 Major Production Performance	2.5
TART 205 Auditions for Theatre and Film	3
Subtotal Units	14
Total Units	51.5-53

Completion of General Education Requirements (Plan A) – 25 Units minimum

Additional elective units may be required to meet the 60 degree-applicable unit minimum total. Students should consult with a counselor for course selections.

Total Degree Units: 60 Units minimum

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 – 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 – 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	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, PHP Web Programmer Certificate (Plan Code: 4129)

Students will learn how to build robust web applications with PHP and MySQL.

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	3
Total Units	15

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 OR	4
CS 11 Introduction to Computer Science-C++1	4
COSP 38 Database Concepts	4
COSP 230 Android App Development in Java	3
Total Units	11

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.

REQUIRED COURSES UNITS

COSW 10 Beginning Website Development	4
COSW 20 Dynamic HTML Web Construction	4
COSW 200 Introduction to JavaScript	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.

Certificate of Accomplishment, Advanced Arc Welding (SMAW and FCAW) (Plan Code: 4986)

The Welding Technology Certificate of Accomplishment in Advanced Arc Welding will emphasize advanced 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 Outcomes:

- 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 additional units in:	
WELD 221 Arc Welding Structural Certification	3
OR	
MTFAB 260 Blueprint Reading for Metal Fabrication	3
OR	
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 Outcomes:

- 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 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.

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
And 4 additional Units in:	
WELD 410 Welding (ARC)	2
OR	
WELD 413 SMAW Flat/Horz Groove Welds with Backing	2
OR	
WELD 414 SMAW Vert and OV/HD Grv Welds w/ Backing	2
Total Units	14

Courses



Accounting (ACCTG)

ACCTG 1A 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 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.

Air Conditioning & Refrigeration (AC_R)

AC_R 211 **10.0 units**
Air Condition/Refrigeration Fundamentals
 90 hours lecture, 270 hours laboratory
 Grading: letter grade or pass/no pass

This is the beginning course of a four-semester program for persons to become technicians in industrial and/or commercial air conditioning and refrigeration. This courses covers shop safety practices, HVAC terminology, pressure/ temperature relationships, heat transfer, analysis of components and complete systems, employee and employer relationship. 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.

AC_R 212 **10.0 units**
Electrical Theory/Component Applications
 90 hours lecture, 270 hours laboratory
 Grading: letter grade or pass/no pass

This course covers electrical systems found in heating, refrigeration and air conditioning installations and equipment. Also covered are formulas used in electrical theory, the interpretation of schematic wiring diagrams, electrical components and applications. This course also covers the theory and lab work associated with motors,

thermostats, controls, and circuit analysis. 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.

AC_R 213 **10.0 units**
Heating, Psychrometrics & Heat Loads
 90 hours lecture, 270 hours laboratory
 Prerequisite: AC_R 211 or AC_R 212
 Grading: letter grade or pass/no pass

This course discusses comfort as it relates to the human body, psychrometrics, gas heating, and electric heating. The psychrometric chart is covered in detail. Total heat and building air conditioning specifications, including heating and cooling load calculations are discussed. Other topics include the forced air system, types of fans and fan drives, duct materials and fastening devices, and sizing duct and measuring air movement for balancing. Operating, safety, and electronic controls for air conditioning are covered. 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.

AC_R 214 **10.0 units**
Troubleshoot Total Comfort Systems
 90 hours lecture, 270 hours laboratory
 Prerequisite: AC_R 213
 Grading: letter grade or pass/no pass

This is an advanced course that requires knowledge of troubleshooting of both electrical and mechanical equipment, electrical, electronic, and pneumatic controls. This course covers the complete electrical and mechanical design, service and troubleshooting of a commercial/industrial facility. 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.

AC_R 220 **3.0 units**
Refrigeration Fundamentals
 45 hours lecture, 27 hours laboratory
 Grading: letter grade or pass/no pass

This course is a basic study of vapor compression refrigeration cycle and system components. It includes shop safety practices, terminology, pressure/temperature

relations, and heat transfer. System dehydration, recovery techniques, charging of refrigerants will also be covered. The material in this course will reflect the current Environmental Protection Agency (EPA) requirements of Section 608 of the Clean Air Act of 1990.

AC_R 223 **3.0 units**
Gas Heating Fundamentals
45 hours lecture, 27 hours laboratory
Recommended Preparation: AC_R 220
Grading: letter grade or pass/no pass

This course will cover the theory, operation and application of natural gas heating systems used in residential and commercial heating installations including the properties of fuel gases, gas combustion, furnace construction pilot proving devices and troubleshooting systems.

AC_R 226 **2.0 units**
Air Properties and Measurement
36 hours lecture
Recommended Preparation: AC_R 220
Grading: letter grade or pass/no pass

This course investigates the air side operating theory and application of comfort cooling systems. This course will include the psychometrics that will include the measurement and air distribution through duct design and component identification.

AC_R 229 **3.0 units**
Heat Pumps
45 hours lecture, 27 hours laboratory
Grading: letter grade or pass/no pass

This course will cover the theory, operation and application of heat pump systems used in residential and commercial heating and cooling installations. The heat pump refrigeration cycle, reversing valves, defrost methods, supplemental heat, airflow and thermostats will also be covered.

AC_R 230 **3.0 units**
Electrical Fundamentals
45 hours lecture, 27 hours laboratory
Recommended Preparation: AC_R 220
Grading: letter grade or pass/no pass

This course includes the basic concepts of electrical principles as used in air conditioning and refrigeration. The development of schematic diagrams, the application of electrical components, the electrical sequence of operation, and troubleshooting of electrical systems will be covered.

AC_R 233 **3.0 units**
Commercial Electrical for HVAC
45 hours lecture, 27 hours laboratory
Prerequisite: AC_R 230
Grading: letter grade or pass/no pass

This course covers electrical systems found in commercial heating, refrigeration and air conditioning systems. It will also include the topics of time clocks, defrost systems, three phase transformers, three phase motors, timers, sequencers, starting methods and troubleshooting of commercial electrical systems.

AC_R 236A **2.5 units**
Automobile Air Conditioning
36 hours lecture, 27 hours laboratory
Recommended Preparation:
AC_R 220 or AC_R 211 or AC_R 450A
Grading: letter grade or pass/no pass

This course covers tools, equipment, refrigeration fundamentals, electrical systems, air distribution, installation and repair of automobile air conditioning. System dehydration, recovery techniques, charging of refrigerants will also be covered. The material in this course reflects the current Environmental Protection Agency (EPA) requirements of Section 609 of the Clean Air Act of 1990.

AC_R 240 **4.0 units**
Advanced Air Conditioning
54 hours lecture, 54 hours laboratory
Prerequisite: AC_R 220
Grading: letter grade or pass/no pass

This is an advanced course that requires knowledge of air conditioning mechanical and electrical systems. This course will cover the operation, maintenance and troubleshooting of commercial and industrial HVAC systems. This course also covers theory and practices associated with chilled water systems, absorption chilled water systems, cooling towers and pumps. Equipment

efficiency rating, EER and SEER are also covered.

AC_R 260 **3.0 units**
Solar Hot Water Heating
 45 hours lecture, 27 hours laboratory
 Grading: letter grade or pass/no pass

This course is a basic study on the essentials of installing code compliant solar thermal systems including Solar Hot Water and Solar Pool Heating. This course will cover the basic concepts, system configurations, guidelines and installation techniques involved with solar thermal systems. This course will consist of lecture, demonstration and lab activities. This course is designed for students who currently work in or plan to be employed in the solar hot water industry.

AC_R 400A **3.0 units**
Uniform Mechanical Code I
 54 hours lecture
 Grading: letter grade or pass/no pass

This course will cover the purpose of the Uniform Mechanical Code. It will provide information about the complete requirements for the installation and maintenance of residential heating, ventilating, cooling and refrigeration systems.

AC_R 421A **3.0 units**
Elect Controls for Refrig/Air Cond/Heat
 54 hours lecture
 Grading: letter grade or pass/no pass

This course covers the theoretical and practical principles involving the control of air conditioning and refrigeration equipment. Topics covered are the selection, application and maintenance of automatic controls for heating, ventilation and cooling systems.

AC_R 421B **3.0 units**
Pneumatic Controls for HVAC
 54 hours lecture
 Prerequisite: AC_R 421A
 Grading: letter grade or pass/no pass

This is an advanced course that requires knowledge of basic air conditioning and refrigeration controls. This course covers the selection, application and maintenance of automatic controls found the large

commercial/industrial facilities.

AC_R 422 **3.0 units**
Air Conditioning System Design and Installation
 54 hours lecture
 Grading: letter grade or pass/no pass

This course is an introduction to estimating and selection of equipment used in residential, commercial and industrial air conditioning, heating and ventilating systems.

AC_R 450A **5.0 units**
Transport Refrigeration
 72 hours lecture, 54 hours laboratory
 Grading: letter grade

This course is an introduction to transport refrigeration. This course covers the application, function, power supply, basic operation, safety and troubleshooting of mechanical and electrical components of transport refrigeration equipment.

AC_R 450B **5.0 units**
Advanced Transport Refrigeration
 72 hours lecture, 54 hours laboratory
 Prerequisite: AC_R 450A
 Grading: letter grade

This is an advanced course that requires knowledge of basic transport refrigeration. This course covers the complete application, service, and troubleshooting of transport refrigeration systems.

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 **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 **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 **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 **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

36 hours lecture, 54 hours laboratory

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. This is an interactive course where students will also participate in recording, developing, and comparing fingerprints.

Transferable to CSU

ADJUS 20 **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.

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 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 **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 provider.

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 **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 licenses as LVNs and/or foreign graduate nurses.

<p>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</p> <p>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.</p>	<p>PHYSI 1 and READ 82 or completion of Reading proficiency. Grading: letter grade</p> <p>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.</p>
<p>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</p> <p>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.</p>	<p>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</p> <p>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.</p>
<p>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</p> <p>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.</p>	<p>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</p> <p>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.</p>
<p>ADN 225 3.0 units Pharmacology 54 hours lecture Recommended Preparation: BIO 60 or ANAT 1 and</p>	<p>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</p>

This course is designed to prepare the graduate nurse to pass the NCLEXRN. The content includes medical, surgical, pediatrics, nursing of the child-bearing family, mental health, pharmacology, critical thinking, community health and leadership refresher course.

ADN 600 **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 smallgroup instruction in basic bedside nursing skills and advanced bedside nursing skills. Supervised practice is available on a recurring, as needed, and/or drop-in basis to improve performance levels.

ADN 810 **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.

Automotive Technology (AMECH)

AMECH 50A **3.0 units**

Machine Tool Operation and Practices

36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

Formerly MACHT 50A. This course is designed to explore the machining techniques utilized in the machine shop. This entry level machining course covers safety practices required in the modern manufacturing industry. This course includes semi-precision layout, semi-precision/precision measurement, tools and equipment. Students learn to operate the milling machine and engine lathe. This course is primarily design as a supplemental course so that students in another field appreciate and apply techniques utilized in the machine shop.

Transferable to CSU

AMECH 421 **3.0 units**

Auto Mechanics 1

36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

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.

AMECH 424 **3.0 units**

Auto Air Conditioning

36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

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.

AMECH 430 **6.0 units**

Auto Wheel Alignment

90 hours lecture, 54 hours laboratory
Recommended Preparation: High school auto mechanics or AMECH 421
Grading: letter grade or pass/no pass

This course covers automotive wheel alignment theory, design, operation, power flow, suspension, and steering in automotive vehicles and small trucks. This course will also include testing, diagnostics, and modern methods of servicing vehicles. ASE (Automotive Service Excellence) testing preparation is emphasized.

AMECH 432 **6.0 units**

Automotive Brake Systems

90 hours lecture, 54 hours laboratory
Recommended Preparation: AMECH 421
Grading: letter grade or pass/no pass

Covers the theory, design and operation of the standard, disc and antilock brake systems common to most autos and small trucks. Includes testing, diagnosing and modern methods of servicing the brake system.

AMECH 436 **6.0 units**

Automatic and Standard Transmissions

90 hours lecture, 54 hours laboratory
Recommended Preparation:
High school auto or AMECH 421
Grading: letter grade or pass/no pass

This course covers the construction, operation, maintenance, adjustment and overhaul of manual and automatic transmissions.

AMECH 438 **6.0 units**

Auto Emission Controls

90 hours lecture, 54 hours laboratory
Recommended Preparation:
High school auto mechanics or AMECH 421
Grading: letter grade or pass/no pass

This course covers the California State approved Smog Check Program as well as preparation for the BAR Smog Check Inspection and Smog Check Repair Licenses. Also, The operation and testing of computer-controlled oxygen feedback systems and use of the California State approved BAR97 Emissions Inspection System

(EIS) as well as the new Data Acquisition Device used on 2000 model year and above. This course is the first of two courses necessary to prepare for a license exam administered by the State of California Smog Check Program. Successful candidates will qualify for the LEVEL I and LEVEL II BAR certification needed to apply for the Smog Check exam.

AMECH 440 **6.0 units**

Automotive Computer Systems

90 hours lecture, 54 hours laboratory
Recommended Preparation: AMECH 421
Grading: letter grade or pass/no pass

This course covers the operation and testing of computer controlled oxygen feedback systems, the use of the California State Approved Emission Inspection System (EIS) and the use of hand-held auto systems analyzers. Students will prepare to take the ASE (Automotive Service Excellence) and the California state emission control license tests.

AMECH 442 **6.0 units**

Automotive Fuel Systems

90 hours lecture, 54 hours laboratory
Recommended Preparation: AMECH 421
Grading: letter grade or pass/no pass

This course covers the testing and repair of auto fuel systems (carburation and fuel injection) and operation of auto oscilloscopes for testing (Conventional and computer assisted purposes). Prepare 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.

AMECH 444 **6.0 units**

Automotive Electrical Systems

90 hours lecture, 54 hours laboratory
Recommended Preparation: AMECH 421
Grading: letter grade or pass/no pass

This course covers testing and repair of automotive electrical charging and starting systems, ignition systems (conventional and transistorized). This course is designed to assist the student with preparation for the ASE (Automotive Service Excellence) test.

AMECH 461 **6.0 units****A-1 Engine Repair Specialty**

90 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

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.

Anatomy (ANAT)**ANAT 1** **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 prenursing, 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 focuses on demonstrated understanding of the evolutionary physical characteristics that distinguish humans from other life forms. Major topics included in the course are human genetics, human physical variation, primatology, the origin and evolution of humans, and the synthetic theory of evolution.

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

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 **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 **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 **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 **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:

1. Structural Linguistics—phonology, morphology, syntax, and semantics;

2. 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 CSU

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

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 plans 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 **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 **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 **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**

Honor 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 **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 **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 **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 **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 **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 limitations

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**

Three Dimensional 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

This course provides on-campus lab practice and the application of course content for introductory jewelry/metalwork courses. Must be taken concurrently with ART 35. 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 **4.0 units**

Jewelry/Metalsmithing 1

36 hours lecture, 126 hours laboratory

Recommended Preparation: ART 30 and ART 31

Grading: letter grade or pass/no pass

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 nonlinear 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**

Graphic Design Tools & Techniques

36 hours lecture, 72 hours laboratory

Prerequisite: ART 41

Recommended Preparation: ART 31

Grading: letter grade or pass/no pass

This course is an exploration of the basic use of computers for graphic design. Students learn the fundamentals of graphic design in preparation for visual communications for both digital and print media. By completing assignments on the computer, students will create documents that effectively combine text and graphics. Projects will be created using a variety of input and output devices as well as software.

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 computerbased 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

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**

Introduction to 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 **4.0 units**

Beginning Sculpture

36 hours lecture, 126 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 photoemulsion 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

Advanced Transportation Technology (ATT)

ATT 480 **3.5 units**

Intro to Hybrid & Electric Vehicles

54 hours lecture, 27 hours laboratory

Grading: letter grade

Formerly AMECH 480. This course is a hands-on approach to the world of Hybrid, Fuel Cell and Electric powered vehicles. Discover how this new technology works as it replaces existing fossil fueled engines. Examine existing technologies, conversion processes, testing, assembly, operation, and maintenance of Hybrid-Electric, Fuel Cell and Battery Powered electric vehicles. Appropriate safety related instruction is included.

ATT 481 **3.5 units**

Advanced Hybrid & Electric Vehicles

54 hours lecture, 27 hours laboratory

Grading: letter grade

Formerly AMECH 481. This course furthers the student's skills in electric vehicles (EVs) and hybrid electric vehicles (HEVs) and provides an introduction to advanced EV designs and propulsion systems. The students will work with hybrids, Fuel Cells & A/C drive systems in advanced design electric vehicles. The course includes: EV design and construction; the testing, assembly, operation and maintenance of EVs; the influence of aerodynamic design; advanced technology batteries and intelligent charging systems; hydrogen fuel cell technology and alternative EV drive systems. Appropriate safety related instruction will be included in each segment.

ATT 482 **3.5 units**
Heavy Duty Hybrid & Electric Vehicles
 54 hours lecture, 27 hours laboratory
 Grading: letter grade

This course introduces the students to heavy-duty electric vehicles (HDEVs) and heavy-duty hybrid electric vehicles (HD-HEVs) and provides an introduction to advanced HD-EV designs and propulsion systems. The students will work with heavy-duty hybrids, Fuel Cells & A/C drive systems in advanced design heavy-duty electric vehicles. The course includes: HD-EV design and construction; the testing, assembly, operation and maintenance of HD-EVs; the influence of aerodynamic design; advanced technology batteries, super-capacitors, intelligent charging systems; hydrogen fuel cell technology and alternative HD-EV drive systems. Appropriate safety related instruction will be included in each segment.

ATT 483 **3.5 units**
Advanced Hybrid Diagnosis & Repair
 54 hours lecture, 27 hours laboratory
 Grading: letter grade

Formerly AMECH 483. This course increases the student's skill and knowledge and provides updated information in hybrid-electric vehicle technology. The course emphasizes OEM (original equipment manufacturer) hybrid vehicle diagnosis and repair utilizing OEM diagnosis tools and methodology. Appropriate safety related instructions will be included in each segment.

ATT 490 **3.5 units**
Introduction to Alternative Fuels
 54 hours lecture, 27 hours laboratory
 Grading: letter grade

Formerly AMECH 490. Alternative fueled vehicles are extensively used in fleet service. This NATEF certified course covers theory of operation, installation, testing, trouble-shooting and repair of gaseous fuels with a focus on natural gas. Includes both dedicated and after-market systems. Gasoline and diesel powered vehicles are discussed with an emphasis on computer-controlled fuel injection. Current trends in the industry and preparation for taking the ASE (Automotive Service

Excellence) F1 test in compressed natural gas systems is included.

ATT 491 **3.5 units**
Heavy Duty Alternative Fuels
 54 hours lecture, 27 hours laboratory
 Grading: letter grade

Formerly AMECH 491. Heavy duty/diesel alternative fueled vehicles with an emphasis on natural gas. Includes the theory of operation, installation, testing, troubleshooting and repair of alternatively-fueled heavy duty vehicles with both dedicated and after-market systems. Lab intensive training in Natural Gas spark fired vehicles emphasizing computer controlled fuel management. Current trends in the industry and preparation for taking the ASE (Automotive Service Excellence) F1 test are included.

ATT 492 **3.5 units**
HD Alt Fuel Engine Diagnosis & Repair
 54 hours lecture, 27 hours laboratory
 Grading: letter grade

Formerly AMECH 492. Covers OEM and aftermarket spark ignited, alternatively-fueled truck and bus engines with an emphasis on computer controlled fuel management. The theory of operation, conversion, troubleshooting and maintenance of alternatively-fueled heavy duty engines, emphasizing natural gas and computer controlled fuel management systems. Includes both factory and after-market dedicated systems. Current trends in the industry and preparation for taking the ASE (Automotive Service Excellence) F1 test are included.

ATT 493 **3.5 units**
Alt Fuels Conversion, Diagnosis & Repair
 54 hours lecture, 27 hours laboratory
 Grading: letter grade

Formerly AMECH 493. Covers diagnosis and repair of light and medium duty alternative fuel vehicles including aftermarket and OEM systems. The theory of installation, regulations and certification, manufacturing techniques and trouble-shooting of alternatively-fueled vehicles, emphasizing natural gas and computer controlled fuel management systems. Current trends in the industry and preparation for taking the ASE (Automotive Service

Excellence) F1 test are included.

ATT 494 **3.5 units**
Heavy Duty LNG Fuel Systems
54 hours lecture, 27 hours laboratory
Grading: letter grade

This course concentrates on the diagnosis and repair of Liquefied Natural Gas (LNG) fuel systems as used in Heavy Duty applications. The cryogenic aspects of fuel storage and delivery to the engine will be discussed in both Pilot and Spark Ignited applications. The proper safe handling of LNG fuel will also be emphasized and included in the instruction.

ATT 801 **2.0 units**
Quick Service Tech-Lubrication Service
36 hours lecture, 4 hours laboratory
Grading: pass/no pass

Formerly AMECH 801. Learning to be a Quick-Service Lubrication Technician is one of the fastest ways to a job in automotive technology. This one-week course prepares you to enter this field immediately with skills needed for an entry-level job doing oil changes, lubrication, under hood services and vehicle inspections. Job seeking skills are included. This course is also excellent for the do-it-yourselfer who wants to learn how professionals do a lubrication service.

ATT 802 **2.0 units**
Quick Service Tech-Tire Service
36 hours lecture, 4 hours laboratory
Grading: pass/no pass

Formerly AMECH 802. Learning to be a Quick Service Tire Technician is one of the fastest ways to a job in automotive technology. This course prepares you to enter this field immediately with skills needed for an entry-level job doing tire rotation, repair, replacement, balancing and vehicle inspections. Job seeking skills are included. This course is also excellent for the do-it-yourselfer who wants to learn how professionals do tire service.

ATT 803 **2.0 units**
Quick Service Tech-Brake Inspection
36 hours lecture, 4 hours laboratory
Grading: pass/no pass

Formerly AMECH 803. Learning to be a Quick Service Brake Inspection Technician is one of the fastest ways to a job in automotive technology. This one-week course prepares you to enter this field immediately with skills needed for an entry-level job doing brake safety inspections and vehicle inspections. Job seeking skills are included. This course is also excellent for the do-it-yourselfer who wants to learn how professionals do brake service.

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 **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.

Biology (BIO)

BIO 1A **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 **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

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: the pervasiveness of the ocean and its effect on weather, its contributions to the diversity of life forms and to the physical and historical development of humankind, its impact on geopolitical and economic matters, the impact of oceanic pollutants and the potential exploitation 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 a practical experience in a computerized tutorial setting. Experiments and

demonstrations are selected which clarify the principles developed in BIO 60. 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

Carpentry (CARP)

CARP 211 **10.0 units**

Carpentry 1

108 hours lecture, 234 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to the fundamentals of the building trades. Topics of instructions include: safety, building codes, construction mathematics, rough framing, residential concrete, residential concrete forms, blueprint reading, and technical information on materials and methods of residential construction. Practical instruction is given in the use of tools and materials through carpentry laboratory work. Students are required to attend 10 hours at the CTE Success Center for specially designed activities and assignments that relate to this course's content.

CARP 212 **10.0 units**

Carpentry 2

108 hours lecture, 234 hours laboratory

Prerequisite: CARP 211

Grading: letter grade or pass/no pass

This course will cover the topics of safety and rough framing. Rough framing includes mudsills and their placement, girder placement, foundation types including slab on grade and stemwall foundation, floor

joists, sub-flooring, wall framing systems, ceiling joists and roughing out stairs. Field trips and special projects will also be part of this course.

CARP 213 **10.0 units**

Carpentry 3

108 hours lecture, 234 hours laboratory

Prerequisite: CARP 211

Grading: letter grade or pass/no pass

This is an advanced course in Carpentry covering various residential construction trades. Topics of instructions include: safety, building codes, construction mathematics, rough framing, residential roof framing, exterior finishes, interior finishes, blueprint reading, and technical information on materials and methods of residential construction. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

CARP 219 **4.0 units**

Residential Roof Framing

36 hours lecture, 108 hours laboratory

Recommended Preparation: CARP 211

Grading: letter grade

This is an advanced course in Carpentry covering residential roof framing. Topics of instruction include roof structures, calculations and layout of various rafters, codes requirements, roof construction, and estimating. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

CARP 222 **4.0 units**

Residential Stairs

36 hours lecture, 108 hours laboratory

Recommended Preparation: CARP 211

Grading: letter grade

This is an advanced course in Carpentry covering residential stairs framing. Topics of instruction include stair design, calculation, layout, and construction. Practical instruction is given in the carpentry laboratory work.

CARP 225 **4.0 units**

Metal Framing

36 hours lecture, 108 hours laboratory

Recommended Preparation: CARP 211

Grading: letter grade

This course covers the fundamentals of residential light steel framing. Topics include: raised floor construction, wall framing, trussed roof fabrication and installation, applicable building codes and blueprint reading. The fundamentals are learned through laboratory work which requires the use of standard construction tools and materials.

CARP 227 **4.0 units**
Finish Carpentry
36 hours lecture, 108 hours laboratory
Recommended Preparation: CARP 211
Grading: letter grade

This is an advanced course in carpentry covering 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; interior design, estimating, and layout. Practical instruction is given in the carpentry laboratory.

CARP 230 **4.0 units**
Cost Estimating
72 hours lecture
Recommended Preparation: CARP 440
Grading: letter grade or pass/no pass

This course is designed for those individuals needing to produce accurate project estimates; topics will include interpretation of project information from a detailed blueprint and processing it into a final detailed estimate.

CARP 245 **3.0 units**
Contracting Laws and Management
54 hours lecture
Grading: letter grade

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.

CARP 311 **3.0 units**
Carpentry 1
29 hours lecture, 77 hours laboratory
Grading: letter grade or pass/no pass

This course is an introduction to the fundamentals of the building trades. Topics of instruction include safety, building codes, construction mathematics, rough framing, concrete formwork and placement, blueprint reading, and technical information on alternative "Green Technology" materials and methods of construction. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

CARP 312 **3.0 units**
Carpentry 2
29 hours lecture, 77 hours laboratory
Grading: letter grade or pass/no pass

This course will cover safety and rough framing and will include: mudsills and their placement, girder placement, floor joists, subflooring, wall framing systems, and ceiling joists.

CARP 313 **3.0 units**
Carpentry 3
29 hours lecture, 77 hours laboratory
Grading: letter grade or pass/no pass

This course is an introduction to the fundamentals of the building trades. Topics of instruction include safety, roof types, roof theory, exterior wall finish, interior finish, and stairway construction. Practical instruction is given in the use of tools and materials through carpentry laboratory work.

CARP 314 **3.0 units**
Carpentry 4
29 hours lecture, 77 hours laboratory
Grading: letter grade or pass/no pass

This is an advanced course in Carpentry covering residential foundation designs, form construction, and advanced wood frame construction. Topics of instruction include the installation of concrete forms, building layout, concrete placement, and Post and Beam Construction. Practical instruction is given in the carpentry laboratory.

CARP 415A **2.0 units**
Home Remodeling and Repair
 18 hours lecture, 54 hours laboratory
 Grading: letter grade or pass/no pass

This course focuses on home improvement projects and introduces the student to basic home remodeling. Topics will include safety, building codes, obtaining building permits, rough mechanical, trade related math, hand and power tools, techniques for installing or repairing plumbing fixtures, electrical repairs and upgrades, and energy saving concepts.

CARP 415B **2.0 units**
Home Remodeling and Repair
 18 hours lecture, 54 hours laboratory
 Prerequisite: CARP 415A
 Grading: letter grade or pass/no pass

This course focuses on home improvement projects and introduces the student to basic home remodeling. Topics will include safety, building codes, framing floor systems, framing walls with door and windows, trade related math, hand and power tools, framing various roof systems, and related construction hardware.

CARP 415C **2.0 units**
Home Remodeling and Repair
 18 hours lecture, 54 hours laboratory
 Prerequisite: CARP 415B
 Grading: letter grade or pass/no pass

This course in home remodeling covers interior sub-crafts. Topics of instruction include insulation, safety, drywall, finish carpentry, tile, estimating, and relevant codes. Practical instruction is given in the carpentry laboratory work.

CARP 415D **2.0 units**
Home Remodeling and Repair
 18 hours lecture, 54 hours laboratory
 Prerequisite: CARP 415C
 Grading: letter grade or pass/no pass

This course in home remodeling covers exterior sub-crafts. Topics of instruction include exterior flashing, safety, roofing, stucco, estimating, exterior siding, and relevant building codes. Practical instruction is given in the carpentry laboratory work.

CARP 440 **3.0 units**
Blueprint Reading for Construction Trade
 54 hours lecture
 Grading: letter grade or pass/no pass

This course introduces students to construction blueprint reading through a study of the fundamental skills and concepts involved in reading and interpreting drawings.

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 an 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 is a study of the educaring (education and care) of toddlers 18 to 36 months of age. Topics will include: the role of the adult in a center-based program, in family home care and parental care; an overview of child development theories pertinent to this age; and activities and methods which nurture the toddler's intellectual, language, emotional, social, personality and motor development. The course will also cover effective behavior management; laws and regulations (Title 22), program quality standards, group size and continuity of care, the role of the primary caregiver, culturally sensitive care; as well as early recognition and intervention for toddlers with special needs, and information about the health, nutrition and safety components of toddler care. This course meets the Department of Social Services Classification Indicator DS4.

Transferable to CSU

CDECE 45 **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 **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 **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 **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 **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

This course covers 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 **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 antibias 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 **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 **3.0 units**

Practicum D3

36 hours lecture, 72 hours laboratory
Prerequisite: CDLL 52 and CDECE 1 and CDECE 19 and CDECE 48 and CDECE 50 and CDECE 53 and CDECE 61 and CDECE 66
Grading: letter grade or pass/no pass

Under guided supervision, students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Reflective practice will be emphasized as student teachers design, implement, and evaluate approaches and strategies, and techniques that promote development and learning. There are 72 hours of lab experience over the course of the semester. Proof of current state mandated immunizations and negative TB status are required to participate.
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

CDESED 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

CDESED 69**3.0 units****Special Education Practicum**

36 hours lecture, 54 hours laboratory

Prerequisite: CDESED 67, 5, 70 and CDECE 45 or 47

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 are required to participate.

Transferable to CSU

CDESED 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****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**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 **5.0 units****Intro to Gen, Organic & Biochemistry**

72 hours lecture, 54 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 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 **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 student who already have credit for PHYS 4.

Transferable to UC or CSU; see counselor for limitations

CHEM 12A **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 one year course 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 **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 second semester of a one year course 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 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 3.0 units

Communications Cabling Installation

45 hours lecture, 27 hours laboratory

Grading: letter grade

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 3.0 units

Introduction to Networking

45 hours lecture, 27 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 3.0 units

Routing and Switching Essentials

45 hours lecture, 27 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 3.0 units

Scaling Networks

45 hours lecture, 27 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 **3.0 units**
Connecting Networks

45 hours lecture, 27 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 **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 **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 **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 cultural patterns, cultural rules of interaction, linguists, and nonverbal 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 50 **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 **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 201A **3.0 units**
Mathematics for the Trades
 54 hours lecture
 Grading: letter grade

This course covers a study of mathematics used in construction trades. Topics in arithmetic, fractions, decimals, percents, graphing, measurement and introduction to algebra are covered. This course is the same as ELECT 202.

CONST 201B **4.0 units**
Algebra and Trigonometry for the Trades
 72 hours lecture
 Prerequisite:
 MATH 805 or MATH 815 or CONST 201A
 Grading: letter grade

This course will present basic algebra and trigonometry and their application to the solution of practical problems in technical (mechanical, electrical, construction) fields.

CONST 203B **2.0 units**
OSHA Safety Standards for General Industry
 36 hours lecture
 Grading: pass/no pass

This course covers OSHA 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.

CONST 203C **2.0 units**
OSHA Safety and Health Regulations for Longshoring
 36 hours lecture
 Grading: pass/no pass

This course covers OSHA safety and health regulations for longshoring. Topics include scope and application of the OSHA safety standards in the maritime environment. 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 Maritime Industry Outreach Training Program Completion Card.

CONST 206 **3.0 units**
Workplace Competency Skills
 54 hours lecture
 Grading: letter grade

This is a course to prepare students with the necessary employment skills for a career in the construction industry. Topics covered will include core soft skills, including how to communicate effectively, become a

team player, resolve problems and conflicts, and succeed in a diverse and changing workforce. Students will learn vital workplace skills through designed exercises as well as how employers evaluate these skills in their employees. Employment tests, and job interviews will be covered.

CONST 207 **3.0 units**
Blueprint Reading for Construction
54 hours lecture
Grading: letter grade or pass/no pass

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 208 **1.0 unit**
Apprenticeship Exam Preparation
18 hours lecture
Grading: pass/no pass

This course is designed to assist the student in acquiring confidence and competency in the principles of test-taking for jobs in the construction industry. Practice employment tests, hands-on preparation for apprenticeship, civil service and other industry entrance examinations and job interviews will be covered.

CONST 210 **4.0 units**
Construction Technology Lab
36 hours lecture, 108 hours laboratory
Grading: letter grade

This course is designed to provide the student with hands-on learning experience of the fundamentals of the building and construction trades. The class will focus on safety while engaged in the use of proper tools and machinery to develop skills in: Carpentry, HVAC, Concrete, Plumbing, Sheet Metal, Electrical, Architecture, and Green construction.

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 **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. This course satisfies the technology portion 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. This course satisfies the technology portion of the information competency 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 IT project management. Popular project management software will be introduced. In addition, the class will focus on the methods and techniques for managing technology projects as well as preparing students for the CompTIA's IT Project+ certification.

COSA 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.

Computer & Office Studies, Keyboarding (COSK)

COSK 200 **3.0 units**

Beginning Keyboarding and Document Production

36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

Formerly CAOTT 200. Students in this course develop computer typing skills for business and personal use with emphasis on proper technique, speed, and accuracy. Students create correspondence, business reports, academic reports, tables, resumes, and other employment documents. This course satisfies the technology component of the Information Competency graduation requirement.

COSK 209 **1.0 unit**

Speed/Accuracy Bldg. for Typists

18 hours lecture, 18 hours laboratory

Recommended Preparation: COSK 200 or COSK 233

Grading: letter grade or pass/no pass

Formerly CAOTT 209AB and COSK 209AD. This intermediate-level course helps to increase computer keyboarding speed and accuracy. Students receive individual analysis, tips on improving their technique, and guided practice.

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.

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/Linux 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**
Introduction to Cloud Computing
54 hours lecture
Recommended Preparation: COSA 50
Grading: letter grade or pass/no pass
This course educates students about cloud deployment and service models, cloud infrastructure, and key considerations in migrating to cloud computing. The course covers technologies required to build classic, virtualized, and cloud data center environments. These technologies include computing, storage, networking, desktop, and application virtualization. Additional focus areas are security, recovery, and management. Students will learn about the steps involved and key considerations in transitioning from the current data center model to a cloud computing environment.

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.

Computer & Office Studies, Programming (COSP)

COSP 7**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.

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 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 Design (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, selfexploration, 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,ncareer 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 selfassessment 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 selfworth, 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 **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 **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 **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 **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 **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 **5.5 units****Intro to Culinary Skills & Principles**

45 hours lecture, 180 hours laboratory

Prerequisite: 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. Students will also be required to attend 5 hours of Culinary Math Supplemental Learning Assistance in the LAC Multidisciplinary Success Center, L212.

CULAR 211 **5.5 units****Intermed. Culinary Skills & Principles**

45 hours lecture, 180 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 **3.0 units****Vegetarian & Specialty Cuisine**

36 hours lecture, 72 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 allergybased 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) and CULAR 218 and CULAR 219

Corequisite: CULAR 222B

Grading: letter grade

This capstone course covers the fundamental principles of front- and back-of-house operations in a restaurant setting including: equipment and station set-up, cost control, inventory, menu development, Point of Sale (POS) system, dining room service, hospitality management, and marketing.

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) and CULAR 218 and CULAR 219

Corequisite: CULAR 222A

Grading: letter grade

This capstone course gives students real-time hands-on professional restaurant experience via LBCC's full-

service student-run Bistro. Rotating between the kitchen and dining room, students learn how to setup 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 20 and TB Clearance and (CULAR 202 or CULAR 213A)

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

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, savorys, 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, savorys, 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 and (CULAR 241 or CULAR 204)
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 41/1 **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 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 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

Diesel Mechanics (DIESL)

DIESL 281 **10.0 units**

Detroit Diesel Engines

90 hours lecture, 270 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to Detroit Diesel Engines. It covers the safety procedures, disassembly, problem evaluation, repair procedures, reassembly, engine testing, troubleshooting and tuning of the Detroit diesel engine. Students will be required to attend 10 hours in the CTE Success Center for specially designed activities and assignments that relate to this course content.

DIESL 282 **10.0 units**

Cummins Four Cycle Engine

90 hours lecture, 270 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to Cummins Four-Cycle Engines. It covers safety procedures, disassembly, problem evaluation, repair procedures, reassembly, engine testing, troubleshooting and tuning of the engine. Students will be required to attend 10 hours in the CTE Success Center for specially designed activities and assignments that relate to this course's content.

DIESL 283 **10.0 units**

Powered Systems

90 hours lecture, 270 hours laboratory

Prerequisite: DIESL 281 or 282

Grading: letter grade or pass/no pass

This course is an introduction to diesel powered systems required to support engines in a variety of applications. It covers the safety procedures, disassembly, component testing, troubleshooting and reassemble to factory standards.

DIESL 284 **10.0 units**

Highway Transport

90 hours lecture, 270 hours laboratory

Recommended Preparation: DIESL 282

Grading: letter grade or pass/no pass

This course covers safety, troubleshooting, and repair of all components that are used on heavy diesel trucks.

Maintenance of the total truck and service operations will be highlighted.

DIESEL 289 **10.0 units**

Caterpillar 3406 and 3116 Engine

90 hours lecture, 270 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to Caterpillar Four-Cycle Engines. It covers safety procedures, disassembly, problem evaluation, repair procedures, reassembly, engine testing, troubleshooting and tuning of the engine. Students will be required to attend 10 hours in the CTE Success Center for specially designed activities and assignments that relate to this course's content.

DIESEL 290 **10.0 units**

C.A.T. Transmissions and Final Drive

90 hours lecture, 270 hours laboratory

Grading: letter grade or pass/no pass

This course covers steering, clutches, brakes, transmissions and final drive units for Caterpillar heavy equipment intended for off-highway use.

DIESEL 291 **10.0 units**

C.A.T. Hydraulics

90 hours lecture, 270 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to Caterpillar hydraulics systems. It covers safety procedures, troubleshooting of hydraulic systems, problem evaluation and repair procedures on hydraulic pumps, valves and hydraulic equipment. Students will be required to attend 10 hours in the CTE Success Center for specially designed activities and assignments that relate to this course's content.

DIESEL 292 **10.0 units**

C.A.T. Chassis & Electrical

90 hours lecture, 270 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to Caterpillar off-highway and on-highway chassis and related components to support vehicles in a variety of powered system applications. It will include testing, analysis and repair of engines, vehicles and their components.

DIESEL 293 **4.0 units**

General Engines

54 hours lecture, 54 hours laboratory

Grading: letter grade

This course is an introduction to the operation and maintenance of various types of diesel and spark ignited engines. It will include fuel injection and fuel pump systems, governors, marine, special tools and testing equipment, and safety practices.

DIESEL 391A **3.0 units**

Hydraulics

36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to heavy equipment hydraulic systems required to support a variety of heavy diesel applications. Topics will include shop safety practices, industry terminology and testing, troubleshooting, analysis and repair of hydraulic components.

DIESEL 391B **5.0 units**

Heavy Equipment Electrical Systems

54 hours lecture, 108 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to Heavy equipment electrical systems required to support a variety of heavy diesel applications. Course topics will include the testing, troubleshooting, analysis and repair of electrical components required to support an array of diesel powered systems.

DIESEL 492 **3.0 units**

Air and Hydraulic Brakes

36 hours lecture, 54 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to the theory and fundamentals of air and hydraulic brake systems.

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

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 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 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 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 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

DMI 31 **3.0 units**

Positioning for Cranial Radiography

36 hours lecture, 54 hours laboratory

Prerequisite: DMI 30

Grading: letter grade

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 radiographic 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 51A **3.0 units**
Industrial Drafting I

36 hours lecture, 72 hours laboratory

Recommended Preparation: DRAFT 201

Grading: letter grade

This course will cover geometric tolerance dimensioning, orthographic projection, pictorial views, auxiliary views, sections, and intersections. Attention to machine and material shop processes will be practiced on all drawings. Basic freehand lettering, sketching and drawing instruments will be reviewed. Emphasis will be given to producing individualized and teamwork detail and assembly drawings.

Transferable to CSU

DRAFT 51B **3.0 units**
Industrial Drafting II

36 hours lecture, 72 hours laboratory

Prerequisite: DRAFT 51A

Grading: letter grade

This course 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

DRAFT 52A **3.0 units**
Advanced Industrial Drafting

36 hours lecture, 72 hours laboratory

Prerequisite: DRAFT 51B

Grading: letter grade

This course includes discussion, development, and implementation of the following types of drawings: welding, piping, electrical, structural, tools and dies, jig and fixture design. Applied math will be used in creating charts, graphs, and diagrams that require information for materials and heat treatment. Product design fundamentals will be identified, analyzed, refined, and implemented on all drawings.

Transferable to CSU

DRAFT 52B **3.0 units**
Descriptive Geometry

36 hours lecture, 72 hours laboratory

Prerequisite: DRAFT 52A

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 60 **3.0 units**
Geometric Dimensioning and Tolerancing

54 hours lecture
Recommended Preparation:
DRAFT 201 or DRAFT 51A
Grading: letter grade

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

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 202 **4.0 units**
AutoCAD I, Fundamentals

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

Formerly DRAFT 202AD. 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). CAD training will utilize the latest software technology, such as AutoCAD, in the Windows environment. This course continues to introduce CAD fundamentals as well as intermediate drawing techniques: 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 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 DRAFT 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
Prerequisite: DRAFT 203
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-linear 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 DRAFT 51A 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 DRAFT 51A 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 220 **3.0 units**
Introduction to CATIA

36 hours lecture, 72 hours laboratory
 Recommended Preparation:
 DRAFT 201 or DRAFT 51A 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.

DRAFT 221 **3.0 units**
Intermediate CATIA

36 hours lecture, 72 hours laboratory
 Recommended Preparation:
 DRAFT 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 DRAFT 51A 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 **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 **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 **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 **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 20 **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 200A **6.5 units**

First Semester Industrial Electricity

81 hours lecture, 108 hours laboratory

Prerequisite: ELECT 202

Grading: letter grade

This course is an introduction to direct current electrical theory. Covered are industry practices, application, study of nomenclature and components. Also covered are formulas used in electrical theory, information regarding proper use and selection of hand tools, and laboratory practices as performed in the electrical maintenance and construction industry.

ELECT 200B **8.0 units**

Second Semester Industrial Electricity

108 hours lecture, 108 hours laboratory

Prerequisite: ELECT 200A or ELECT 204

Grading: letter grade

This course covers operational theory and practices associated with motors and generators. Included are theory and lab work associated with motors, generators, motor controls and circuit diagrams, including wiring practices in the electrical maintenance and construction industry.

ELECT 200C **8.0 units**

Third Semester Industrial Electricity

108 hours lecture, 108 hours laboratory

Prerequisite:

ELECT 225 and ELECT 209 or ELECT 200B

Grading: letter grade

This course is an introduction to Alternating Current theory, practices and applications with studies of nomenclature and components. It is a course that requires previous Direct Current electrical coursework and math.

<p>ELECT 200D Fourth Semester Industrial Electricity 108 hours lecture, 108 hours laboratory Prerequisite: ELECT 200C or ELECT 212 Grading: letter grade</p>	8.0 units	<p>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.</p>
<p>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.</p>		<p>ELECT 210A 1.0 unit Laboratory Practices 1 54 hours laboratory Corequisite: ELECT 204 Grading: letter grade</p>
<p>ELECT 202 3.0 units Electrical Mathematics 54 hours lecture Grading: letter grade</p>		<p>This course covers laboratory work associated with the fundamentals of DC electricity, electromagnetism, series, parallel and combination circuits, wiring practice and hand tools.</p>
<p>A study of mathematics used in the electrical and construction trades. Topics in arithmetic, fractions, decimals, percents, graphing, measurement and introduction to algebra are covered. This course is the same as CONST 201A.</p>		<p>ELECT 210B 1.0 unit Laboratory Practices 2 54 hours laboratory Prerequisite: ELECT 210A or ELECT 200A Corequisite: ELECT 209 Grading: letter grade</p>
<p>ELECT 204 3.0 units First Semester Fundamentals of DC Electricity 54 hours lecture Prerequisite: ELECT 202 Corequisite: ELECT 210A Grading: letter grade</p>		<p>This course covers lab work associated with the fundamentals of DC electricity, DC principles and practices, as well as fundamentals of DC motors and generators and motor controls. Motors and generators are characterized and connected with various hard wired motor control circuits.</p>
<p>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.</p>		<p>ELECT 210C 1.0 unit Laboratory Practices 3 54 hours laboratory Prerequisite: ELECT 210B or ELECT 200B Corequisite: ELECT 212 Grading: letter grade</p>
<p>ELECT 209 3.0 units Second Sem. Fund of Motors/Generators 54 hours lecture Prerequisite: ELECT 200A or (ELECT 202 and ELECT 204). Grading: letter grade</p>		<p>This course includes lab work associated with the fundamentals of Alternating Current electricity. Alternating Current principles, practices and safe wiring practices with hand tools and instrumentation are included.</p>
		<p>ELECT 210D 1.0 unit Laboratory Practices 4 54 hours laboratory Prerequisite: ELECT 210C or ELECT 200C Grading: letter grade</p>

This course is designed to provide lab work activities that are associated with electrical measuring instruments, motors, transformers and electrical design.

ELECT 212 3.0 units

Third Semester Fund of AC Electricity

54 hours lecture

Prerequisite:

ELECT 225 and ELECT 209 or ELECT 200B

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.

ELECT 214 3.0 units

Fourth Semester AC Principles & Pract

54 hours lecture

Prerequisite: ELECT 212 or ELECT 200C

Recommended Preparation: 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.

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 226 3.0 units

Solid State Fundamentals for Electrician

45 hours lecture, 27 hours laboratory

Prerequisite: ELECT 200B or ELECT 209

Grading: letter grade

This course covers electronic theory and practice as applied in industrial applications. Topics include component identification, schematic diagrams, circuit testing and troubleshooting industrial equipment. Safety issues involving high voltage industrial electronics are covered.

ELECT 227 3.0 units

Variable Speed Drive Fundamentals

45 hours lecture, 27 hours laboratory

Prerequisite: ELECT 204 or ELECT 200A

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 3.0 units

Robotics Technology - Design

45 hours lecture, 27 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 3.0 units

Robotics Technology - Integration

45 hours lecture, 27 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 230C **3.0 units**
Robotics Technology - Applications
 45 hours lecture, 27 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 **3.0 units**
Electro-Hydraulics and Pneumatic Systems
 45 hours lecture, 27 hours laboratory
 Prerequisite: ELECT 435A
 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 200A or 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 245 or ELECT 250
 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 and (ELECT 209 or ELECT 200B)
 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 250 **3.0 units**
Electrical Code-Industrial
 54 hours lecture
 Prerequisite:
 ELECT 240 and (ELECT 209 or ELECT 200B)
 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 254 **2.0 units**
OSHA Standards for General Industry
36 hours lecture
Grading: letter grade

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.

ELECT 256 **1.0 unit**
High Voltage Safety Awareness
18 hours lecture
Prerequisite: ELECT 246
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 261 **3.0 units**
Introduction to Renewable Energy
54 hours lecture
Grading: letter grade

This course will introduce students to renewable energy sources (wind, solar, micro-hydro, geothermal et. al.) along with the advantages and disadvantages of each. Suitable use for each energy source will be discussed, as well as emerging technology, products, and programs available that allow builders and owners to take advantage of renewables.

ELECT 262 **3.0 units**
Solar 1-Grid-Tied Solar Photovoltaics
45 hours lecture, 27 hours laboratory
Prerequisite: ELECT 200B or 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 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 **0.5 unit**

Electrical Pipe Bending (A)

5 hours lecture, 13 hours laboratory

Grading: letter grade

This course is a study of how to properly calculate, layout and bend Electrical Metallic Tubing (EMT) per Industry standards and National Electrical Code (NEC) standards.

ELECT 276 **0.5 unit**

Electrical Pipe Bending (B)

5 hours lecture, 13 hours laboratory

Prerequisite: ELECT 275

Grading: letter grade

This course covers the proper methods to layout and bend rigid conduit. Methods taught include, hand bending and the use of mechanical and machine benders.

ELECT 277 **3.0 units**

Blueprint Reading for Electricians

54 hours lecture

Prerequisite: ELECT 212 or ELECT 200C

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 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**

Electric Motor Control 1

36 hours lecture, 18 hours laboratory

Prerequisite: ELECT 209 or ELECT 200B

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**
Electric Motor Control 2
36 hours lecture, 18 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 **3.0 units**
Emergency Medical Technician
54 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 **1.5 units**
Emergency Medical Technician Laboratory
81 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 **4.0 units**
Reading and Composition
72 hours lecture
Prerequisite:
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. Transferable to UC or CSU; see counselor for limitations

ENGL 1H 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 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 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 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 **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 **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 **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 **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 **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 **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 CSU

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, and critical reading through a highly intensive, accelerated format. 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.

ENGL 627 **0.0 unit**
Writing for Publication or Pleasure

54 hours lecture

Grading: LBCC Non-Graded Course

This course gives 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.

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

<p>ENGR 3B 3.0 units Engineering Graphics 36 hours lecture, 72 hours laboratory Prerequisite: ENGR 3A and MATH 40 Grading: letter grade</p>	<p>ENGR 17L 1.0 unit Electrical Engineering Circuits Lab 54 hours laboratory Prerequisite: ENGR 17 (may be taken concurrently) Grading: letter grade</p>
<p>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</p>	<p>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</p>
<p>ENGR 11 3.5 units Digital Logic Design 54 hours lecture, 36 hours laboratory Prerequisite: MATH 130 Grading: letter grade or pass/no pass</p>	<p>ENGR 35 3.0 units Statics 54 hours lecture Prerequisite: MATH 60 Corequisite: PHYS 3A Grading: letter grade</p>
<p>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</p>	<p>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</p>
<p>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</p>	<p>ENGR 50 1.0 unit Introduction to Engineering 18 hours lecture Grading: pass/no pass</p>
<p>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</p>	<p>This course is an introduction to engineering concepts from various branches of engineering. Transferable to UC or CSU; see counselor for limitations</p>
	<p>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</p>
	<p>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</p>

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: One semester of ESL 812

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.

ESL 147 **5.0 units****Comprehensive Grammar II**

90 hours lecture

Recommended Preparation: One semester of ESL 814

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.

ESL 270 **2.0 units****Intercultural Communication**

108 hours lecture

Prerequisite:

ESL 645 or one semester of ESL 845 or Qualification through the LBCC assessment process for ESL.

Grading: letter grade or pass/no pass

This course provides intermediate-level English learners with the skills needed to communicate effectively. American culture will be learned via role-playing activities, journal writings, interviews, readings, library/internet research, etc. Cross-cultural and intercultural differences will also be emphasized. Idiomatic language will be taught.

ESL 271 **2.0 units****Improving Fluency in Oral Communications**

108 hours lecture

Prerequisite:

ESL 645 or one semester of ESL 845 or Qualification through the LBCC assessment process for ESL.

Grading: letter grade or pass/no pass

An intermediate to advanced level communication course designed to develop fluency and confidence in spoken English, improve listening and pronunciation skills, teach common proverbs and idiomatic expressions used in Standard North American English, and provide practice in interpersonal communication skills.

ESL 272 **2.0 units****Communication for the World of Work**

108 hours lecture

Prerequisite:

ESL 645 or one semester of ESL 845 or Qualification through the LBCC assessment process for ESL.

Grading: letter grade or pass/no pass

An intermediate level communication course to aid ESL students who encounter job-related language difficulties. Cultural information, language for interviewing, job applications, understanding work-related policies and procedures will be taught. Idiomatic language related to the world of work will be emphasized.

ESL 273 **2.0 units****Intermediate Grammar**

108 hours lecture

Prerequisite:

ESL 645 or one semester of ESL 845 or Qualification through the LBCC assessment process for ESL.

Grading: letter grade or pass/no pass

An intermediate level ESL course which teaches grammatical concepts of the English language. Grammar is taught in a form-focused language-learning

activities with ample opportunity for communicative interaction.

ESL 274 **2.0 units**

Reading about the United States

108 hours lecture

Prerequisite:

ESL 645 or one semester of ESL 845 or Qualification through the LBCC assessment process for ESL.

Grading: letter grade or pass/no pass

This intermediate-level reading course acquaints ESL students with various cultural aspects of life in the United States. Students read and discuss narratives and general information articles from journals.

ESL 275 **2.0 units**

Writing for the World of Work

108 hours lecture

Prerequisite:

ESL 645 or one semester of ESL 845 or Qualification through the LBCC assessment process for ESL.

Grading: letter grade or pass/no pass

This course is an intermediate level course to help students who encounter writing difficulties on the job. Memos, faxes, cover letters, general business letters, resumes, punctuation, and autobiographies will be emphasized.

ESL 275X **2.0 units**

Writing for the World of Work

108 hours laboratory

Grading: letter grade or pass/no pass

A computer-assisted, intermediate-level writing course which helps ESL students who encounter writing difficulties on the job. Memos, cover letters, general business letters, resumes, punctuation, and autobiography will be taught.

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 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 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 812 **0.5 unit****Reading for Information and Pleasure**

27 hours lecture

Recommended Preparation: ESL 645 or ESL 845 or placement course recommendation for ESL 146.

Grading: pass/no pass

Formerly ESL 812AB. This course is designed to improve students' ability to extract essential information from academic passages of a variety of written English

material while building vocabulary, improving dictionary skills, and developing comprehension and critical reading skills.

ESL 813 **0.5 unit**

Conversation 2

27 hours lecture

Grading: pass/no pass

Formerly ESL 813AB. This course develops conversational competence and confidence in whole-class, small-group, and partner interactions. Emphasis is on the comprehension and evaluation of oral communications as students practice expressing opinions, feelings, ideas, and abstract concepts.

ESL 814 **0.5 unit**

Composition for ESL Students

27 hours lecture

Recommended Preparation: ESL 645 or ESL 845 or placement course recommendation for ESL 146.

Grading: pass/no pass

Formerly ESL 814AB. This course (Composition) offers intermediate level ESL students systematic instruction and practice in the construction of short connected series of sentences which state an opinion, describe a process, give information or instructions, or report an experience. This course provides instruction and practice in organizing ideas and in identifying and writing topic and support sentences.

ESL 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 818 **0.5 unit**

Vocabulary Development

27 hours lecture

Grading: pass/no pass

Formerly ESL 818AB. In this course, nonnative students prepare for academic success in institutions of higher learning by studying the general academic vocabulary encountered across college disciplines. Instruction focuses on incorporating vocabulary mastery strategies that stimulate students to become active lifelong learners of the North American English lexicon.

ESL 860 **5.0 units**

Reading & Vocabulary 1

90 hours lecture

Prerequisite: ESL147 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 extratextual 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.

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 896 **0.5 unit**
Writing Adjunct

4 hours lecture, 16 hours laboratory

Corequisite:

ENGL 1, ENGL 105, ENGL 801A or ENGL 801B

Grading: pass/no pass

Formerly EWRC 896AD. This course is a study of writing strategies that supplements ENGL 1, 105 and 801A-B, offering individualized instruction in all phases

of the writing process (planning, writing, revision, editing) and helps improve skills in the conventions of writing English: grammar, usage, punctuation, spelling and mechanics.

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 Fashion Merchandising
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

<p>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</p> <p>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</p>	<p>costume, its effects and relationships to political, social and economic conditions. Transferable to CSU</p>
<p>FD 27 1.5 units Production Sewing 18 hours lecture, 36 hours laboratory Recommended Preparation: FD 24 Grading: letter grade or pass/no pass</p> <p>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</p>	<p>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</p> <p>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</p>
<p>FD 29 2.0 units Tailoring 18 hours lecture, 54 hours laboratory Grading: letter grade or pass/no pass</p> <p>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</p>	<p>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</p> <p>This is an intermediate course in the manipulation of the basic blocks drafted for commercial dress forms or individual figure. Transferable to CSU</p>
<p>FD 32 3.0 units History of Fashion 54 hours lecture Grading: letter grade or pass/no pass</p> <p>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</p>	<p>FD 37A 1.5 units Pattern Draping I: Basic Sloper 18 hours lecture, 27 hours laboratory Grading: letter grade or pass/no pass</p> <p>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</p>
	<p>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</p> <p>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</p>

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 36A and FD 36B, FD 24 and one semester of FD 214.
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 37B and FD 24 and one semester of FD 214.
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

<p>FD 45A Computer Applications in Fashion 18 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>Formerly FD 245AD. This course is designed to teach students to effectively use a variety of computer word processing/illustration/design programs frequently used in the fashion industry: Microsoft Word, Microsoft PowerPoint and Adobe Illustrator. Transferable to CSU</p>	<p>1.5 units</p>	<p>directly related to the industry. Transferable to CSU</p>
<p>FD 45B Advanced Computer Fashion Illustration 18 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>This course is designed to teach students to effectively use computer Illustration/design programs to create line sheets, color ways, renderings, recolorations and graphic placements. Students will gain experience in using industry standard image editing software such as Adobe Illustrator and Photoshop. Transferable to CSU</p>	<p>1.5 units</p>	<p>FD 72 Work Experience-Fashion Design 149 hours laboratory Corequisite: Concurrent enrollment in at least one additional course in the discipline. Grading: letter grade or pass/no pass</p> <p>This course is Vocational learning experiences through employment (on-the-job, paid or non-paid) directly related to the industry. Transferable to CSU</p>
<p>FD 70 Work Experience Issues-Fashion Design 18 hours lecture Corequisite: Enrollment in FD 71, FD 72 or FD 73. NOTE: You must enroll in the corequisite course before enrolling in this course. Grading: letter grade or pass/no pass</p> <p>This course is a seminar related to work experience. Included is discussion of work experience objectives, career goals, employment search, communication skills and problem solving. Creation of resumes and cover letters will be covered and completed. Transferable to CSU</p>	<p>1.0 unit</p>	<p>FD 73 Work Experience-Fashion Design 225 hours laboratory Corequisite: Concurrent enrollment in at least one additional course in the discipline. Grading: letter grade or pass/no pass</p> <p>This course is Vocational learning experiences through employment (on-the-job, paid or non-paid) directly related to the industry. Transferable to CSU</p>
<p>FD 71 Work Experience-Fashion Design 74 hours laboratory Corequisite: Concurrent enrollment in at least one additional course in the discipline. Grading: letter grade or pass/no pass</p> <p>This course involves vocational learning experiences through employment (on-the-job, paid or non- paid)</p>	<p>1.0 unit</p>	<p>FD 200 Fashion Prediction/Promotion: Crit View 18 hours lecture Grading: letter grade or pass/no pass</p> <p>This course presents techniques for critical viewing of fashion prediction and promotion services including services which may include Video Fashion Monthly, Video Fashion News, National Association of Men's Sportswear Buyers, California Apparel News, Daily News Record, Fashion News Report and Ready to Wear Report.</p>
<p>FD 213 Textile Surface Design 9 hours lecture, 27 hours laboratory Grading: letter grade</p> <p>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.</p>	<p>1.0 unit</p>	

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 beginning sketch course focuses on the skills necessary for the fashion industry. Students will learn to draw all aspects of garments on the figure and in flat technical drawings using a croquis (template). Fabrics will be rendered in color using marker techniques. The updated fashion figure proportion will be covered. Students will focus on layout of line presentation boards.

FD 215 **2.0 units**
Fashion Sketching I
18 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

Formerly FD 215AB. This is a beginning drawing class for both design and merchandising students which 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 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 virtual portfolio and portfolio book to be presented on job interviews. The class emphasizes drawing the fashion figure, fabric rendering and digitally manipulating fabric prints, computerized flat technical drawings, and layout techniques for line presentation utilizing hand rendering techniques and a multimedia computer as a tool.

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

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.

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 film directors within the Film Industry. The class will deconstruct a film director's work (instructor's choice) throughout the course of the semester, focusing specifically on technical, thematic, ideological, socio-cultural, and political similarities that span the director's career. Students will be expected to articulate specific insights of director's work through essay writing 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

This course will outline the components of fire protection, and career opportunities in the fire protection and suppression fields. It will introduce the philosophy and history of fire protection and analyze the effects of fire losses to the community. The course will address the organization and functions of public and private fire protection services and will address fire departments as part of local governments including the laws and regulations affecting the fire service. This course will introduce students to fire service nomenclature, specific fire protection functions, and the culture of the fire service. This course will introduce students to 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. 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.

Forklift (FORK)

FORK 801 **1.0 unit**

Forklift Safety and Operation

14 hours lecture, 11 hours laboratory

Grading: pass/no pass

This course will cover the of safety and operation of the forklift, including basic lifting principles, load rating, stability and operation techniques.

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 **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.

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 230 **2.0 units**
Clinical Field Experience I
18 hours lecture, 90 hours laboratory
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-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 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 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 dietetics.

F_N 240 **2.0 units**
Clinical Field Experience II
180 hours laboratory
Recommended Preparation:
Two semesters of F_N 230
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.

<p>F_N 250 2.0 units Nutrition for Culinary Arts 36 hours lecture Grading: letter grade or pass/no pass</p> <p>This course provides a practical approach to the application of sound nutritional practices in the food service setting. Culinary arts students and professionals will be able to incorporate healthful nutritional 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.</p>	<p>F_N 255C 1.0 unit Nutrition for Adults and Aging 18 hours lecture Grading: letter grade or pass/no pass</p> <p>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.</p>
<p>F_N 252A 1.5 units Cake Decorating Techniques 18 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>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.</p>	<p>F_N 255D 1.0 unit Vegetarian Lifestyle 18 hours lecture Grading: letter grade or pass/no pass</p> <p>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.</p>
<p>F_N 252B 1.5 units Cake Decorating for Special Occasions 18 hours lecture, 36 hours laboratory Grading: letter grade</p> <p>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.</p>	<p>F_N 256 2.0 units Weight Control & Energy Balance 36 hours lecture Grading: letter grade or pass/no pass</p> <p>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.</p>
<p>F_N 253 1.0 unit Food Handler Certification 18 hours lecture Grading: letter grade or pass/no pass</p> <p>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 receive a Food Handler Certificate after passing the food handler exam given at the conclusion of the course. This Certificate required for those working in a food service establishments and meets the California State Health Code.</p>	<p>F_N 260 1.0 unit Cultural Foods 18 hours lecture, 18 hours laboratory Grading: letter grade or pass/no pass</p> <p>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.</p>
	<p>F_N 261 1.0 unit Cooking for Wellness 18 hours lecture, 18 hours laboratory Grading: letter grade or pass/no pass</p>

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 **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 **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**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**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**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****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 **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 on eday, 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 **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 CSU

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**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**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 **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 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 **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 **3.0 units**
Honors History/Early America
 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 **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 precolonial 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 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 **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**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**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**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**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 10A **4.0 units**

Greenhouse Management and Operation

36 hours lecture, 108 hours laboratory

Grading: letter grade or pass/no pass

This course will focus on the study of greenhouse structures and operation. Topics will include heating and cooling systems, humidity and watering systems, propagation systems and controls, proper soil mix, fertilizer and injector systems, propagation methods, transplanting, shifting of nursery stock, quality and inventory control, wholesale and retail sales, shipping practices and credit management equal to industry standards. Automation, mechanization and other labor saving equipment and procedures will be discussed. This course also includes field trips.

Transferable to CSU

HORT 10B **4.0 units**

Greenhouse Management and Operation

36 hours lecture, 108 hours laboratory

Grading: letter grade or pass/no pass

This course will focus on the study of greenhouse structures and operation. Topics will include heating and cooling systems, humidity and watering systems, propagation systems and controls, proper soil mix, fertilizer and injector systems, propagation methods, transplanting, shifting of nursery stock, quality and inventory control, wholesale and retail sales, shipping practices and credit management equal to industry standards. Automation, mechanization and other labor saving equipment and procedures will be discussed. This course also includes field trips.

Transferable to CSU

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, masonry, 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. This course is required for both CAADE and 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, with heavy emphasis on the Cognitive Behavioral Therapy Model. 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. It 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 45 is required for persons seeking CAADAC certification. This course is an elective for CAADE students. It is also 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 **3.0 units**

Fieldwork in Human Services (A)

54 hours lecture

Prerequisite: HS 50 and HS 43

Recommended Preparation: ENGL 105

Grading: letter grade

Formerly HS 72AD. This course covers topics including student role and responsibilities in social service agencies, professional role model, and desirable traits in the human services field. Ethics and ethical dilemmas will be discussed. 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 preapproved work site as out of classroom assignments. The purpose of this course is to prepare students for meeting the State certification requirement of supervised fieldwork experience.

Transferable to CSU

HS 72B **3.0 units**

Fieldwork in Human Services (B)

54 hours lecture

Prerequisite: HS 72A

Grading: letter grade

Formerly HS 73AD. This is the second course which further addresses topics relating to fieldwork in social services agencies. Specific topics include professional boundaries, client expectations, interpersonal conflicts in the workplace and cultural diversity. Emphasis will be placed on setting and achieving extended fieldwork objectives and how to solve issues and problems professionally in the workplace. This course also requires students to participate in 125 hours of supervised fieldwork and achieve three work-related objectives at a pre-approved work site as assignments. The purpose of this course is to advance students' professionalism, to increase the opportunity of meeting the State certification requirement of supervised fieldwork experience, and to prepare students for passing the California Association of Alcohol & Drug Educators (CAADE) certification test.

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 nonviolent, 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, SOCS 1, or SOCS 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 multicultural nature of American society from a Humanities and Social Sciences perspective. The course examines how ethnic groups in America have constructed artistic, literary, musical, philosophical and religious identities based on their traditions and experiences and seeks to understand

the United States as a common culture. Using the Social Sciences to compare and contrast the origins, living conditions and experiences of America's constituent populations, the course analyzes the complexity of the processes effecting the interaction of the American people. Not open to students registered in or with credit in SOCS 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 macroenvironment and orients students toward a career in the field of international business. Topics covered include economic variables, cultural differences, political risk, regional trade agreements, foreign direct investment, and exchange rates.

Transferable to CSU

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

Interior Design (ID)

ID 1 **3.0 units**
Fundamentals of Interior Design
54 hours lecture
Grading: letter grade or pass/no pass

Fundamentals of Interior Design provides an introduction to the design principles and elements necessary for the planning of interior environments that meet individual, functional, legal and environmental needs. The application of design materials and products used in interior environments will be emphasized.
Transferable to CSU

ID 20 **2.0 units**
Interior Design Careers
36 hours lecture
Grading: letter grade or pass/no pass

This course will provide a survey of the interior design profession, industry, related occupations and work sites.

This course will emphasize personal, educational and professional qualifications required for entry into the interior design profession.
Transferable to CSU

ID 30 **4.0 units**
Applied Color Theory and Design
54 hours lecture, 54 hours laboratory
Grading: letter grade or pass/no pass

This course provides review of basic color and design theory and design application. The review of color theories includes Munsell, Albers, Itten and Ostwald. Interior color exercises are applied to an interior design project. This course also explores psychological implications of design and color forecasting trends.
Transferable to CSU

ID 40 **3.0 units**
Advanced CAD for Interior Design
36 hours lecture, 54 hours laboratory
Prerequisite: ID 10
Grading: letter grade

The CAD for Interior Design course will focus on learning the principles and methods of computer graphic applications utilizing CAD. Projects will include computer drafting, a small set of construction documents.
Transferable to CSU

ID 45 **2.0 units**
Codes, Systems & Specifications
18 hours lecture, 54 hours laboratory
Grading: letter grade

The course will study both national and local building codes as they apply to Interior Design (ID). Survey implications of typical building systems, acoustical, energy conservation, accessibility and safety concerns influencing ID solutions. Both drafted plans and written specifications will be required to resolve assigned case studies.
Transferable to CSU

ID 55 **3.0 units**
Digital Illustration
18 hours lecture, 54 hours laboratory
Grading: letter grade

Exploration of computer aided rendering and image manipulation techniques of 3D objects and interior spaces. Will include techniques for visual composition and presentation using the processes, technology and terminology of digital media software utilized by the design industry.

Transferable to CSU

ID 272 **1.0 unit**
Residential Furnishings
 18 hours lecture
 Grading: letter grade or pass/no pass

This course provides a practical analysis of furniture design for the residential space. Consideration of furniture function, social use, case studies, design theory and fabrication will be observed. The construction of upholstered furniture and case goods will be evaluated for quality standards. Current trends in interior furniture will be discussed.

Foreign Language, Italian (ITAL)

ITAL 1 **5.0 units**
Elementary Italian
 90 hours lecture, 18 hours laboratory
 Grading: letter grade or pass/no pass

This course 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. The ITAL 1 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 a continuation of the study of basic Italian 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

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 **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 **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 **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 71 **2.0 units**
Work Experience- Journalism

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 JOURN 71AD. This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment or volunteer time directly related to occupational goal or career of interest to the student.

Transferable to CSU

JOURN 72 **3.0 units**
Work Experience- Journalism

18 hours lecture, 149 hours laboratory

Corequisite: Concurrent enrollment in at least one additional course in the discipline.

Grading: letter grade or pass/no pass

Formerly JOURN 72AD. This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/volunteer time directly related to occupational goal or career of interest to the student.

Transferable to CSU

JOURN 73 **4.0 units**
Work Experience- Journalism

18 hours lecture, 225 hours laboratory

Corequisite: Concurrent enrollment in at least one additional course in the discipline.

Grading: letter grade or pass/no pass

Formerly JOURN 73AD. This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment and volunteer time

directly related to occupational goal or career of interest to the student.

Transferable to CSU

JOURN 80 **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

<p>KING 55 4.0 units Lifeguard/Water Safety Training 54 hours lecture, 54 hours laboratory Recommended Preparation: Advanced swimming ability Grading: letter grade</p>	<p>Transferable to UC or CSU; see counselor for limitations</p>
<p>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</p>	<p>KING 66 1.0 unit Self-Defense 54 hours laboratory Grading: letter grade</p> <p>Formerly KING 66AD. The 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</p>
<p>KING 65 1.0 unit Martial Arts 54 hours laboratory Grading: letter grade</p>	<p>KING 66B 1.0 unit Self Defense 54 hours laboratory Recommended Preparation: KING 66 Grading: letter grade or pass/no pass</p>
<p>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</p>	<p>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</p>
<p>KING 65B 1.0 unit Martial Arts 54 hours laboratory Recommended Preparation: KING 65 Grading: letter grade or pass/no pass</p>	<p>KING 70 1.0 unit Soccer 54 hours laboratory Grading: letter grade</p>
<p>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.</p>	<p>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</p> <p>KING 70B 1.0 unit Soccer 54 hours laboratory Recommended Preparation: KING 70 Grading: letter grade or pass/no pass</p> <p>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.</p>

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 course is designed to provide instruction in the fundamentals of softball including strategy, rules, and the skills of throwing, hitting and catching.

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 course provides instruction in the basic skills needed to play sand volleyball. Students will learn strategies, rules and etiquette for sand volleyball with an emphasis on individual skills, doubles and six versus six team play.

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 requirement for a physical education activity and meets the state intercollegiate requirement for conditioning in preparation for competition.

Transferable to UC or CSU; see counselor for limitations

KINIA 2AD 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 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 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. 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 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

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 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 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 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 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 21AD **3.0 units**
Volleyball (Men)
180 hours laboratory
Recommended Preparation:
Enroll by Instructor Consent
Grading: letter grade

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 coach 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 CSU

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**
Dance Aerobics
54 hours laboratory
Grading: letter grade

Formerly KINPF 6AD. The course will cover the development of strength, muscular endurance, cardiovascular endurance, flexibility, coordination and balance. This will be accomplished by utilizing various cross training activities, calisthenics and dance aerobic movement.
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

Formerly KINPF 10AD. 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 Stretch & Relaxation	1.0 unit	Transferable to UC or CSU; see counselor for limitations
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 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 12 Core Conditioning	1.0 unit	Transferable to UC or CSU; see counselor for limitations
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 Core Conditioning	1.0 unit	Transferable to UC or CSU; see counselor for limitations
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 Yoga	1.0 unit	Transferable to UC or CSU; see counselor for limitations
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.		
KINPF 17 Jogging	1.0 unit	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 Jogging	1.0 unit	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 Triathlon Training	1.0 unit	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**
Power Lifting
 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 the three Power Lifts and two Olympic Lifts. The class is co-educational but is designed for students who have an interest in this specialized weight lifting genre. Students will be instructed how to perform the bench press, squat, and dead lift which considered the three base Power Lifts. Proper technique will be a major emphasis with a high importance placed on students lifting weight totals that are within a safe capacity of their individual limits. In addition, the performance of the two Olympic Lifts, the snatch and the clean and jerk will be covered. Students will work cooperatively in small groups and will be placed together according to each's level of expertise and strength capacity.

Transferable to UC or CSU; see counselor for limitations

KINPF 53B **1.0 unit**
Power Lifting
 54 hours laboratory
 Recommended Preparation: KINPF 53
 Grading: letter grade or pass/no pass

This course provides continued study of and practice in power lifting. Topics that will be examined are bench

press, squat, and dead lift with proper technique as a major emphasis.

Transferable to UC or CSU; see counselor for limitations

KINPF 54 **1.0 unit**
Weight Training
 54 hours laboratory
 Grading: letter grade

Formerly KINPF 54AD. 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. 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 CSU

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 **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 subdisciplines 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 and practice in officiating intramural, college, and high school Fall/Winter sports. This course is open to all and is designed for students seeking professional preparation to be able to teach, coach and/or officiate fall/winter sports. Students will participate as actual game officials during intramural competition.
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 and practice in officiating intramural college and high school Winter/Spring sports. This course is open to all and is designed for students seeking professional preparation to be able to officiate Winter/Spring sports. Students will participate as actual game officials during intramural competition.
Transferable to UC or CSU; see counselor for limitations

KINPP 23 **3.0 units**
First Aid and Safety
54 hours lecture
Grading: letter grade

Formerly PEPP 23. 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 200 **3.0 units**
Introduction to Therapeutic Massage

36 hours lecture, 54 hours laboratory

Grading: letter grade

This foundation course introduces students to the history, science and practice of massage therapy. This course provides students theoretical, practical and preliminary experience in massage therapy. Topics include basic anatomy and physiology as they relate to massage therapy, as well as professional standards expected of massage therapists. Students practice giving massages using beginning strokes and proper sanitation, hygiene, and body mechanics.

KINPP 201 **3.0 units**
Therapeutic Massage II

36 hours lecture, 54 hours laboratory

Grading: letter grade

This course focuses on massage applications with therapeutic and rehabilitative techniques. Students will analyze and evaluate anatomical structures and assess common pathology. The course includes intermediate massage theory, methods and procedures of soft tissue techniques, and contraindications. Applications introduced include deep tissue, postural realignment, craniosacral motion and aromatherapy. Special attention is given to palpatory skills.

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 205 **3.0 units****Integrative Therapeutic Massage**

45 hours lecture, 45 hours laboratory

Prerequisite: KINPP 201

Grading: letter grade

This course covers traditional Chinese medicine and massage for special populations. Theories of mind/body connection drawn from recent scientific research will be incorporated with Shiatsu, Tai Chi, Tuina, acupuncture and other Asian bodywork therapies. Students will develop treatment plans and perform indicated techniques for selected special populations, such as prenatal, geriatric, HIV/AIDS, and cancer.

KINPP 207 **4.0 units****Massage and Bodywork Clinical Practicum**

54 hours lecture, 54 hours laboratory

Prerequisite: KINPP 201

Grading: letter grade

This course provides the clinical practice for massage therapy. Students receive the practical experience of giving a professional massage, while working with the public, under supervision of the instructor. Students will focus on advanced therapeutic massage techniques, business practices, massage marketing, ethics, and clinic procedures for the massage experience.

KINPP 211 **1.0 unit****Chair Massage**

18 hours lecture, 18 hours laboratory

Prerequisite: KINPP 201

Grading: letter grade

This course will focus on the techniques and practice of chair massage. Topics include physiological effects, related anatomy, contraindications, body mechanics, ethics, hygiene and sanitation standards.

KINPP 213 **2.0 units****Sports Massage**

18 hours lecture, 54 hours laboratory

Prerequisite: KINPP 201

Grading: letter grade

This course specifically covers massage techniques and evaluation procedures for providing massage to athletes. Focus will be on anatomy and sport as it relates to muscle movement, common sports injuries, basic

postural analysis, contraindications, and sport massage techniques.

KINPP 230 **3.0 units****Fieldwork Observation in Kinesiology**

36 hours lecture, 54 hours laboratory

Prerequisite: KINPP 70B

Grading: letter grade

This course is designed to provide students in the Kinesiology Major with practical experience in the field of kinesiology. Students will be expected to participate in a minimum number of hours in a supervised fieldwork setting. Emphasis is placed on, but not limited to, client 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** **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
Business Law
54 hours lecture
Grading: letter grade

3.0 units

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
Property Law
54 hours lecture
Grading: letter grade

3.0 units

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
Learning and Academic Strategies
54 hours lecture
Grading: letter grade

3.0 units

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
Honors Learning and Academic Strategies
54 hours lecture
Prerequisite: Qualification for the Honors Program.
Grading: letter grade

3.0 units

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
Basic Study Skills Laboratory
54 hours laboratory
Grading: LBCC Non-Graded Course

0.0 unit

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
Supervised Tutoring
18 hours laboratory
Corequisite: Concurrent enrollment in an LBCC course.
Grading: LBCC Non-Graded Course

0.0 unit

This course is designed to provide students with individual and smallgroup 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 201**3.0 units****Introduction to Cataloging**

54 hours lecture

Prerequisite: LIB 3

Grading: letter grade or pass/no pass

This course is designed to teach students the valuable skills necessary to become qualified technicians. Topics will include: 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 202**3.0 units****Introduction to Access Services**

54 hours lecture

Prerequisite: LIB 3

Grading: letter grade or pass/no pass

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 203 **3.0 units**

Introduction to Acquisitions

54 hours lecture

Prerequisite: LIB 3

Grading: letter grade or pass/no pass

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 204 **3.0 units**

Introduction to Reference Services

54 hours lecture

Prerequisite: LIB 3

Grading: letter grade or pass/no pass

This course is designed to teach students the valuable skills necessary to become qualified library technicians. This course introduces students to widely used print, non-print, electronic and online sources in a variety of settings, and develops question-negotiation reference skills and search strategies. The topics will include the information needs of library users and the students will be empowered to function competently in the Information Age.

Linguistics

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 284A **2.0 units**
Medical Assisting Clinical Practicum
 108 hours laboratory
 Prerequisite: MA 280
 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 clinical aspects of Medical Assisting. This course is typically offered for eight weeks.

MA 284B **2.0 units**
Med Asst Administrative Practicum
 108 hours laboratory
 Prerequisite: MA 270
 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 aspects of Medical Assisting. This course is typically offered for eight weeks.

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 50 **3.0 units**
Machine Tool Operations
 36 hours lecture, 72 hours laboratory
 Grading: letter grade

Introduction to the basic principles and operation of machine tools with a focus on bench operations, drilling, mills, lathes, and grinding machines, progressing from conventional machine tools to computer automated machine tools. Standard industry practices and tool set-ups will be emphasized and applied. In order to assist students with the challenges of the course content, students may be required to complete 3 hours of Supplemental Learning Assistance activities in a Multidisciplinary Success Center over the course of the semester.

Transferable to CSU

MACHT 201
Machine Tool Math
54 hours lecture
Grading: letter grade

3.0 units

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.

MACHT 202
CNC Programming

36 hours lecture, 72 hours laboratory
Grading: letter grade

3.0 units

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.

MACHT 203
Numerical Control Graphics Programming

36 hours lecture, 72 hours laboratory
Grading: letter grade

3.0 units

This course covers 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 using interactive graphics computer systems.

MACHT 204
3D CNC Graphics Programming

36 hours lecture, 72 hours laboratory
Grading: letter grade

3.0 units

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.

Mathematics (MATH)

MATH 21A
Statistics Pathway A

90 hours lecture
Prerequisite: MATH 815
Grading: letter grade

5.0 units

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
Statistics Pathway B

90 hours lecture
Prerequisite: MATH 21A
Grading: letter grade

5.0 units

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 CSU

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 **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 **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.

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
Essentials of Marketing
54 hours lecture
Grading: letter grade

3.0 units

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
Introduction to Metalworking
54 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

4.0 units

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
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

3.0 units

This course covers the integration of engineering technology principles and automation in manufacturing environments. Students will create threedimensional 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
Basic Metal Layout and Fabrication
54 hours lecture, 72 hours laboratory
Grading: letter grade or pass/no pass

4.0 units

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 the CTE Success Center for specially designed activities and assignments that relate to this course’s content.

MTFAB 220B
Advanced Metal Layout and Fabrication
54 hours lecture, 72 hours laboratory
Corequisite: MTFAB 220A or MTFAB 50
Grading: letter grade or pass/no pass

4.0 units

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 the CTE 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

Corequisite: 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

Corequisite: 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 nonferrous 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 **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 **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 **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 **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 **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 **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 **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 **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 **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 **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 **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 cappella, 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 **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 **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 **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 **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 nonrelated 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, sightreading, 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, sightreading, expanded chord progressions and harmonization skills are encountered in intermediate piano music.

Transferable to UC or CSU; see counselor for limitations

MUSIC 51D 3.0 units

Intermediate Piano II

54 hours lecture

Prerequisite: MUSIC 51C

Grading: letter grade or pass/no pass

This course will allow students to refine and develop intermediate keyboard skills. Piano technique, harmonization techniques, ensemble skills, and stylistic considerations are encountered in upperintermediate piano repertoire.

Transferable to CSU

MUSIC 54AD 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

<p>MUSIC 55 2.5 units Guitar 36 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p>	<p>Transferable to UC or CSU; see counselor for limitations</p>
<p>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</p>	
<p>MUSIC 56 2.5 units Intermediate Guitar 36 hours lecture, 36 hours laboratory Prerequisite: MUSIC 55AD Grading: letter grade or pass/no pass</p>	<p>MUSIC 60 2.5 units Pro Tools (Digital Audio Recording/Edit) 36 hours lecture, 36 hours laboratory Grading: letter grade</p>
<p>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</p>	<p>Formerly MUSIC 60AD. 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</p>
<p>MUSIC 57AD 1.5 units Jazz Combos 90 hours laboratory Grading: letter grade or pass/no pass</p>	<p>MUSIC 68 3.0 units Basic Audio Theory 54 hours lecture Grading: letter grade or pass/no pass</p>
<p>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</p>	<p>This course is an introduction to the theoretical and practical aspects of sound, recording studio and live sound reinforcement technology. Transferable to CSU</p>
<p>MUSIC 58 1.5 units College Philharmonia 90 hours laboratory Recommended Preparation: Prior successful orchestral experience Grading: letter grade or pass/no pass</p>	<p>MUSIC 71 2.5 units Introduction to Music Technology 36 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p>
<p>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.</p>	<p>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</p>
	<p>MUSIC 89 3.0 units History of Rock 54 hours lecture Grading: letter grade or pass/no pass</p>
	<p>The History of Rock Music will be treated as a chronological study. This allows for brief overviews of</p>

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 **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

MUSIC 98A **1.5 units**
EXP: Jazz Ensemble

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. This will be expected of all enrolled students.

Transferable to CSU

MUSIC 98B **1.5 units**
EXP: 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. The Jazz Combos perform 1- 2 times each semester. This will be expected of all enrolled students.

Transferable to CSU

MUSIC 98C **0.5 unit**
EXP: Adv. Applied Vocal & Instrumental Music

36 hours laboratory

Grading: letter grade

This course continues the skills and outcomes of MUSIC 17A 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. Students will participate in rehearsal and concert performances outside of regular class meetings.

Transferable to CSU

Geography, Physical (PGEOG)

PGEOG 1 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 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 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 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 **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 **3.0 units**
Introduction to Philosophy
54 hours lecture
Grading: letter grade or pass/no pass

This introductory philosophy course explores perennial questions in philosophy. It surveys a number of the main areas within philosophy including metaphysics, epistemology, and ethics, with an emphasis on critical thinking and philosophical analysis.
Transferable to UC or CSU; see counselor for limitations

PHIL 6H **3.0 units**
Honors Introduction to Philosophy
54 hours lecture
Prerequisite: Qualification for the Honors Program
Grading: letter grade or pass/no pass

This introductory philosophy course explores perennial questions in philosophy at an honors level. It surveys a number of the main areas within philosophy including metaphysics, epistemology, and ethics, with an emphasis on critical thinking and philosophical analysis.
Transferable to UC or CSU; see counselor for limitations

PHIL 7 **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 **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 **3.0 units****Symbolic Logic**

54 hours lecture

Grading: letter grade

This course is an introduction to the formal techniques of evaluating arguments. The emphasis is on developing symbolic techniques, including sentential and quantificational, for representing and evaluating ordinary language arguments.

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**

Basic Photography-Black and White

36 hours lecture, 108 hours laboratory

Grading: letter grade or pass/no pass

This course is an introduction to the breadth of 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; 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 class is a comprehensive course to give the advanced student in photography an opportunity to develop a professional portfolio. Students will work with the instructor to develop a set of assignments appropriate for their career goals. Emphasis is also placed on digital asset management skills such as: metadata, storage and organization of a digitized photographic archive.
Transferable to CSU

PHOT 42 **4.0 units**
Experimental Photography Laboratory
36 hours lecture, 108 hours laboratory
Prerequisite: PHOT 32 or ART 81 or PHOT 31
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 71 **2.0 units**

Work Experience - Photography

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

This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/volunteer time directly related to photography. One unit of field work credit will be granted for every 75 hours of paid work or 60 hours of volunteer work per semester. This class includes 1 unit of field work.

Transferable to CSU

PHOT 72 **3.0 units**

Work Experience - Photography

18 hours lecture, 149 hours laboratory

Corequisite: Concurrent enrollment in at least one additional course in the discipline.

Grading: letter grade or pass/no pass

This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/volunteer time directly related to photography. One unit of field work credit will be granted for every 75 hours of paid work or 60 hours of volunteer work per semester. This class includes 2 units of field work.

Transferable to CSU

PHOT 73 **4.0 units**

Work Experience - Photography

18 hours lecture, 225 hours laboratory

Corequisite: Concurrent enrollment in at least one additional course in the discipline.

Grading: letter grade or pass/no pass

This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/volunteer time directly related to photography. One unit of field work credit will be granted for every 75 hours of paid work or 60 hours of volunteer work per semester. This class includes 3 units of field work.

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 **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 **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 **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
 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 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 in CHEM 4. Transferable to UC or CSU; see counselor for limitations

Physiology (PHYSI)**PHYSI 1****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 prenursing, 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****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**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**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**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 **3.0 units**

World Politics

54 hours lecture

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 4H **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 **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 **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 **3.0 units**
Introduction to Psychology
54 hours lecture
Grading: letter grade or pass/no pass

This course is an introduction to scientific exploration of human psychology and behavior. The course includes a survey of the historical, physiological, and social influences on behavior, emphasizing development, learning, motivation, perception, cognition, mental health, individual and cultural differences, as well as the causes of, treatments for, and prevention of mental disorders.

Transferable to UC or CSU; see counselor for limitations

PSYCH 1H **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 field of psychological science through consideration of such topics as human development, motivation, emotion, intelligence, learning, thinking, perception, personality, and social relations. It looks at individual differences, including the continuum from optimal functioning

to mental disorder. This course includes additional assignments not required in PSYCH 1.
Transferable to UC or CSU; see counselor for limitations

PSYCH 2 **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 **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 **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: 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 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: Reading proficiency met through the LBCC assessment process or successful completion of READ 82 or READ 83.

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 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.

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 entrylevel 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

<p>R_TV 8 2.5 units Introduction to Media Production 36 hours lecture, 36 hours laboratory Grading: letter grade</p> <p>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</p>	<p>lighting, audio and the environment. Issues related to acquisition format, such as film versus tape and analog versus digital, will be explored. Students will shoot projects in the field as “standalone” productions and as elements for edited productions. Editing will be covered as it relates to field production. Transferable to CSU</p>
<p>R_TV 12 2.5 units Television Lighting 36 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>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</p>	<p>R_TV 15 2.5 units Advanced Television Production 36 hours lecture, 36 hours laboratory Recommended Preparation: Audition Grading: letter grade</p> <p>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</p>
<p>R_TV 13 2.5 units Television Production 36 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>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</p>	<p>R_TV 21 3.0 units Radio Production 54 hours lecture, 18 hours laboratory Grading: letter grade</p> <p>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</p>
<p>R_TV 14 2.5 units Electronic Field Production 36 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>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,</p>	<p>R_TV 25 2.5 units Radio Activity 36 hours lecture, 36 hours laboratory Grading: letter grade or pass/no pass</p> <p>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</p>

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 14AD
Grading: letter grade or pass/no pass

Formerly R_TV 34AD. This course provides an in depth exam of the components necessary to produce a music video, including completion of a camera ready production proposal and a script of selected projects. Selected projects may be produced.
Transferable to CSU

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 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 71 **2.0 units**

Work Experience: Radio and Television

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 R_TV 71AD. This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/volunteer time in radio, television, film, or multimedia directly related to an occupational goal or career of interest to the student.

Transferable to CSU

R_TV 72 **3.0 units**

Work Experience: Radio and Television

18 hours lecture, 149 hours laboratory

Corequisite: Concurrent enrollment in at least one additional course in the discipline.

Grading: letter grade or pass/no pass

Formerly R_TV 72AD. This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational learning experiences through employment/volunteer time in radio, television, film, or multimedia directly related to an occupational goal or career of interest to the student.

Transferable to CSU

R_TV 73 **4.0 units**

Work Experience: Radio and Television

18 hours lecture, 225 hours laboratory

Corequisite: Concurrent enrollment in at least one additional course in the discipline.

Grading: letter grade or pass/no pass

Formerly R_TV 73AD. This course consists of discussions regarding work experience objectives, career goals, employment adjustments and issues encountered on the job. It also involves vocational

learning experiences through employment/volunteer time in radio, television, film, or multimedia directly related to an occupational goal or career of interest to the student.

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 216AC. This course explores the process of non-linear video and film editing using Final Cut Pro.

Sign Language (SIGN)

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 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

Sociology (SOCIO)

SOCIO 1 **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 **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 **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 **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 intragroup 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 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 40**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 micro and macro sociological influences on, preparation for, and effects of 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 multicultural nature of American society from a Humanities and Social Sciences perspective. The course examines how ethnic groups in America have constructed artistic, literary, musical, philosophical and religious identities based on their traditions and experiences and seeks to understand the United States as a common culture. Using the Social Sciences to compare and contrast the origins, living conditions and experiences of America's constituent populations, the course analyzes 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****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 **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 **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 **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 **5.0 units**

Spanish for Spanish Speakers

90 hours lecture

Prerequisite: Second semester of Spanish or equivalent

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.

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****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 **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

Theatre Arts (TART)

TART 1 **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 **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 **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 **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 **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 **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

Formerly TART 42AD. 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 49 **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 50/1 **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 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 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 **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 75 **2.0 units**
Summer Repertory Theatre: Performance

126 hours laboratory

Corequisite: TART 76

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 76 **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 10 **1.0 unit**

Introduction to Engineering Technology

18 hours lecture

Grading: letter grade or pass/no pass

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

TEC 20 **3.0 units**

Introduction to Engineering and Design

36 hours lecture, 72 hours laboratory

Grading: letter grade

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

TEC 30 **3.0 units**

Principles of Engineering Technology

36 hours lecture, 72 hours laboratory

Recommended Preparation:

MATH 110 or MATH 110B or MATH 880

Grading: letter grade or pass/no pass

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

TEC 40 **3.0 units**

Electronics for Engineering Technology

36 hours lecture, 72 hours laboratory

Recommended Preparation: MATH 110, 100B or 880

Grading: letter grade

In this course, students are introduced to the applications of 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 a non-math based course that transfers to an Engineering Technology program.

Transferable to CSU

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 200 **3.0 units**

Engineering Design and Development

36 hours lecture, 72 hours laboratory

Prerequisite: TEC 10 and TEC 20 and TEC 30

Grading: letter grade

In this capstone course, teams of students will work together to design and construct solutions to engineering problems. Emphasis will be placed on research methods, design problem statements, continuous improvement, cost analysis, prototyping, testing methods, project construction, and project presentation.

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 **1.0 unit****Intravenous Therapy & Blood Withdrawal**

9 hours lecture, 27 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, those preparing for licensure, or Licensed Vocational Nurses seeking certification.

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 VN 225 are equivalent courses.

VN 230 **3.0 units**

Common Health Deviations 1

54 hours lecture

Prerequisite: VN 220, VN 225, and BIO 60

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. This course may be scheduled using the arranged scheduling format.

VN 235 **3.0 units**

Common Health Deviations 2

54 hours lecture

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, hepatobiliary system, and infectious diseases.

VN 235L **3.5 units**

Common Health Deviations 2 Lab

189 hours laboratory

Corequisite: VN 235

Grading: pass/no pass

This course provides opportunity for nursing students to practice the concepts of medical-surgical nursing in a variety of health care settings, including perioperative nursing care, as learned in VN 235. Topics presented in the campus nursing lab include skills required for care of surgical and medical patients. Compliance with all clinical agency policies is required the first day of the course. This course is scheduled in an arranged scheduling format.

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
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
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 beginning competency in the role of the vocational nurse in acute care facilities. Compliance with all clinical agency health and safety policies is required the first day of the course.

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
 Corequisite: VN 255
 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
 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. 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 is designed to prepare students to take the Los Angeles City Certification test in structural steel welding. It provides additional instructions in the practical hands on welding. It is also designed for students who wish to advance their knowledge and skills in welding. The course includes safety, electrode identification, welding code applications and basic welding metallurgy.

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.

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Appendix: Administration

ANTONIO-PALOMARES, MARGARET

Assistant Director, CalWorks
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

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B.A., California State University, Long Beach
M.A., University of California, Los Angeles

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B.A., University of California, Santa Barbara
M.S., California State University, Long Beach

CREASON, PAUL

Dean, School of Health, Kinesiology, Science & Math
B.A., M.A., California State University, Fullerton
Ed.D., California State University, Long Beach

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Interim Executive Dean, Enrollment Services
B.A., Simpson University
M.S., University of La Verne

DE LA TORRE-INIGUEZ, SONIA

Director, Student Success & Support Program
B.A., University of California, Davis
M.S., California State University, San Bernadino

DEL GAUDIO, ROSE D.

Vice President, Human Resources
B.A., University of California, Los Angeles
M.S., California State University, Long Beach

DOUGLAS, O. LEE

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B.A., Pepperdine University
M.A., California State University, Dominguez Hills

DURAND, GENE

Associate Vice President, Human Resources
B.F.A., San Francisco Art Institute
J.D., Golden Gate University

GABEL, ANN-MARIE

Vice President, Administrative Services
B.A., California State University, Fullerton
M.A., University of Laverne

GONZALES, DAVID

Associate Dean, Career and Technical Education
B.S., M.B.A., University of La Verne

GRIMES-HILLMAN, MICHELLE

Dean, Academic Services
B.A., M.A., California State University, Fullerton

KASHOU, HUSSAM

Director, Instructional Technology & Distance Learning
B.S., M.A., Ph.D, The Ohio State University

KNOX, RAMON

Dean, Student Affairs
B.S., Ball State University
M.S., Southwest Missouri State University

LONG, TERRI

Vice President, Academic Affairs
B.A., M.S., Ed.D., University of Southern California

LYNCH, SYLVIA

Chief Information Systems Officer
B.S., Azusa Pacific University
M.A., Chapman University

MAY-TREANOR, MISTY E.

Director, Volleyball Operations/Head Coach
B.A., California State University, Long Beach
M.A., Concordia University, Irvine

PEABODY, BRETT

Director, Football Operations/Head Coach
B.S., University of Nevada
M.A., Ball State University

PETERSON, GREGORY

Vice President, Student Support Services
B.A., Brigham Young University
M.A., Portland State University
Ed.D., University of Texas at Austin

ROMALI, REAGAN

Superintendent-President

B.A., Rutgers University

M.B.A., University of San Diego

Ph.D., Walden University

ROTHSTEIN, KAREN

Associate Dean, Student Success & Library

B.A., State University of New York

M.A., Ph.D., University of California, Los Angeles

TOTORP, RANDY

Athletic Director

B.A., San Diego State University

M.A., Azusa Pacific College

Appendix: Full Time Faculty List

AKHAVAN, MEHRZAD

Professor, Biology
B.A., M.A., California State University, Fresno

ALGER, RHONDA L.

Professor, Vocational Nursing
B.A., M.A., California State Univ. Dominguez Hills

AMELOTTE, DIANE M.

Professor, Reading
B.A., M.A., Loyola Marymount University

ANAND, BHAGIRATHI

Professor, Mathematics & Engineering
B.S., M.A., University of Madras, India

ANDERSON, KIMBERLY B.

Professor, Learning & Academic Resources
Professor, Kinesiology
A.S., Long Beach City College
B.A., California State University, Long Beach
M.A., Azusa Pacific University

ANDUJO, ALICIA

Professor, Counseling
B.A., M.S., California State University, Long Beach

ANGULO, SKYE E.

Professor, Music
B.A., Chapman University
M.A., University of Southern California

ARAEIPOUR, MOHAMMAD

Professor, Mathematics
B.A., M.A., Ed.D., California State University, Long Beach

ARIAS, ROBYN

Associate Professor, Life Science
B.S., University of California, San Diego
Ph.D., University of Southern California

ARMENIA, JOANNE E.

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B.A., Excelsior College
M.A., California State University, Dominguez Hills
Ph.D., Walden University

ARNAUD, MARICELA

Professor, Registered Nursing
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills
Ph.S., Western University of Health Sciences

ATKINSON, MATTHEW

Assistant Professor, Political Science
B.A., University of California, Santa Cruz
M.A., Ph.D., University of California, Los Angeles

AZIZ, TAHIR

Professor, Computer & Office Studies
M.B.A., National University, Los Angeles

BARBEE, LADERA

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Instructional Specialist, Math Success Center
B.A., San Diego State University
M.A., California State University, Long Beach

BARNARD, MORGAN

Visual & Media Arts Department Head
Associate Professor, Art
B.F.A., M.A., New York University

BARNES, SHELLEY

Instructional Specialist Multidisciplinary Success Ctr
B.A., California State University, Long Beach
M.A., Pepperdine University

BARR, KYRAN

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B.A., M.A., St. Bonaventure, New York

BARRERA, EMILY S.

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Instructional Specialist, Multidisc Success Center
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B.A., University of California, Santa Barbara
M.A., California State University, Long Beach

BARTLAU, CYNTHIA

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 Professor, Vocational Nursing
 B.S., University of Tulsa, Oklahoma
 M.S., University of Phoenix

BAUMGARDNER, SUSAN

Assistant Professor, Computer & Office Studies
 B.S., Mc Murry College, Texas
 M.Ed., West Texas A & M University

BEAN, JULIE

Associate Professor, Registered Nursing
 B.A., M.S., University of Phoenix

BEAS, SOFIA F.

Professor, Counseling
 B.A., University of Southern California
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Assistant Professor, Computer & Office Studies
 A.S., State University of New York at Cobleskill
 B.S., San Diego State University
 M.A., California State University, Los Angeles

PAGE, RUBEN D.

Coordinator Transfer Services
 B.A., University of California, Irvine
 M.A., California State University, Long Beach

PAMINTUAN, MARTHA

Assistant Professor, Dance
 B.A., San Francisco State University
 M.F.A., University of California, Irvine

PEARSON, VELVET D.

Professor, English
 B.A., University of California, Santa Barbara
 M.A., San Diego State University
 Ph.D., University of Southern California

PELLEGRINI, LAURA A.

Professor, Political Science
 B.A., California State University, Long Beach
 M.A., Ph.D., University of Southern California

PERALTA, COLLEEN

Assistant Professor, Nursing
 B.S., M.S., University of Phoenix

PERALTA-CRISPIN, VANESSA

Assistant Professor, History
 B.A., California State University, Chico
 M.A., Ph.D., University of California, Santa Barbara

PERROT, MARY E.

Physical Sciences & Geography Department Head
 Professor, Chemistry
 B.A., Massachusetts Institute of Technology
 Ph.D., University of Wisconsin, Madison

PETERSON, DEBRA E.

Associate Professor, Counseling
 B.A., California State University, Long Beach
 M.A., California State University, Dominguez Hills

PIERCE, KRISTIN

Professor, Child and Adult Development
B.A., California State University, Long Beach

PIKE, KARI A.

Assistant Professor, Communication Studies
B.A., M.A., California State University, Long Beach

PLISKA, JANINE K.

Assistant Professor, Social Science
A.S., Long Beach City College
B.A., University of California, Berkeley
M.S., Durham University

POKORNY, GRACE K.

Professor, Health
B.A., University of California, Los Angeles
M.A., California State University, San Diego

POTTER, LAURIE E.

Professor, English as a Second Language
B.A., Marymount Manhattan College
M.A., California State University, Long Beach

POWELL, RENAE L.

Professor, Computer & Office Studies
B.S., California State University, Los Angeles
M.A., California State University, Long Beach
M.S., Claremont Graduate University

POWELL, STEPHANIE M.

Professor, Performing Arts
B.A., University of California, Berkeley
M.F.A., University of California, Irvine

QUINTERO, CYNTHIA A.

Foreign Language Department Head
Associate Professor, Foreign Language
B.A., Ph.D., University of California, Irvine
M.A., California State University, Long Beach

RADLOFF, SUSAN

Professor, Vocational Nursing
B.A., University of Phoenix

RAFANELLO, DONNA SUE

Professor, Child Development & Adult Education
B.A., Loyola University, Chicago
M.Ed., National-Louis University, Chicago

RAJARAM, GEETHA

Associate Professor, Business Administration
B.A., University of California, San Diego
Ph.D., University of Colorado, Boulder

RAMOS, CARLOS M.

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B.A., University of Southern California
M.A., University of California, Los Angeles

RAPHAEL, DOUGLAS

Assistant Professor, Communication Studies
B.S., California State University, Long Beach
M.A., J.D., University of Hawaii at Manoa

REISBIG, MICHAEL R.

Professor, Kinesiology
B.S., California Polytechnic University, Pomona
M.A., Azusa Pacific University

RICHARDS, GISELLE T.

Professor, English as a Second Language
M.A., California State University, Los Angeles

RIDENOUR, ANALISA

Professor, Communication Studies
B.A., M.A., California State University, Long Beach

RIPLEY, DAN A.

Professor, Health Education
B.A., California State University, San Jose
M.A., California State University, Fullerton

RIVERA, JAVIER

Professor, Carpentry
A.S., Santa Ana College

ROBERTSON, MICHAEL

Assistant Professor, Anthropology
B.A., M.A., California State University, Long Beach

RODDEN, JENNIFER

Reading Department Head
Professor, Reading
B.A., University of California, Davis
M.A., California State University, Sacramento
Ph.D., Indiana University of Pennsylvania

RODRIGUEZ, ANNA

Assistant Professor, English as a Second Language
 B.A., California State University, Dominguez Hills
 M.A., University of California, Los Angeles

RODRIGUEZ, RODNEY A.

English Department Head
 Associate Professor, English
 M.A., University of Utah
 Ph.D., University of California, Irvine

RODRIGUEZ, TREVOR

Coordinator, College & School Articulation
 B.A., MPA, California State University, Long Beach

ROPER, LISA

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 B.A., University of California, Los Angeles
 M.A., University of California, Dominguez Hills

ROSE, KAREN L.

Professor, English
 B.A., M.A., Ph.D., University of California, Los Angeles

ROSILLO, ZOILA

Assistant Professor, Computer & Office Studies
 B.A., University of California, Riverside

ROSS, MELVIN L.

Professor, History
 B.A., Alabama State University
 M.A., Purdue University

RUEHL, JEANNE M.

Professor, Registered Nursing
 B.S.N., M.S.N., California State Univ., Long Beach

RYAN, JOHN K.

Professor, Mathematics
 B.A., M.A., California State University, Long Beach

SAVOIE, PAUL J.

Professor, Political Science
 B.A., California State University, Northridge
 M.A., University of California, Riverside

SCHNEIDER, JULIE

Assistant Professor, Welding
 Vocational, Henry Ford Community College

SCHROEDER, NATALIA E.

Professor, English as a Second Language
 B.A., M.A., M.A.TESL, California Prof. Clear Teaching
 Credential, California State University, Dominguez Hills

SETHURAMAN, RAMCHANDRAN

Library Department Head
 Professor, Library
 M.A., University of Illinois at Chicago
 Ph.D., University of Florida

SEXTON, SIGRID K.

Registered Nursing Department Head
 Professor, Registered Nursing
 B.A., M.A., California State University, Long Beach

SHANNON, MARGARET E.

Professor, Writing & Reading
 B.A., Pomona College
 M.A., University of Chicago

SHAW, LYNN J.

Professor, Electricity
 B.A., University of Minnesota, Minneapolis
 M.A., California State University, Long Beach
 Ph.D., Claremont Graduate University

SHEAFFER, DE WAYNE T.

Professor, Counseling
 M.A., California State University, Los Angeles

SHENG, PATRICK

Assistant Professor, Music
 B.A., M.A., Washington State University

SHIHABI, AZZAM M.

Professor, Mathematics/Engineering B.A., Kuwait University
 M.A., Ph.D., Claremont Graduate University

SHOEMAKER, TIMOTHY L.

Professor, Sheet Metal
 A.S., El Camino College
 B.A., M.A., California State University, Long Beach
 B.A., California State University, Fresno
 M.S., San Jose State University

SIMS, ELIJAH

Assistant Professor, Counseling
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

SINGHAL, MEENA

Professor, English as a Second Language
B.A., University of Calgary
M.A., McGill University
Ph.D., University of Arizona

SKINNER, DAMON

Assistant Professor, Sheet Metal
A.S., Long Beach City College

SMITH, JOHN G.

Professor, Kinesiology
A.S., Los Angeles Valley College B.A., California State University,
Northridge M.A., University of Illinois, Champaign-Urbana
Ph.D., University of Southern California

SMOLEY, DAREN

Instructional Specialist, Writing & Reading Center
B.A., California State University, Long Beach
M.A., M.F.A., Chapman University

STARROS, ANTHONY P.

Professor, English
B.A., M.A., California State University, Long Beach

STEELE, JAMES F.

Allied Health Department Head Professor, Diagnostic Medical
Imaging Sciences A.S., Long Beach City College
B.A., California State University, Long Beach

STERRITT, COLEEN P.

Professor, Art/Sculpture
B.A., University of Illinois, Champaign-Urbana
M.A., Otis Art Institute, Los Angeles

SUMNER, RAY

Professor, Geography
B.A. (Hons), M.A., James Cook University, Australia
Ph.D., University of Queensland, Australia
Dip.Tch, Kelvin Grove College, QUT, Australia

TAN, DANNY S.

Professor, ABOYD/AMECH
B.A., Columbia University

TAVAKKOLY, AUNDREA

Assistant Professor, Mathematics & Engineering
B.S., M.S., University of California, Santa Barbara

TRICKETT, DAWN

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B.A., M.A., California State University, Long Beach

TSUBOI, YUKIKO

Assistant Professor, Japanese
B.A., University of Shizuoka
M.A., University of Southern California
M.A., University of Shizuoka

TURLO, MATTHEW

Professor, Electricity
A.A., A.S., El Camino College

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B.A., M.A., California State University, Los Angeles

VALELLA, PATRICIA

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B.S., M.S., Michigan State University

VALENTINO, GINA

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B.A., California State University, Fullerton
M.A., University of California, Fullerton
Ph.D., University of California, Santa Barbara

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Professor, Child and Adult Development
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VARGAS, MARIO

Assistant Professor, Physical Science
M.S., Ph.D., University of California, Riverside

VARGAS, VIDAL

Assistant Professor, Counseling
B.A., California State University, San Bernadino
M.A., University of Redlands

VIGILANT, KAREN A.

Professor, Kinesiology
 B.S., Arizona State University
 M.S., Azusa Pacific University

VILLASENOR, FRANCISCO J.

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 B.A., University of Southern California, Los Angeles
 M.A., Point Loma Nazarene University, Pasadena

VITT, ROBERT

Assistant Professor, Social Science
 B.A., University of California, Riverside
 M.A., City University of New York
 M.B.A., J.D., Chapman University

VOKOUN, KATHLEEN

Assistant Professor, Child Development
 B.A., University of California, Los Angeles
 M.A., California State University, Long Beach

VUKOV, BORIS

Professor, Psychology B.S., Texas Christian University
 M.A., San Diego State University

VURE, SARAH

Professor, Art
 B.F.A., The Cooper Union, New York
 M.A., Ph.D., Boston University

WAN, JAMES X.

Professor, Mathematics
 M.A., Ph.D., University of California, Santa Barbara

WARD, JACQUELINE

Assistant Professor, Mathematics
 B.S., University of California, Los Angeles
 M.A., California State University, Fullerton
 Ph.D., The Florida State University

WEBER, RICHARD T.

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 B.A., California State University, Long Beach
 M.A., University of California, Irvine

WESTAWAY, CHRISTA

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 B.A., M.F.A., California State University, Long Beach

WHEELER, JEFFREY M.

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 Professor, English
 M.A., University of Southern California

WHEELER, LAURA S.

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 B.A., University of Virginia
 M.A., University of Southern California

WHELAN, CONNOR

Assistant Professor, Mathematics
 B.A., Pitzer College
 M.S., California State University, Long Beach

WHELAN, GARRET C.

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 B.S., M.S., Michigan Technological University

WHITTAKER, DEBRA ANN

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WILGING, TRISHA

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 B.A., University of California, Riverside
 M.S., California State University, Fullerton

WILLIAMS, COLIN

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 B.A., University of California, Los Angeles
 M.S., University of Illinois Urbana-Champaign

WILSON, WILLIAM

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 B.A., California State University, Long Beach

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 B.A., California State Polytechnic, Pomona
 M.A., University of California, Los Angeles
 Ed.D., University of Southern California

WONG, COLLEEN

Assistant Professor, Culinary Arts
AOS, The Culinary Institute of America
B.S., Cal Poly Pomona

WOOD, RONDA M.

Professor, Registered Nursing
M.A., University of California, Los Angeles

XU, MAY N.

Professor, Mathematics
M.S., Northeastern Illinois University

YASUTOMI, EMILY

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M.S., University of Southern California

YOUNG, CHRIS

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A.S., Long Beach City College
B.S., University of California, San Diego

ZAMPELLI, SHERI

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B.A., M.S., California State University, Long Beach

ZEPEDA, MILDRED

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A.S., Santa Ana College
B.A., M.A., California State University, Los Angeles

ZUCKERMAN, JOAN E.

Professor, Life Science
B.S., Ph.D., University of California, Davis

ZUGATES, MICHAEL

Professor, Mathematics
B.S., M.S., California State University, Long Beach



LONG BEACH CITY COLLEGE

2017-2018 ASSOCIATE DEGREE (A.A./A.S.) GENERAL EDUCATION REQUIREMENTS

PLAN
A
2017-18

All information contained herein is subject to change without notice.

Since individual plans and circumstances vary,
students should consult with a counselor before beginning a program of study
to ensure the appropriate General Education pattern is followed.

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

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

GRADUATION PROFICIENCY REQUIREMENTS

- | | | | |
|---|---|--|--|
| <p><input type="checkbox"/> MATHEMATICS: A qualifying score on the LBCC Assessment Test which places a student in MATH 37, 37H, 40, 45, STAT 1, 1H, or higher; or successful completion with a grade of "C", "P", or higher in a college math course at the level of MATH 120 or 130 or 130A or 140 or 125 or 115 or higher.</p> <p><input type="checkbox"/> READING: Satisfying this proficiency may be achieved by any one of the following:</p> <ul style="list-style-type: none"> • A qualifying score achieved through multiple LBCC assessment measures OR • Completion of READ 82 or 83 ("C", "P" or better) at LBCC (courses taken at other colleges may be individually reviewed for equivalency by the Reading Department Chair) OR • A Bachelor's Degree from an accredited college or university. <p><input type="checkbox"/> WRITING: Complete ENGL 1 or 1H with a grade of "C" or better.</p> | <p><input type="checkbox"/> INFORMATION COMPETENCY REQUIREMENT: Information Competency is the ability to find, evaluate, use and communicate information in all its various formats. It combines aspects of library literacy, research methods and technology proficiency.</p> <p>Students must complete ONE course from INFORMATION and ONE course from TECHNOLOGY (courses MUST be completed with a grade of "C" or better):</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> INFORMATION
complete one course from:
ENGL 1, 1H, 3, 3H
LIB 1, 3 </td> <td style="width: 50%;"> TECHNOLOGY
complete one course from:
COSA 1, 4, 5, 20, 25, 30, 35, 50
COSK 200 </td> </tr> </table> | INFORMATION
complete one course from:
ENGL 1, 1H, 3, 3H
LIB 1, 3 | TECHNOLOGY
complete one course from:
COSA 1, 4, 5, 20, 25, 30, 35, 50
COSK 200 |
| INFORMATION
complete one course from:
ENGL 1, 1H, 3, 3H
LIB 1, 3 | TECHNOLOGY
complete one course from:
COSA 1, 4, 5, 20, 25, 30, 35, 50
COSK 200 | | |

AREA REQUIREMENTS

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

ENGLISH COMPOSITION

One Class Required (3 units minimum)--choose from:
ENGL 1, 1H

units	course	grade
course from: _____		

COMMUNICATION AND ANALYTICAL THINKING

One Class Required (3 units minimum)--choose from:
BCOM 15
COMM 10, 10H, 20, 25, 30, 60
COSA 2
COSP 8, 10
CS 11, 21
COUNS 2
ELECT 225
ENGL 3, 3H, 4, 4H
LIB 3
MATH 27, 28, 37, 37H, 40, 45, 47, 50, 50H, 60, 60H, 70, 70H, 80, 84, 120, 130, 130A, 130B
PHIL 11, 12, 22
READ 82, 83, 84
STAT 1, 1H

units	course	grade
course from: _____		

NATURAL SCIENCES

One Class Required (3 units minimum)--choose from:
Physical Sciences:
ASTR 1, 1H, 1L
CHEM 1A, 1B, 2, 3, 12A, 12B
ENVR 1
GEOL 1, 1H, 2, 2F, 2L, 3, 3H, 4, 5, 7, 16, 17, 18
PGEOG 1, 1L, 2
PHYS 2A, 2B, 3A, 3B, 3C

Biological Sciences:
ANAT 1, 41
ANTHR 1, 1H
BJO 1A, 1B, 2, 5, 11, 20, 20H, 22, 25, 28, 30, 31, 37, 41, 41H, 41L, 41LH, 60, 60L, 61
PHYS 1

units	course	grade
course from: _____		

SOCIAL SCIENCES

One Class Required (3 units minimum)--choose from:
ANTHR 2, 2H, 3, 3H
CDECE 45, 47
ECON 1, 1H, 2, 2H, 3, 4, 5⁴
FD 32
GEOG 2, 5⁴, 40, 48
HLED 10⁴
HIST 1A, 1AH, 1B, 1BH, 2B, 2C, 2CH, 5A, 5B, 9A, 9B, 9C, 18, 25, 27A, 27B, 48
(HIST 8A, 8B, 10, 11 may be taken for the A.S. degree)

POLSC 2, 4, 9, 10, 11
(POLSC 1, 1H, 3 may be taken for the A.S. degree)
PSYCH 1, 1H, 2, 4, 10⁴, 11, 14, 33
PUBAD 1
SOCSC 1⁴, 1H⁴, 7⁴
SOCIO 1, 1H, 2, 11, 13, 40

units	course	grade
course from: _____		

4 Cross-listed courses. A cross-listed course is interdisciplinary and is the same course as its cross-listed counterparts. A cross-listed course CANNOT be used in more than one subject area:
ECON 5 = GEOG 5: The Global Economy
HUMAN 1/1H = SOCSC 1/1H: Comparative World Cultures/Honors CWC
HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
HUMAN 7 = SOCSC 2: American Pluralism and Identity
HLED 10 = PSYCH 10: Human Sexuality

AMERICAN HISTORY (not required for the A.S. Degree)

One Class Required (3 units minimum)--choose from:
HIST 8A, 8AH, 8B, 8BH, 10, 10H, 11, 11H, 25, 27A, 27B

Note: Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either 8A/8AH or 8B/8BH to fulfill the history portion of the U.S. History, Constitution, and American Ideals requirements. (Retroactive to Fall 2004)

units	course	grade
course from: _____		

POLITICAL SCIENCE (not required for the A.S. Degree)

One Class Required (3 units minimum)--choose from:
POLSC 1, 1H, 3

units	course	grade
course from: _____		

HUMANITIES AND ARTS

One Class Required (3 units minimum)--choose from:

- ART 1, 1H, 2, 2H, 3, 3H, 4, 4H, 5, 9, 10, 11, 11H, 15, 23, 24, 26, 30, 31, 34, 35, 43, 50, 51, 60, 70, 71, 80
- CHIN 1, 2
- COMM 50
- CART 41
- DANCE 1, 19
- ENGL 2, 2H, 26, 32, 33, 33H, 35, 36, 37, 38, 39, 41, 42, 43A, 43B, 44, 44H, 45, 45H, 46, 47, 48, 48H, 49, 49H
- FILM 1, 2A, 2B, 10, 25
- FREN 1, 1C, 2, 2C, 3, 4, 25A
- GER 1, 2

- HUMAN 1[†], 1H[†], 7[†]
- ITAL 1, 2
- JAPAN 1, 2, 3, 4
- LING 1
- MUSIC 6, 28AD, 30A, 30B, 32, 33B, 35, 40, 40H, 89,
- PHIL 3[†], 6, 6H, 7, 7H, 8, 9, 10, 14, 15, 16
- PHOT 10
- R_TV 1
- SPAN 1, 2, 3, 4, 8, 9, 9H, 10, 10H, 25A, 25B, 25C, 25D
- TART 1, 25, 30
- VIET 1, 2

units _____ course _____ grade _____
course from: _____

† Cross-listed courses. A cross-listed course is interdisciplinary and is the same course as its cross-listed counterparts. A cross-listed course CANNOT be used in more than one subject area:

- ECON 5 = GEOG 5: The Global Economy
- HUMAN 1/1H = SOCS 1/1H: Comparative World Cultures/Honors CWC
- HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
- HUMAN 7 = SOCS 7: American Pluralism and Identity
- HLED 10 = PSYCH 10: Human Sexuality

PHYSICAL FITNESS/WELLNESS

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

One UNIT Required--choose from:

- DANCE: 3, 5, 6, 8, 12A, 13, 14, 17, 18A, 18B, 20, 21, 26, 29, 31, 32, 33, 41/1, 41/2, 41/3, 41
- F_N: 26, 250, 255C, 255D, 256, 260, 261, 262
- HLED 21, 22, 24
- KINA: 1
- KING: 2, 2B, 10, 10B, 14, 14B, 55, 65, 65B, 66, 66B, 70, 70B, 74, 76, 84, 86, 90, 90B, 92, 92B, 94
- KINIA: 1AD, 2AD, 3AD, 5AD, 7AD, 13AD, 15AD, 19AD, 21AD, 23AD, 27AD, 29AD, 35AD, 37AD, 39AD, 41AD, 43AD, 45AD, 47AD,
- KINPF: 3, 4, 6, 8, 8B, 10, 10B, 12, 12B, 14, 17, 17B, 18, 18B, 21, 22, 22B, 23, 24, 42, 53, 54, 54B, 81, 84A, 84B
- KINPP: 7, 10, 12, 15, 17
- TART: 1B, 2C

units _____ course _____ grade _____
course from: _____

HEALTH EDUCATION

3 Units Minimum Required--choose from:

One class chosen from:
F_N 20
HLED 3, 4, 5

OR

BIO 60 & 61 & PSYCH 1[†] or

ANAT 41 & DMI 60 & PSYCH 1[†] or

ANAT 1 & PHYSI 1 & PSYCH 1[†]

†--All courses grouped in boxes must be completed to satisfy the requirement.

units _____ course _____ grade _____
course from: _____
units _____ course _____ grade _____
course from: _____
units _____ course _____ grade _____
course from: _____

OTHER GRADUATION REQUIREMENTS

G.P.A. REQUIREMENTS

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

CONTINUOUS ENROLLMENT

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

COURSE TOTALS:

General Education Units Completed:		+	General Education Units Total must equal: 25 units§ for the A.A. 19 units§ for the A.S.
Field of Concentration (Major) Units Completed:		+	For Graduation: Complete a minimum of 60 AA/AS applicable units (LBCC courses numbered 1-599). Some fields of concentration may require more units--consult the appropriate curriculum guide (http://osca.lbcc.edu).
General Elective Units Completed:		=	
Overall Total Units: MUST EQUAL AT LEAST 60 units.			§Any course that appears on a curriculum guide and the General Education Pattern (Plan A) may fulfill both major and general education requirements (Approved by College Curriculum Committee Spring 2012 and applicable retroactively).

DEGREE RESIDENCY

Meet one of the following requirements:

- A) Minimum of 20 units within the last 30 units applied to the degree must be completed at LBCC
- OR
- B) at least 50% of the units required for a degree must be completed at LBCC.

$$\frac{\text{# of degree-applicable units completed at LBCC**}}{\text{# of Units Required (should be at least 60, actual total varies by major)}} \times 100 = \text{# of units completed at LBCC (MUST BE 50% or Greater)} \%$$

** Only LBCC courses numbered 1-599 are applicable to the degree.

FIELD OF CONCENTRATION (MAJOR) RESIDENCY

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

$$\frac{\text{# of Major Units completed at LBCC}}{\text{# of Major Units Required}} \times 100 = \text{# of Major Units completed at LBCC (MUST BE 50% or Greater)} \%$$

APPLICATION FOR GRADUATION

To receive a degree you must complete and submit the Application for Graduation form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office or online at <http://admissions.lbcc.edu/>.

Refer to the Schedule of Classes (<http://schedule.lbcc.edu>) and click the "Important Dates" link to view the actual deadline for each semester.

2017-2018 Plan A Checklist: Published May 2017,
Long Beach City College Office of School and College Articulation.
All information contained herein is subject to change without notice.



LONG BEACH CITY COLLEGE
2017-2018 GENERAL EDUCATION REQUIREMENTS
CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION-BREADTH
 All information contained herein is subject to change without notice.

PLAN
B
 2017-18

Since individual plans and circumstances vary,
 students should consult with a counselor before beginning a program of study
 to ensure the appropriate General Education pattern is followed.

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

Students planning to transfer to the University of California should refer to the IGETC General Education Pattern (Plan C). Students planning to earn an associate degree and NOT transfer should follow Plan A. Both Plans A and C are accessible at <http://osca.lbcc.edu/genedplan.cfm>.

AREA REQUIREMENTS

Double-counting of courses listed in more than one area of this general education pattern is **NOT** allowed.

For example, PHIL 3 is listed in areas C2 (Humanities) and D (Social Sciences), but it may be used to satisfy only one of these requirements.

AREA A1: ORAL COMMUNICATION

Area A1--One Class Required (3 units minimum)--choose from:

<u>COMM</u> 10, 10H, 20, 30, 60	units	course	grade
course from: _____			

AREA A2: WRITTEN COMMUNICATION

Area A2--One Class Required (3 units minimum)--choose from:

<u>ENGL</u> 1, 1H	units	course	grade
course from: _____			

AREA A3: CRITICAL THINKING

Area A3--One Class Required (3 units minimum)--choose from:

<u>COMM</u> 60 <u>READ</u> 84 <u>COSA</u> 2 <u>ENGL</u> 3, 3H, 4, 4H <u>PHIL</u> 11, 12, 22	units	course	grade
course from: _____			

AREA B: SCIENTIFIC INQUIRY AREA B1: PHYSICAL SCIENCE
AREA B2: LIFE SCIENCE
AREA B3: LABORATORY ACTIVITY

Area B--Two Classes Required (6 units minimum)

♦--Indicates a lab course (Area B3).
 NOTE: One class in this area must include an associated laboratory (Area B3).

Area B1--Physical Sciences: Complete 1 class <u>ASTR</u> 1, 1H, 1L* <u>CHEM</u> 1A*, 1B*, 2*, 3* <u>ENVR</u> 1 <u>GEOL</u> 1*, 1H*, 2, 2F, 2L*, 3*, 3H*, 4*, 5, 7, 18 <u>PGEOG</u> 1, 1L*, 2 <u>PHYS</u> 2A*, 2B*, 3A*, 3B*, 3C*	Area B2--Biological Sciences: Complete 1 class <u>ANAT</u> 1*, 41* <u>ANTHR</u> 1, 1H <u>BIO</u> 1A*, 1B*, 2*, 5*, 11, 20*, 20H*, 22, 25, 30*, 41, 41H, 41L*, 41LH*, 60, 60L*, 61 <u>PHYSI</u> 1*	B1 units	B1 course w/ lab? Y or N	B1 grade
course from: _____				
		B2 units	B2 course w/ lab? Y or N	B2 grade
				course from: _____

AREA B4: MATHEMATICS/QUANTITATIVE REASONING

Area B4--One Class Required (3 units minimum)--choose from:

<u>MATH</u> 27, 28, 37, 37H, 40, 45, 47, 50, 50H, 60, 60H, 70, 70H, 80, 84 <u>STAT</u> 1, 1H	units	course	grade
course from: _____			

AREA C: ARTS & HUMANITIES

Area C--Three Classes Required (9 Units Minimum)

NOTE: Students must complete one class from both Areas C1 and C2 and a second course from either Area (for a total of 3 classes).

Area C1--Arts--choose from: <u>ART</u> 1, 1H, 2, 2H, 3, 3H, 4, 4H, 5, 9, 10, 11, 11H, 30, 31, 80 <u>COMM</u> 50 <u>CART</u> 41 <u>DANCE</u> 1, 19 <u>FILM</u> 1, 2A, 2B, 10 <u>MUSIC</u> 6, 30A, 30B, 32, 33B, 35, 40, 40H, 89 <u>PHOTO</u> 10 <u>R-TV</u> 1 <u>TART</u> 1, 25, 30	Area C2--Humanities--choose from: <u>CHIN</u> 1, 2 <u>ENGL</u> 2, 2H, 26, 32, 33, 33H, 35, 36, 37, 38, 39, 41, 42, 43A, 43B, 44, 44H, 45, 45H, 46, 47, 48, 48H, 49, 49H <u>EREN</u> 1, 2, 3, 4, 25A <u>GER</u> 1, 2 <u>HIST</u> 1A, 1AH, 1B, 1BH, 2B, 2C, 2CH, 5A, 5B, 8A, 8AH, 8B, 8BH, 9A, 9B, 9C, 10, 10H, 11, 11H, 18, 25, 27A, 27B <u>HUMAN</u> 1*, 1H*, 7* <u>ITAL</u> 1, 2 <u>JAPAN</u> 1, 2, 3, 4 <u>LING</u> 1 <u>PHIL</u> 3*, 6, 6H, 7, 7H, 8, 9, 10, 14, 15, 16 <u>SOCSC</u> 1*, 1H*, 7* <u>SPAN</u> 1, 2, 3, 4, 9, 9H, 10, 10H, 25A, 25B, 25C, 25D <u>VIET</u> 1, 2	C1 units	C1 course	C1 grade
course from: _____				
		C2 units	C2 course	C2 grade
				course from: _____
		units	third course	grade
				course from: _____

AREA D: SOCIAL SCIENCES

Area D--Three Classes Required (9 units minimum)

Area D--Students must take courses from at least 2 different disciplines

- | | |
|---|--|
| ANTHR 2, 2H, 3, 3H, 10
CDECE 45
COMM 25
ECON 1, 1H, 2, 2H, 3, 4, 5 [†]
GEOG 2, 5 [†] , 40
HIST 1A, 1AH, 1B, 1BH, 2B, 2C, 2CH, 5A,
5B, 8A, 8AH, 8B, 8BH, 9A, 9B, 9C, 18, 25,
27A, 27B | HUMAN 1 [†] , 1H [†] , 7 [†]
PHIL 3 [†] , 10, 15, 16
POLSC 1, 1H, 2, 3, 4, 9, 10, 11
PSYCH 1, 1H, 11, 14, 33
PUBAD 1
SOCS 1 [†] , 1H [†] , 7 [†]
SOCIO 1, 1H, 2, 11, 13, 40 |
|---|--|

Note: Effective Fall 2016, Area D (Social Sciences) will no longer be categorized by sections D1- D0

units	course	grade
course from:		
units	course	grade
course from:		
units	course	grade
course from:		

AREA E: LIFELONG LEARNING & SELF-DEVELOPMENT

3 Units Minimum Required--choose from:

- Complete One class from:
- CDECE 45, 47 PSYCH 4, 10
 COUNS 2, 7
 F. N 20
 GBUS 10
 HLED 3, 4, 5, 10[†]
 KINPP 1, 4
 LEARN 11,11H

- OR Complete one of the following:
 (KINPP 12 & 1 unit KIN Activity)⁺

+--All courses grouped together must be completed to satisfy the requirement.

Check the approved CSU GE-Breadth Certification Area E course list on the ASSIST web site (www.assist.org) to determine which Kinesiology Activity courses satisfy this requirement.

units	course	grade
course from:		
units	course	grade
course from:		

CSU U.S. HISTORY, CONSTITUTION, and AMERICAN IDEALS GRADUATION REQUIREMENT

CSU Graduation Requirement

Complete both the History and Political Science sections below:

Students may complete this requirement after transfer to a CSU.

History: 3 Units Minimum Required--choose from: HIST 8A, 8AH, 8B, 8BH, 10, 10H, 11, 11H
 Political Science: 3 Units Minimum Required--choose from: POLSC 1, 1H

Notes: 1) Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either 8A/8AH or 8B/8BH to meet the History portion of the U.S. History, Constitution, and American Ideals Graduation requirement. (Retroactive to Fall 2004). 2) HIST 8A, 8AH, 8B, 8BH, 10, 10H, 11, 11H, POLSC 1, 1H may be used for GE and the U.S. History, Constitution and American Ideals requirement (Retroactive to Fall 2011).

units	course	grade
course from:		
units	course	grade
course from:		
units	course	grade
course from:		

ADDITIONAL INFORMATION

ADMISSIONS

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

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

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

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

The on-line application for CSU is located at www.csumentor.edu.

Priority Application Filing Periods:

- Fall Quarter/Semester: October 1 - November 30
- Winter Quarter/Semester: June 1 - 30
- Spring Quarter/Semester: August 1 - 31
- Summer Quarter: February 1 - 28

Check with counselor for open filing periods

CERTIFICATION

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

Certification requirements:

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

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

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

LEGEND

+ All courses grouped in parentheses "(+)" must be completed to satisfy the requirement.

◆ Denotes laboratory classes.

◀ Cross-listed courses. A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plan B:

- ECON 5 = GEOG 5: The Global Economy
- HUMAN 1/1H = SOCS 1/1H: Comparative World Cultures/Honors CWC
- HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
- HUMAN 7 = SOCS 7: American Pluralism and Identity
- HLED 10 = PSYCH 10: Human Sexuality

2017-18 CSU GE-Breadth (Plan B): Published May 2017
 Long Beach City College Office of School and College Articulation.
 All information contained herein is subject to change without notice.



LONG BEACH CITY COLLEGE
2017-2018 GENERAL EDUCATION REQUIREMENTS
INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

PLAN
C
2017-18

All information contained herein is subject to change without notice.

Since individual plans and circumstances vary,
 students should consult with a counselor before beginning a program of study
 to ensure the appropriate General Education pattern is followed.

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

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

A GRADE OF "C" OR BETTER IS REQUIRED IN EACH COURSE

AREA REQUIREMENTS

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

AREA 1A: ENGLISH COMPOSITION

Area 1A--One Class Required (3 units minimum)--choose from:

ENGL 1, 1H

units	course	grade
course from:		

AREA 1B: CRITICAL THINKING AND COMPOSITION

Area 1B--One Class Required (3 units minimum)--choose from:

ENGL 3, 3H, 4, 4H

units	course	grade
course from:		

AREA 1C: ORAL COMMUNICATION (Required by CSU Only)

Area 1C--One Class Required (3 units minimum)--choose from:

NOTE: This area required by CSU only.

COMM 10, 10H, 30, 60

units	course	grade
course from:		

AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

Area 2--One Class Required (3 units minimum)--choose from:

MATH 37*, 37H*, 45*, 47*, 50*, 50H*, 60*, 60H*, 70*, 70H*, 80*, 84*
STAT 1, 1H

units	course	grade
course from:		

AREA 3: ARTS AND HUMANITIES

Area 3--Three Classes Required (9 units minimum)

NOTE: Students must complete one class from both the Arts and Humanities lists and a second course from either list (for a total of 3 classes).

Area 3A--Arts--One Class Minimum required--choose from:

ART 1, 1H, 2, 2H, 3, 3H, 4, 4H, 5, 5H, 10, 11, 11H
CART 41
DANCE 1, 19
FILM 1, 2A, 2B, 10
MUSIC 30A, 30B, 32, 33B, 35, 40, 40H, 89
PHOTO 10
TART 25, 30

Area 3B--Humanities--One Class Minimum required--choose from:

ENGL 32, 33, 33H, 35, 36, 37, 38, 39, 41, 42, 43A, 43B, 44, 44H, 45, 45H, 46, 47, 48, 48H, 49*, 49H*
FREN 3, 4, 25A
HIST 1A, 1AH, 1B, 1BH, 2B, 2C, 2CH, 5A, 5B, 8A, 8AH, 8B, 8BH, 9A, 9B, 9C, 10*, 10H*, 11*, 11H*, 18, 25, 27A, 27B
HUMAN 1*, 1H*, 7*
JAPAN 3,
LING 1
PHIL 3*, 6, 6H, 7, 7H, 8, 9, 10, 14, 15, 16
SOCS 1*, 1H*, 7*
SPAN 3*, 4*, 9*, 9H*, 10*, 10H*, 25A, 25B, 25C, 25D

units	course	grade
course from:		

units	course	grade
course from:		

units	third course	grade
course from:		

units	course	grade
course from:		

AREA 4: SOCIAL AND BEHAVIORAL SCIENCES

Area 4--Three Classes Required (9 units minimum)--choose from:

Students must take courses from at least 2 different disciplines.

ANTHR 2, 2H, 3, 3H, 10
COMM 25
ECON 1, 1H, 2, 2H, 3, 4, 5**
GEOG 2, 5*, 40
HUMAN 1*, 1H*, 7*

PHIL 3*, 10, 15, 16
POLSC 1, 1H, 2, 3, 4, 9, 10, 11
PSYCH 1, 1H, 11, 14
SOCIO 1, 1H, 2, 11, 13, 40
SOCS 1*, 1H*, 7*

units	course	grade
course from:		

units	course	grade
course from:		

units	course	grade
course from:		

Note: Effective Fall 2016, Area 4 (Social and Behavioral Sciences) will no longer be categorized by sections 4A- 4J.

AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES

Area 5--Two Classes Required (7 units minimum)

◆--Denotes Laboratory Classes.
NOTE: One class in this area must include an associated laboratory component (Area 5C).

Area 5A--Physical Sciences: One Class Required (3 units minimum)

- ASTR 1, 1H, 1L♦
- CHEM 1A♦, 1B♦, 2♦♦, 3♦
- GEOL 1♦♦, 1H♦♦, 2♦, 2L♦, 3♦, 3H♦, 5, 18
- PGEOG 1, 1L♦, 2
- PHYS 2A♦♦, 2B♦♦, 3A♦♦, 3B♦♦, 3C♦♦

Area 5B--Biological Sciences: One Class Required (3 units minimum)

- ANAT 1♦♦, 41♦♦
- ANTHR 1, 1H
- BIO 1A♦, 1B♦, 2♦, 5♦♦, 20♦, 20H♦, 30♦♦, 41♦, 41H♦, 41L♦♦, 41LH♦♦, 60♦, 60L♦♦, 61♦
- PHYSI 1♦♦

units	course w/ lab? Y or N	grade
course from: _____		
units	course w/ lab? Y or N	grade
course from: _____		

AREA 6: LANGUAGE OTHER THAN ENGLISH PROFICIENCY (Required by UC Only)

Area 6--Language Other Than English (required by UC only).
Proficiency equivalent to two years of high school study in the same language.
This requirement may be met by any ONE of the following options:

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

- Completion of a second or more advanced level of foreign language course offered at LBCC, chosen from:
CHIN 2
FREN 2, 3, 4
GER 2
ITAL 2
JAPAN 2, 3
SIGN 1B, 2A, 2B
SPAN 2, 3, 4, 9, 9H, 10, 10H
VIET 2

units	course	grade
course from: _____		

AREA 7: CSU U.S. HISTORY, CONSTITUTION and AMERICAN IDEALS GRADUATION REQUIREMENTS (Required by CSU Only)

CSU Graduation Requirement
Complete both the History and Political Science sections below:
Only courses completed at LBCC may be used to certify this requirement.

Students may complete this requirement after transferring to a CSU.

History: 3 Units Minimum Required--choose from: HIST 8A, 8AH, 8B, 8BH, 10, 10H, 11, 11H
Political Science: 3 Units Minimum Required--choose from: POLSC 1, 1H

units	course	grade
course from: _____		
units	course	grade
course from: _____		

ADDITIONAL INFORMATION

UC ADMISSIONS

Minimum admission requirements include:

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

UC transferable units are noted in the LBCC Catalog and Schedule of Classes. This information is also available on ASSIST.org, at www.assist.org. To locate the transferable course list on www.assist.org, choose Long Beach City College in the drop down list. After the new page loads, click the "UC Transferable Courses" link.

Some majors require a higher G.P.A. for admission. See application and major requirements for more information.

Only 14 UC transferable units may be completed on a P/NP basis.

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

UC Priority Application Filing Periods:
Fall Quarter/Semester: November 1 - 30
Winter Quarter: July 1 - 31
Spring Quarter: October 1 - 31 (except Berkeley)
Spring Semester-UC Merced: July 1 - 31

Check with counselor for open filing periods

CSU ADMISSIONS

Minimum admission requirements include:

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

CSU transferable units are LBCC courses numbered 1-99.

Certain impacted/popular majors and universities may require a higher G.P.A. (See university admissions websites or www.csumentor.edu for more information.)

A maximum of 70 transferable semester units earned at California Community Colleges will be accepted by a CSU toward a Bachelor's degree.

CSU Priority Application Filing Periods:
Fall Quarter/Semester: October 1 - November 30
Winter Quarter/Semester: June 1 - 30
Spring Quarter/Semester: August 1 - 30
Summer Quarter: February 1 - 28

Check with counselor for open filing periods

IGETC CERTIFICATION

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

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

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

LEGEND

- ◆ Denotes laboratory classes.
- * Indicates course limitations may exist. For an explanation of limitation, please refer to the UC Transfer Course Agreement, which is available on the ASSIST web site at www.assist.org.
- ◀ **Cross-listed courses.** A cross-listed course is interdisciplinary and is the same course as its cross-listed counterpart. A cross-listed course CANNOT be used in more than one discipline NOR can it be used to certify more than one area on Plan C:
ECON 5 = GEOG 5: The Global Economy
HUMAN 1/1H = SOCS 1/1H: Comparative World Cultures/Honors CWC
HUMAN 3 = PHIL 3: Intro to Issues/Phil, Psych & Religion
HUMAN 7 = SOCS 7: American Pluralism and Identity
HLED 10 = PSYCH 10: Human Sexuality

Notes: **1)** Students are no longer required to take both 8A/8AH and 8B/8BH at LBCC. Students may now take either 8A/8AH or 8B/8BH to fulfill the History portion of the U.S. History, Constitution, and American Ideals Requirement (Retroactive to Fall 2004). **2)** HIST 8A, HIST 8AH, 8B, 8BH, 10, 10H, 11, 11H, POLSC 1, 1H may be used for GE and the CSU U.S. History, Constitution and American Ideals requirement (Retroactive to Fall 2011).

2017-2018 IGETC (Plan C): Published: May 2017
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