



## CHABOT

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## STATEMENT OF NON-DISCRIMINATION

Chabot College desires to maintain an academic and work environment which protects the dignity and promotes the mutual respect of all employees and students. Sexual harassment of employees or students will not be tolerated. In general, deliberate verbal comments, gestures or physical contact of a sexual nature that are unsolicited and unwelcomed will be considered harassment (Title VII of the Civil Rights Act of 1964).

"Never doubt that a small group of thoughtful, committed, citizens can change the world."


TABLE OF CONTENTS ..... 5
GENERAL INFORMATION UPDATES ..... 6
Catalog Rights and Continuous Attendance Policy ..... 6
Residency Requirements Policy ..... 6
MATH PLACEMENT UPDATES ..... 7
About Math Placement ..... 7
How to Complete Math Course Selection ..... 7
Notes About the Course Sequence Chart ..... 8
Math Sequence ..... 8
STUDENT RIGHTS AND RESPONSIBILITIES ..... 9
District Board Policy BP 5500
Standards of Student Conduct ..... 9
District Administrative Procedure AP 5500 Standards of Student Conduct ..... 10
DISCONTINUED PROGRAMS \& DEACTIVATED COURSES ..... 13
Discontinued Programs ..... 13
AA Speech Communications ..... 13
Course Deactivation ..... 13
NEW, CORRECTED, \& MODIFIED NONCREDIT COURSES ..... 14
English. ..... 14
NEW, CORRECTED, AND MODIFIED COURSE LISTING ..... 15
Apprenticeship:
Construction System Electrical Low Voltage (CEST) ..... 15
Apprenticeship: Electrical Construction (ELEC) ..... 16
Apprenticeship: Pipefitting (PLPF) ..... 17
Apprenticeship: Roofing (APRO) ..... 18
Apprenticeship: Sheetmetal (SHEE) ..... 19
Apprenticeship: Telecommunications (APTE) ..... 19
Architecture (ARCH) ..... 20
AA Architecture ..... 20
Architecture Technology ..... 20
Art (ART) ..... 22
AA Fine Art Sculpture ..... 22
Art History (ARTH) ..... 23
AA-T Art History ..... 23
Astronomy (ASTR) ..... 23
Biological Sciences (BIOS) ..... 24
AS-T Public Health Science ..... 24
Business (BUS) ..... 25
AS Architecture ..... 25
Basic Employability Preparation (new) ..... 25
Management ..... 25
Marketing ..... 25
Communication Studies (COMM) ..... 29
Interpersonal Communication ..... 29
Persuasive and Rhetorical Communication ..... 29
Computer Application Systems (CAS) ..... 30
AS Administrative Assistant ..... 30
Dental Hygiene (DHYG) ..... 31
Early Childhood Development (ECD) ..... 31
Engineering (ENGR) ..... 33
AS Engineering ..... 33
Computational Design ..... 33
Technical Design Drafting ..... 33
English (ENGL) ..... 35
AA-T English ..... 35
AA English (Emphasis in Literature) ..... 35
Creative Writing ..... 35
English as a Second Language (ESL) ..... 37
Ethnic Studies (ES) ..... 37
AA-T Social Justice: Chicano Studies ..... 37
AA-T Social Justice: Ethnic Studies ..... 37
AA Ethnic Studies ..... 37
Humanities (HUMN) ..... 42
AA Humanities ..... 42
Interior Design (ID) ..... 43
International Studies (INST) ..... 43
AA International Studies ..... 43
Machine Tool Technology (MTT) ..... 44
Mass Communication (MCOM) ..... 45
AA Mass Communications ..... 45
Mathematics (MTH) ..... 45
Nursing (NURS) ..... 46
AS LVN-RN ..... 46
AS Nursing ..... 46
Paralegal Studies (PLGL) ..... 49
Physical Education ..... 49
Precision Manufacturing (APPM) ..... 50
Psychology (PSY) ..... 50
AA-T Psychology ..... 50
AA Behavioral Science ..... 50
Psychology - Counseling (PSCN) ..... 52
AS Human Services ..... 52
AA Liberal Arts ..... 52
AS Liberal Arts and Sciences: Science, Math, and Technology ..... 52
Behavioral Health ..... 52
CSU GE Breadth ..... 52
Intersegmental General Education Transfer Curriculum (IGETC) ..... 52
Physics (PHYS) ..... 69
Sheetmetal (Shee) ..... 69
Spanish (SPA) ..... 70
AA Spanish ..... 70
Spanish ..... 70
Theater Arts (THTR) ..... 72
Women's Studies (WMST) ..... 72
Women's Studies ..... 72
Work Experience (WEXP) ..... 72

## CATALOG RIGHTS AND CONTINUOUS ATTENDANCE POLICY

Effective Fall 2023
A student has catalog rights for the purposes of meeting degree or certificate requirements by maintaining continuous attendance at the Chabot-Las Positas Community College District.

Continuous attendance is defined as enrollment in at least one semester during the academic year on a continuing basis. A student who does not attend for three consecutive semesters (fall, spring, summer) in one academic year or more is considered to be a returning student and would follow the catalog in effect at the time of their return. Students whose first semester of attendance is summer, would have catalog rights to the academic year immediately preceding the summer semester. Any academic record symbol (A-F, P, NP, I, P, RD, W, CW, EW, MW) shall constitute enrollment.

The Chabot College catalog rights and continuous attendance policy does not necessarily apply to the requirements at other institutions of higher education. Courses applicable towards major and general education requirements may change. Students who are planning to transfer are advised to consult the catalog of the institution to which they will transfer and consult www.assist.org for UC and CSU.

## RESIDENCY REQUIREMENTS POLICY

Effective Fall 2022
In order to be granted an Associate Degree, of the total required units for the degree, at least 12 semester units must be completed in residence at Chabot College. Certificates do not require a minimum number of units to be completed in residence at Chabot College.


## ABOUT MATH PLACEMENT

All students have access to transfer-level math courses after using the Math Course Selection (MCS), which also helps students place beyond the first level and consider lower level options.
It is helpful for you to complete the MCS at home before you attend a First Semester Planning session, so you can jump to talking to a counselor about your math choice.
Go to the Assessment Center website to learn more about how the Chabot Assessment Center can help you place into classes that match your skills and experience: www.chabotcollege.edu/counseling/assessment
The first-level transferable math courses are MTH 21, 33, 33S, 41 (Spring only), 43, 47; PSY 5; and BUS 19. MTH 21 is for students who need calculus; general students should choose another course. For more information about choosing a first-level transfer math course, use the Online Resources links below after completing the Math Course Selection in CLASS-Web.

HOW TO COMPLETE MATH COURSE SELECTION

Step 1: Log into CLASS-Web
Step 2: Click on the "Student Services" tab


Step 3: Toward the bottom of the page, click on the "Chabot Math Course Selection" link

Step 4: Follow the directions for each page and, when completed, a recommendation will be displayed.

## ONLINE RESOURCES

To view math course options based on academic or career fields: tinyurl.com/ChabotMathByFields


For more detail about math courses: tinyurl.com/ChabotMathCourses

For more detail about self-placement above first-level transferable math course: tinyurl.com/CC2ndMath


## SECTIONS WITH SUPPORT

This option is available for MTH 21, 43, 47, and PSY 5 for additional instructional support.

- PSY 5 students may additionally enroll in any section of PSY 5 W workshop ( 0.5 unit). It is recommended especially for new college students with a high school GPA less than 2.3.
- MTH 43 and 47 students may additionally enroll in any section of MTH 220 Math Jam that is designated for their course. It is noncredit (no tuition cost, $1.5 \mathrm{hrs} / \mathrm{wk}$ ) and recommended especially for new college students with a high school GPA less than 2.3.
- MTH 21 students may additionally enroll in any section of MTH 210 Math Jam that is designated for their course. It is noncredit (no tuition cost, $1.5 \mathrm{hrs} / \mathrm{wk}$ ) and recommended for students with less than 3.4 HS GPA who never enrolled in calculus, and especially for students who less than 2.6 HS GPA and never enrolled in precalculus or IM 4.


## OVERVIEW OF THE MATH COURSE SELECTION

## Transfer-Level Courses

Do you plan to take Statistics and Liberal Arts Math (SLAM)?
YES Take MTH 47, Math for Liberal Arts
or MTH 41, Number Systems
or MTH 43, Statistics
or PSY 5, Statistics for Behavioral \& Social Sciences
Are you majoring in Business?
YES ...and do you plan to take Applied Calculus?
YES Start with MTH 31S (Summer 23) or MTH 21 (Fall 23), College Algebra
NO Take BUS 19, Business Stats; or MTH 43 Intro Prob \& Stats
Are you majoring in Science,Technology, Engineering, and Math (STEM)?

YES Start with MTH 31S (Summer 23) or MTH 21 (Fall 23), College Algebra

## Precalculus in High School

If you completed Precalculus or IM 4 in high school with C or higher but did not place into calculus (MTH 1 or 15) via MCS, you have the option to self-place higher than MTH 21. See QR code above for detail about self-placement.

## AP Exam Scores or Transfer Courses

Present your documentation to a counselor for higher placement. Visit the Counseling website for more information at www.chabotcollege.edu/counseling.

## Pre-Transfer Courses

To ensure that all students understand their right under $A B 705$ and the benefits of enrolling in transfer-level math course, a petition is required to enroll in a pre-transfer math course. The petition is located in CLASS-Web where the Math Course Selection is found. For more information, see https://tinyurl.com/CCPreTransferMath

For information about updated placement process, please visit the Assessment Center website at www.chabotcollege.edu/counseling/assessment

## MATH PLACEMENT UPDATES

## NOTES ABOUT THE COURSE SEQUENCE CHART

- The unit load for the course is in (parentheses).
- An * notes a class that meets the minimum requirement to satisfy the AA/AS math proficiency requirement. However, AB 705 gives you direct access to first-level transferable math courses, which you are encouraged to take to meet both the AA/AS math proficiency and transfer math requirements at the same time.
- $A \pm$ notes a class with the minimum requirement to satisfy the CSU GE math requirement.
- It is advised that you consult a Counselor to determine UC admission math requirements and visit www.assist.org to determine math requirements for your major.
- MTH 253 and MTH 255 are noncredit versions of MTH 53 and MTH 55, respectively. See https://tinyurl.com/CCMathNC for details.


## MATH SEQUENCE



The green slotted line shows the path for Science, Technology, Engineering, Mathematics (STEM) math courses.
The red dashed line shows the path for Business majors
The blue solid line shows the path for Statistics and Liberal Arts Math (SLAM) courses


## DISTRICT BOARD POLICY BP 5500

 STANDARDS OF STUDENT CONDUCT
## REFERENCES

Education Code Sections 66300 and 66301; ACCJC Accreditation Standards I.C. 8 and 10

The Chancellor shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of the federal and state law and regulations.

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions, including but not limited to the removal, suspension, or expulsion of a student.

The Board of Trustees shall consider any recommendation from the Chancellor for expulsion. The Board shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Board on the expulsion shall be taken at a public meeting.

The procedures shall be made widely available to students through the college catalogs and other means.

The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension, or expulsion of a student, except for conduct that constitutes sexual harassment under Title IX, which shall be addressed under BP 3433 Prohibition of Sexual Harassment under Title IX:

- Causing, attempting to cause, or threatening to cause physical injury to another person.
- Possession, sale, or otherwise furnishing any firearm, knife, explosive, or other dangerous object, including but not limited to any facsimile firearm, knife, or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a District employee, which is concurred in by the college president.
- Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging, or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.
- Committing or attempting to commit robbery or extortion.
- Causing or attempting to cause damage to District property or to private property on campus.
- Stealing or attempting to steal District property or private property on campus, or knowingly receiving stolen District property or private property on campus.
- Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the District.
- Sexual assault or sexual exploitation regardless of the victim's affiliation with the District.
- Committing sexual harassment as defined by law or by District policies and procedures.
- Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
- Engaging in intimidating conduct or bullying against another student or member of the District community through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyberbullying.
- Willful misconduct which results in injury or death to a student or to college personnel.
- Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel or members of the District community.
- Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
- Dishonesty, forgery, alteration, or misuse of college documents, records, or identification; or knowingly furnishing false information to the District.
- Unauthorized entry upon or use of college facilities.
- Lewd, indecent, or obscene conduct on District-owned or controlled property or at District-sponsored or supervised functions.
- Engaging in expression which is obscene; libelous, or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.
- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
- Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any District policy or administrative procedure.

Students who engage in any of the above are subject to the procedures outlined in AP 5520 Student Discipline Procedures.

District community is defined as the entirety of the public that interacts with the District, its Colleges, and District operations. This includes students, employees, visitors, and contractors.

Also see AP 5500 Standards of Student Conduct and AP 5520 Student Discipline Procedures.

Adopted: June 17, 2014
Board Reviewed: February 15, 2022
(Replaces former CLPCCD Policy 5512)

## DISTRICT ADMINISTRATIVE

 PROCEDURE AP 5500
## STANDARDS OF STUDENT CONDUCT

## REFERENCES

Education Code Sections 66300 and 66301; ACCJC Accreditation Standards I.C. 8 and 10

Students who violate any of the Standards of Student Conduct as outlined in BP 5500 Standards of Student Conduct will be subject to the discipline as delineated in AP 5520 Student Discipline Procedures.

All complaints of alleged misconduct made against a student by any person should be submitted to the Vice President of Student Services or designee (VPSS/designee), with a copy to the area administrator. These complaints must be made in writing, specifying the time, place, and nature of the alleged misconduct. Identifying information for the complainant is also required. If the VPSS/designee determines the complaint to be capricious, the complaint may be dismissed.

The VPSS/Designee shall conduct an investigation of the reported incident as is appropriate. The VPSS/Designee will confer with the accused student for the purposes of advising the student of the report and of the student's rights under college rules and regulations. The VPSS/Designee may also procure information relating to the report from the accused student and other persons, including an assessment of damage to property or injury to persons. Such investigations shall be treated as confidential and shall not be placed in the student's file unless a charge is upheld, and a decision is rendered by the VPSS/ Designee against the student.

Following investigation, the VPSS/Designee will render a decision in writing to the student as well as the person filing the complaint against the student (if appropriate) within five (5) working days. The VPSS/Designee may find that the complaint lacks merit; or deliver a written statement to the accused student formally charging that student with misconduct.

This statement will specify one or more of the following actions that will be taken in the case:

1. Place on record a verbal or written reprimand.
2. Apply restorative justice or restitution practices which
require the student to take specific actions.
3. Place the student on probation, temporary exclusion, or suspension.
4. Recommend expulsion to the District Board of Trustees via the President of the College and the District Chancellor.
5. Assign the case for further review to a formal Hearing Committee.

The student may do one of the following:

1. Accept the VPSS/Designee decision.
2. Notify the VPSS/Designee in writing within two (2) working days to initiate a formal hearing.

## DEFINITIONS

District means Chabot-Las Positas Community College District.
College means Chabot College or Las Positas College.
Student includes all persons taking courses at the College, both full time and part-time studies. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the (College) are considered "students".

Faculty member means any persons hired by the (College/ District) to conduct classroom activities.

Manager includes any person employed by the (College/ District) performing assigned administrative, professional, or staff responsibilities.

Agent of the college includes any person who is a student, faculty member, classified professional, (College/District) official or any other person employed by the (College).
(College) premises includes all land, buildings, facilities, and other property in the possession of or owned, used or controlled by the (College) including adjacent streets and sidewalks.

College community includes any person who is a student, faculty member, staff, (College/District) official or any other person employed by the (College).

Organization means any number of persons who have complied with the formal requirements for (College) enrollment/ registration.

Behavior includes conduct and expression.
Hazing means any method of initiation into a student organization, or any pastime or amusement engaged in with regard to such an organization or causes, or is likely to cause bodily danger, or physical or emotional harm, to any member of the college community.

Deadly weapons include any instrument or weapon of the kind commonly known as a blackjack, sling shot, billy club, sand club, sandbag, metal knuckles, any dirk, dagger, switchblade knife, or any knife having a blade longer than five inches, pistol, revolver, or any other firearm, any razor with an unguarded blade, any metal pipe or bar used or intended to be used as a club.

Shall is used in the imperative sense.
May is used in the permissive sense.
Policy is defined as the written regulations of the (College/ District) as found in, but not limited to, the Student Code, and College Catalog.

Cheating includes, but is not limited to: fraud deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials which are prohibited or inappropriate in the context of the academic assignment in questions, such as: copying or attempting to copy from others during an exam or on an assignment, communicating answers with another person during an exam, preprogramming a calculator to contain answers or other unauthorized information for exams, using unauthorized materials, prepared answers, written notes, or concealed information during an exam, or allowing others to do an assignment or portion of an assignment for you, including the use of a commercial termpaper service.

Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work or another person without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared; by another person or agency engaged in the selling of term papers or other academic materials.

Designee is the person(s) designated by the college or District. The Vice President of Student Services or college President may name a designee for Vice President of Student Services. The campus safety administrator or President may name a designee for campus safety administrator. The Chancellor may name the college President or another designee for Chancellor.

Day means a day during fall and spring semesters when the College is in session and regular classes are held, excluding Saturdays and Sundays. For the summer session, days-for purposes of notice and response under this Administrative Procedure-may be reasonably extended to ensure the responsible parties are able to appropriately attend to the issue. Notice of extension will be provided to the student.

District community refers to the entirety of the public that interacts with the District, its Colleges, and District operations. This includes students, employees, visitors, and contractors.

Also see BP 5500 Standards of Student Conduct and AP 5520 Student Discipline Procedures.

Adopted: March 18, 2014; Revised August 2016
Board Reviewed: January 18, 2022
(Replaces former Administrative Rules and Procedures 5512)



## DISCONTINUED PROGRAMS

## COMMUNICATION STUDIES (COMM)

## Degree

AA Speech Communications

## COURSE DEACTIVATION

| COMPUTER SCIENCE (CSCI) |  |  |  |
| :--- | :--- | ---: | :---: |
| CSCI 5 | Technology for Academic Success | 1 Unit |  |
|  | GEOGRAPHY (GEO) |  |  |
| GEO 95 | Work Experience |  |  |
| GEO 96 | Work Experience Seminar | 1 1-3 Units |  |
|  |  | 1 Unit |  |

## MASS COMMUNICATIONS (MCOM)

MCOM 24 Newspaper Production IV
3 Units

## MATHEMATICS (MTH)

| MATHEMATICS (MTH) |  |  |
| :--- | :--- | :--- |
| MTH 65B | Elementary Algebra B | 3 Units |
| MTH 103 | Basic Mathematics | 3 Units |


| NURSING (NURS) |  |  |
| :--- | :--- | ---: |
| NURS 64 | Pharmacology for Professional Nurses | 3 Units |
| NURS 73 | Intravenous Therapy Lab | 0.5 Units |
| NURS 88 | Pathophysiology | 3 Units |

## PSYCHOLOGY - COUNSELING (PSCN)

PSCN 85 Fieldwork: Social Work and Human Services 3 Units


# ENGLISH <br> <br> NON-CREDIT PREPARATION FOR ENGLISH <br> <br> NON-CREDIT PREPARATION FOR ENGLISH COMPOSITION 

 COMPOSITION}

Certificate of Competency

Learn or review strategies for reading critically in an academic setting, managing the steps of the writing process, and learning to access and use sources. This program is designed for students who are looking to practice their reading and writing in a low stakes environment before taking transfer-level, for-credit English courses. English 1, Critical Reading and Composition is required for most Associate's Degree and transfer programs. Students who earn the Non-credit Preparation for English Composition Certificate will be prepared with strategies for the reading and writing required in English 1 as well.

## Career Opportunities

Critical reading and composition skills provide a foundation for skills required in most degree-level or transfer-level quantitative courses. Critical reading and composition skills developed in this program are essential preparation for careers such as, office manager, executive assistant, HR assistant.

## Program Learning Outcomes

1. Critically respond to the ideas and information in academic texts;
2. Independently read and understand complex academic texts;
3. Develop and apply a series of metacognitive strategies for reading comprehension and analytical writing, to establish a strong foundation for transfer-level English.

Required Core (choose 2 courses) Hours
ENGL 201A Non-Credit Preparation for Composition I 45
ENGL 201B Non-Credit Preparation for English Composition II 45
ENGL 202 Noncredit Reading, Writing, and ReasoningAccelerated Course
ENGL 215 Support with Writing and Reading 18-54
Total Hours:
63-144

## ENGLISH (ENGL) COURSE UPDATES

## 202 Noncredit Reading, Writing, and Reasoning-

 Accelerated Course90 Hours

## New course

Preparation for academic reading, critical thinking, and writing expected in transfer and associate-degree classes. This course is designed to prepare students to move, in one semester, into English 1. It includes in-class time to practice college-level reading and writing, using primary texts of diverse authors, including marginalized voices. This course is tuition free and students may repeat this course until mastery of the skills is met. This course is tuition free and students may repeat this course until mastery of the skills is met. It is equivalent to the English 102 credit course of the same title; both options cover the same content and students will be enrolled in the same class at the same time. If a student chooses to move from noncredit to credit courses, please meet with English faculty to discuss assessing equivalency and credit by exam. This course can be used to earn a Certificate of Competency in Preparation for English Composition. Available Certificates can be found in the Chabot College Catalog.


## APPRENTICESHIP: CONSTRUCTION SYSTEM

 ELECTRICAL LOW VOLTAGE (CEST)
## CONSTRUCTION SYSTEM ELECTRICAL LOW VOLTAGE (CEST) COURSES

## 9701 Introduction to Construction Electronic Systems Technician I

3 Units
This course provides the Construction Electronic Systems Technician apprentice with instruction in the following areas: Basic safety, including accident prevention, lockout/tagout, trenching and lifting safety, firefighting, and electrical safety guidelines. Measurements and calculations, including units of imperial and metric measure, decimal and fractional numbers. Use of hand and power tools. Reading and care of blueprints. Rigging safety, equipment, crane hand signals, estimating size and weight of load. Methods used to move equipment and materials. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9702 Introduction to Construction Electronic Systems Technician II

3 Units
This course provides the Construction Electronic Systems Technician apprentice with instruction in basic principles of electrical safety and hazard procedures, including working with toxics and vapors. Students are also provided with instruction in techniques used to hand bend conduits and install anchors and supports. Additional instruction included an introduction to basic electrical theory and test equipment, the use of National Electric Code (NEC) boxes, fittings and conductors, and the interpretation of related electrical blueprints and commercial/industrial/residential symbols, diagrams and schematics used for wiring. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9703 Intermediate Construction Electronic Systems Technician I

3 Units
This course provides the Construction Electronic Systems Technician with instruction in mathematics related to the trade and electronic theory, including common electrical formulas, quantities, units, and analyzing the operation of electrical circuits. Standard electronic measurement tools, such as multimeters, wattmeters, and megohmeters, and techniques for their use. Alternating Current (AC) and Direct Current (DC) electrical systems and grounding, and blueprint reading related to the trade. Application of wire, cable, and their termination. Student will learn applicable codes and standards and how to determine which codes and standards apply for a given application. Student must be a state registered apprentice in this trade. 36 hours lecture, 54 hours laboratory.

## 9704 Intermediate Construction

Electronic Systems Technician II
3 Units
This course provides the Construction Electronic Systems Technician with instruction in types of cabling, switches and relays, terminating conductors, low-voltage codes and standards, and computer cabling applications. Installation, configuration, and troubleshooting of computer networking appliances. Study of fiber optic theory, devices, and systems. Basic theory, installation, and operation of wireless communication systems. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9705 Advanced Construction

Electronic Systems Technician I
3 Units
This course provides the Construction Electronic Systems Technician with instruction in wire and cable selection, advanced buses and networks, fiber optic installation, cable and satellite television systems, and wireless communications. Students will learn the components, cabling, and installation techniques specific to audio, video, broadband, and digital communication systems. Student must be a state registered apprentice in this trade. 36 hours lecture, 54 hours laboratory.

## 9706 Advanced Construction <br> Electronic Systems Technician II

3 Units
This course provides the Construction Electronic Systems Technician with instruction in wire and cable selection, advanced buses and networks, fiber optic installation, cable and satellite television systems, and wireless communications. Students will learn the components, cabling, and installation techniques specific to audio, video, broadband, and digital communication systems. Student must be a state registered apprentice in this trade. 36 hours lecture, 54 hours laboratory.

## 9795 Occupational Work Experience - <br> Construction Electronic Systems Technician 1-8 Units

 New courseCollege supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. 60-480 hours unpaid or 75-600 hours paid work experience.

## APPRENTICESHIP: ELECTRICAL CONSTRUCTION (ELEC)

## ELECTRICAL CONSTRUCTION (ELEC) COURSE UPDATES

## 9701 Introduction to Electrical Construction I

3 Units
This course provides the electrical worker with instruction in general construction site safety, measurements and formulas, use of hand and power tools, interpretation of blueprints, basic rigging techniques and methods used to move equipment and materials. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9702 Introduction to Electrical Construction II

3 Units
This course provides the electrical student with instruction in basic principles of electrical safety and hazard procedures, including working with toxics and vapors. Students are also provided with instruction in techniques used to hand bend conduits and install anchors and supports. Additional instruction includes an introduction to basic electrical theory and test equipment, the use of National Electric Code (NEC) boxes, fittings and conductors, and the interpretation of related electrical blueprints and commercial/ industrial/residential symbols, diagrams and schematics used for wiring. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9703 Intermediate Electrical Construction I 3 Units

This course covers the installation of connections for conductor termination and splices; use of cable pulling instruments and National Electrical Manufacturers Association (NEMA) and National Electrical Code (NEC) standards for cable tray; installation of electrical service and related components and equipment; use of material take-off methods and troubleshooting techniques; identification of ratings for current breakers and fuses and regulations for sizing use, and installation of relay switches, conductors and overrides; electrical lighting principles, types and applications. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9704 Intermediate Electrical Construction II

3 Units
This course is an intermediate study of electrical techniques. Topics include the principles of alternating currents, the characteristics of circuits, transformers, motor theory applications, grounding purposes and methods, National Electrical Code (NEC) requirements for conduit bending, types of bends, specifications for boxes and fittings, and location considerations. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

9705 Advanced Electrical Construction I
3 Units
This course is an advanced study of electrical techniques. Topics include branch load calculations for circuits and varied electrical appliances, electrical conductors, devices used for overprotection of loads, currents, circuits and fuses, fill requirements for boxes/ raceways, principles of wiring devices, switches and receptacles, requirements for distribution equipment, settings for voltage, switch gear, circuits and components, distribution system transformers, National Electrical Code (NEC) requirements, and troubleshooting. This course is designed for students in the Electrical program. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9706 Advanced Electrical Construction II

## 3 Units

This course provides the electrical worker with instruction in basic lighting and National Electrical Code (NEC) requirements for indoor and outdoor lighting. Topics include introductory motor basics, including calculations, transformers, instruments for testing, wiring, protection, maintenance, and troubleshooting for various types of motors and motor controls. This course also covers an introduction to heating, ventilation, and air conditioning (HVAC) systems and refrigeration theory, including compressors, operating systems and system maintenance equipment, and safety requirements. The principles of combustion, hazardous materials, their reactions in varied locations, and the use of safety equipment is also included in this course. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9707 Electrical Construction Specialties I

3 Units
This course provides the electrical worker with instruction in calculations for wiring commercial and residential dwellings and National Electrical Code (NEC) requirements for lighting and specialty fixtures. Topics include the standby emergency electrical systems and system applications, disconnect switches, feeder and branch circuits for direct current (DC) systems, theory and operating principles for solid-state devices, operational amplifier circuits, transformers and components of fire alarm and security systems, and installation methods for smoke and heat detectors. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9708 Electrical Construction Specialties II

3 Units
This course is designed to provide the electrical worker with advanced instruction in controls for motors, starters, relays, switches and transformers as well as in the installation and connection of gas burner controls and commercial and industrial Heating Ventilation and Air Conditioning (HVAC) control systems. Topics also include National Electrical Code (NEC) and Occupational Safety and Health Administration (OSHA) requirements for connecting and grounding varied welding machines, installation and protection of heat-tracing and freeze protection equipment, principles and maintenance of motors, and selection of materials and tools required for high voltage termination/splices according to manufacturer's specifications. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9795 Occupational Work Experience Electrical Construction

1-8 Units
New course
College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. 60-480 hours unpaid or 75-600 hours paid work experience.

## APPRENTICESHIP: PIPEFITTING (PLPF)

## PIPEFITTING (PLPF) COURSE UPDATES

## 9701 Introduction to Plumbing I

3 Units
This course is designed to give the plumbing/pipefitting student introductory information regarding OSHA (Occupational Safety \& Health Administration) standards of safety and precautions for working on the construction site; a review of math as it relates to plumbing, hand and power tool usage, basic plumbing blueprint reading, welding and basic rigging. This course is designed for students planning a career in the plumbing/pipefitting trade. Student must be a registered State indentured apprentice. May not receive credit if PLBG 9701 has been completed successfully. 36 hours lecture, 72 hours laboratory.

## 9702 Introduction to Plumbing II

3 Units
This course is designed to give the plumbing/pipefitting student an introduction to reading and interpreting the International Association of Plumbing \& Mechanical Officials (IAMPO) uniform plumbing codes and residential plumbing drawings, identifying various types of pipe and the procedures for working with the pipe. This course also includes identification of various plumbing lines and their components. This course is designed for students planning a career in the plumbing trade. Student must be a registered State indentured apprentice. May not receive credit if PLBG 9702 has been completed successfully. 36 hours lecture, 72 hours laboratory.

## 9703 Intermediate Plumbing I

3 Units
This course is designed to give the plumbing/pipefitting student an introduction to reading and interpreting the International Association of Plumbing \& Mechanical Officials (IAMPO) uniform plumbing codes and residential plumbing drawings, identifying various types of pipe and the procedures for working with the pipe. This course also includes identification of various plumbing lines and their components. This course is designed for students planning a career in the plumbing trade. Student must be a registered State indentured apprentice. May not receive credit if PLBG 9703 has been completed successfully. 36 hours lecture, 72 hours laboratory.

9704 Intermediate Plumbing II
3 Units
This course is designed to give the intermediate plumbing/ pipefitting student the ability to perform testing of water supply piping and systems, installation of the components of a water supply system, and the ability to read and interpret commercial plumbing drawings for project requirements according to local and national codes. The application of advanced trade math concepts is further developed. This course is designed for students planning a career in the plumbing trade. Student must be a registered State indentured apprentice May not receive credit if PLBG 9704 has been completed successfully. 36 hours lecture, 72 hours laboratory.

## 9705 Advanced Plumbing I formerly

3 Units
(Formerly PLBG 9705)
This course is designed to provide the advanced pipefitting/ pipefitting student with the ability to perform applications of advanced math for plumbers and methods of handling waste. This course also provides information relating to water softening measures, methods of locating buried lines, the installation and maintenance of waste pressure booster systems, and the prevention of backflow. This course is designed for students planning a career in the plumbing/pipefitting trade. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9706 Advanced Plumbing II

3 Units
(Formerly PLBG 9706)
This course is designed to provide the advanced plumbing/pipefitting student with the ability to organize job tasks, clean and disinfect potable water systems, thaw frozen pipes, and install main to meter water services and solar systems. This course also covers the ability to rough-in fixtures for residential, commercial and handicapped settings and install natural gas. This course is designed for students planning a career in the plumbing/pipefitting trade. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9707 Plumbing Construction Specialties I

3 Units
(Formerly PLBG 9707)
This course is designed to introduce the plumbing student to specialty topics such as swimming pool installation, medical gas systems, mobile home and mobile home park plumbing systems, and private water waste and treatment systems. This course is designed for students planning a career in the plumbing trade. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9708 Plumbing Construction Specialties II

3 Units
(Formerly PLBG 9708)
This course is designed to prepare the advanced plumbing student to apply plumbing codes to correctly design and build plumbing systems. Primary topics include coverage of codes pertaining to plumbing fixtures and fittings, water heaters and fuel piping, drainage, waste and vent systems, sewage and reclaimed water systems, sizing and standards, shielded metal arc welding and alternate plumbing systems. This course is designed for students planning a career in the plumbing trade. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9735 Pipefitting Construction Specialties I

3 Units
This course is designed to give the pipefitting student instruction in pipe hangers and supports, identifying and installing valves, field routing and vessel trim, spring can supports. Emphasis is placed on planning work activities and performing non-destructive examination testing. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9740 Pipefitting Construction Specialties II

3 Units
This course is designed to give the Pipefitting student instruction in advanced pipe fabrication, aligning pipe to rotating equipment, steam traps, in-line specialties, special piping, hot taps and maintaining valves. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

9745 Pipefitting Construction Specialties III 3 Units
This course is designed to give the Pipefitting student an introduction to advanced rigging practices, installation of couplings, mechanical seals, and conventional alignment and laser alignment. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9750 Pipefitting Construction Specialties IV

3 Units
This course is designed to give the Pipefitting student an introduction to steam systems, high-pressure systems, heaters, furnaces, heat exchangers, cooling towers and fin fans. Hydrostatic and pneumatic testing, basic hydraulic systems, troubleshooting and repairing hydraulic systems. Student must be a registered State indentured apprentice. 36 hours lecture, 72 hours laboratory.

## 9795 Occupational Work Experience Plumbing/Pipefitting

1-8 Units
New course
College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. 60-480 hours unpaid or $75-600$ hours paid work experience.

## APPRENTICESHIP: ROOFING (APRO)

## ROOFING (APRO) COURSE UPDATES

9701 Introduction to Roofing/Waterproof Industry 3 Units Introduction to the apprenticeship program for the roofing and waterproofing industry including safety, use of tools and equipment, types of roofs and structural design. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

9702 Roof/Waterproof Material/Equipment
3 Units
Preparation and application of various roofing and waterproofing materials including bitumen and asphalt products, built-up roofing materials and adhesives, rigid roofing materials, elastomeric and plastic membranes, flashing materials, fasteners and operation and maintenance of small engines. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

9703 Build-Up Roofing Assemblies
3 Units
Preparation and application of built-up roofing assemblies and related components. Including roof preparation, handling, and loading of Built-up roofing materials. Operation, maintenance, and safety of kettle operation. Overview of other built-up roofing consideration - Insulation, Sumps and drains and Flashings. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

9704 Cold-Applied Roofing Systems
3 Units
Preparation and application of cold-applied assemblies and related components including waterproofing, dampproofing, asphaltic, bituminous sheet and membrane, elastomeric sheet and fluid applied systems. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

## 9705 Roofing Shingles <br> 3 Units

Application and maintenance of various roofing shingle systems including safety, preliminary work, new construction, reroofing, roll roofing and wood shingles and shakes. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

## 9706 Rigid Roofing

3 Units
The preparation and application of rigid roof materials, including one and two piece Mission tiles, Roman tiles, Concrete interlocking tiles, slate and rigid materials. Hoisting and handling of rigid materials. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

## 9707 Maintenance/Repair/Re-Roofing

3 Units The maintenance, repair and re-roofing, waterproofing and dampproofing of built-up, shingle, cold applied, single-ply and rigid roofs. Includes safety, material handling and leak detection. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

9708 Single-Ply Roofing and Waterproofing Systems 3 Units The application and maintenance of single-ply roofing and waterproofing systems. Includes materials and safety of EDPM,Modified Bitumen and Thermoplastic systems. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

## 9709 Plans and Specifications

3 Units The development and application of plans, specifications, regulations, cost estimating and mathematics for the roofing and waterproofing industry. Use of and reading plans, specification and codes related to the roofing trade. Mathematics, and square determinations. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

## 9710 Standard First Aid

3 Units
Development offirstaid knowledge and skills necessary to care for most personal injuries and to meet most personal injuries, including but not limited to heat related illness, burns, bleeding, shock, stroke, seizures, and allergies. Accident prevention. Development of CPR knowledge and skills necessary to care for victims of sudden cardiac arrest, and use of AED. Successful completion of the knowledge and skills tests qualifies for an American Red Cross Adult CPR, AED and Standard First Aid Certification, valid for 2 years. Student must be registered in the IRCC Apprentice Program. 36 hours lecture, 54 hours laboratory.

## 9795 Occupational Work Experience Roofing Apprenticeship

1-8 Units

## New course

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. 60-480 hours unpaid or 75-600 hours paid work experience.

## APPRENTICESHIP: SHEETMETAL (SHEE)

## SHEETMETAL (SHEE) COURSE UPDATES

## 9795 Occupational Work Experience - Sheet Metal 1-8 Units New course

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. 60-480 hours unpaid or 75-600 hours paid work experience.

## APPRENTICESHIP:

TELECOMMUNICATIONS (APTE)

## TELECOMMUNICATIONS (APTE) COURSE UPDATES

## 9707 Fiber Installation \& Maintenance 3 Units

Introduction to Fiber Optic Technology. Provides coverage of theory, installation procedures, testing procedures, proper maintenance, and trouble analysis of Fiber Optics Systems. Introduction to multimode and single mode fiber. Coverage of how generic fiber optic systems operate. Procedures for interpreting the output of fiber optic monitor controls, optical time domain reflectometers and error rate test sets. Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship committee (CWA-JAC). 54 hours lecture.

## 9714 Introduction to Computer Networking 3 Units

The Course provides a thorough overview of networking basics: MAC and IP addressing, hubs and switches, packets and ports, and OSI versus TCP/IP models, cabling, topologies and Ethernet basics, basics of TCP/IP and an overview of routing, major TCP/IP applications, http, https protocols, ports and network naming conventions. This course also discusses VLAN, VPNs, IPv6 and remote connectivity; Using wired (Ethernet) and wireless (Wi-Fi) methods to connect the computers and equipment in a network; sharing files between computers and explaining how to manage connections to those services with DHCP and DNS addressing; setting up an Internet connection and configuring security and local-storage options for the network. Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship committee (CWA-JAC). 54 hours lecture.

## 9715 Computer Literacy <br> 3 Units

Introduction to computers including: What is a computer, what's inside a computer, laptop and desktop computers, hardware, software, Microsoft Windows, Internet, World Wide Web, multimedia, browsers, Microsoft Word, Microsoft Excel, and an awareness of computer software in use including programming languages, electronic mail, storage devices, and printing. No prior computer experience necessary; course recommended for students of any major who want to learn about computers and how to use them. Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship Committee (CWA-JAC). 54 hours lecture.

## 9716 Installation Skills-Level 3

3 Units
Advanced level procedures and practices of installing and maintaining telecommunications and associated equipment. Hands on exercises in testing and fusion splicing with fiber optic cabling circuits. The course discusses principles of security, intrusion detection systems, exploring the basics of design, and provides examples of the application of various types of sensors used to provide intrusion detection, various types of access control systems, video surveillance fundamentals, notification display devices, special systems such as nurse call, codes, standards, regulations, and organizations. Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship Committee (CWA-JAC). 54 hours lecture.

## 9718 Installation Skills-Level 2

3 Units
Intermediate level procedures and practices of installing telecommunications equipment, including EIA/TIA standards and applicable NEC and IEEE codes and standards for the telecommunications industry. Demonstrative proficiency in termination and testing of copper in accordance with the EIA/TIA 568 and 569 standards. Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship Committee (CWA-JAC). 54 hours lecture.

## 9720 Health and Safety <br> 3 Units

Coverage of health and safety issues and procedures in the telecommunications industry. Included in the course will be an introduction to OSHA, health and safety related to falls, electrocution, falling objects, trench hazards, personal protective and lifesaving equipment, health hazards in construction, CPR and first aid training. In addition, overall and direct use of appropriate tools and equipment required to install and maintain communications systems are covered. Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship Committee (CWAJAC). 54 hours lecture.

## 9721 Fiber Installation \& Maintenance Level 2 <br> New course

Provides coverage of theory, and hands-on coverage of splicing activities necessary for the installation procedures; testing procedures; proper maintenance and trouble analysis of Fiber Optics Systems including multimode and single mode fiber. Coverage of how to splice fiber optic cables using a fusion splicer and connectorizing fiber cables with connectors. Procedures on open and close splice cases and closures. Procedures for interpreting fiber optical time domain reflectometers (OTDR). Student must be a registered State indentured apprentice and/or approved by the CWA Joint Apprenticeship Committee (CWA-JAC). 54 hours lecture.

## 9795 Occupational Work Experience -

Telecommunications Apprenticeship
1-8 Units
New course
College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. 60-480 hours unpaid or 75-600 hours paid work experience.

## ARCHITECTURE (ARCH)

## Degrees

AA Architecture

## Certificate of Achievement

Architecture Technology

## ARCHITECTURE

## Associate in Arts

The Chabot College Architecture Program is a well-established program that prepares students to transfer into architecture programs at 4 -year universities. Students may complete the program by earning an Associate of Arts (AA) degree in Architecture or Certificate of Achievement in Architecture Technology or transfer without a degree. Our program provides upgraded Building Information Modeling (B.I.M) computer labs and drafting studios with state-of-the-art computer drafting software for students to complete. Required courses cover design, drafting, building code, construction materials, interior design, graphics, 3-D modeling, urban design and landscape architecture.

## Career Opportunities

This degree is designed to prepare students with knowledge of architecture building codes, drafting skills and building designs. Students who obtain this degree will be able to work with Architects, Landscape Architects, Developers, Interior Designers, Historic Preservation and Government Agencies. It is also designed as basic coursework for transferring into advanced degree programs in architecture and related fields.

## Program Learning Outcomes

1. Develop architectural and freehand.
2. Identify and explain the behavior appearance and use building materials.
3. Incorporate the basic Uniform Building Code requirements to construction drawings.
4. Describe and apply knowledge of the structural systems using wood, steel, masonry, and concrete.

## First Year

ARCH 2A Architectural Graphics in Drawing and Sketching
ARCH 2B Architectural Graphics in Color Rendering 3
ARCH 3 Digital Tools for Design and Visual Communication
ARCH 14 California Architecture and Urban Design 3
ARCH 33 Digital Communication in Modeling 3

## Second Year

ARCH 4A Architectural Drafting Principles I 3
ARCH 4B Architectural Drafting Principles II 3
ARCH 8A Fundamentals of Architectural Design I 4
ARCH 8B Fundamentals of Architectural Design II
ARCH 12 Construction Materials and Methods
ARCH 16 People and Environmental Design

| Major Requirements | 35 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## ARCHITECTURE TECHNOLOGY

## Certificate of Achievement

The Chabot College Architecture Program is a well-established program that prepares students to transfer into architecture programs at 4-year universities. Students may complete the program by earning an Associate of Arts (AA) degree in Architecture, or Certificate of Achievement in Architecture Technology, or transfer without a degree. Our program provides upgraded Building Information Modeling (B.I.M) computer labs and drafting studios with state-of-the-art computer drafting software for students to complete. Required courses cover design, drafting, building code, construction materials, interior design, graphics, 3-D modeling, urban design and landscape architecture.

## Career Opportunities

This certificate of achievement is designed to prepare students for employment as assistant Architects, assistant landscape architects, junior developers, interior designers, architectural drafters, architectural office managers, model-making workers, and building construction workers.

## Program Learning Outcomes

1. Develop computer rendering and drafting skills.
2. Develop advanced presentation skills in 3D forms and posters.
3. Incorporate Uniform Building Code requirements and City regulations to residential
4. Use different materials such as wood, truss, steel, masonry, and concrete to apply to structural systems.

## First Year

Units
ARCH 2A Architectural Graphics in Drawing and Sketching 3
ARCH 3 Digital Tools for Design and Visual Communication 3 (same as ID 49)
ARCH 14
ARCH 2B
ARCH 4A
ARCH 33
California Architecture and Urban Design 3
Architectural Graphics in Color Rendering 3
Architectural Drafting Principles I 3
Digital Communication in Modeling

## Second Year

ARCH 4B Architectural Drafting Principles II 3
ARCH 8A Fundamentals of Architectural Design I 4
ARCH 12 Construction Materials and Methods 3
ARCH 8B Fundamentals of Architectural Design II 4
ARCH 16 People and Environmental Design 3
ARCH 80 Architectural Education and Practice 2
Total

## ARCHITECTURE (ARCH) COURSE UPDATES

## 3 Digital Tools for Design and Visual Communication3 Units

(Formerly 4.0 units course)
(See also ID 49 )
Introduction to digital tools with computer-aided design drafting. Ability to effectively use basic design principles in two dimensions. Topics include command basics including drawing entity creation and modification, industry layering standards, text and dimensioning systems appropriate to architecture, creating symbol libraries, external reference techniques, model and paper space commands, and plotting techniques. May not receive credit if ID 49 or ARCH 68 has been completed. 36 hours lecture, 72 hours laboratory.

## 4A Architectural Drafting Principles I

3 Units
Introduction to principles and practice of architectural drafting with emphasis on working drawings for wood frame construction; introduction to drafting concepts and conventions for architectural working drawings, basic building systems, and architectural applications of computer-aided drafting technology. 36 hours lecture, 72 hours laboratory. Prerequisite: ARCH 3 (same as ID 49) or ARCH 68 or ID 49.
ART (ART)

## Degrees

AA Fine Art Sculpture

## FINE ART SCULPTURE

Associate in Arts

Correction: List A should say ART 16B not Art 16A (already listed under required core)

The sculpture program provides a sequenced studio approach to three-dimensional creations in a variety of materials and techniques that prepare students for lifelong learning as a professional artist. Through working from observation and imagination as the backbone of the curriculum, students learn about medium, form, and content. The principal component of the program is studio activity, and students explore studio work that demonstrates individual expression, critical thinking, and an awareness of historical and contemporary art making. Critical dialogue and rigorous expectations about craftsmanship and studio best practices support work toward an artistic vision.

## Career Opportunities

The Associate of Fine Arts degree is offered for the student eventually seeking a Bachelor of Fine Arts degree, the position of a professional artist or designer. The A.F.A. degree program is demanding, requiring high quality performance in order to develop the professional competence of talented students toward successful entrance into the professional art field. Job opportunities include curate an art gallery or mobile business, develop an effective portfolio that leads to successful marketing and entrepreneurship or set up, maintain, and manage a safe and effective studio. Job titles include: Commercial Artist, Designer, Exhibition Designer, Art Critic/Writer, Art Director.

## Program Learning Outcomes

1. Gain functional competence with principles of visual organization, including the ability to work with visual elements in two and three dimensions; color theory and its applications; and drawing.
2. Present work that demonstrates perceptual acuity, conceptual understanding, and technical facility at a professional entry level in sculpture.
3. Become familiar with the historical achievements, current major issues, processes, and directions of sculpture.
4. Be afforded opportunities to exhibit their work and to experience and participate in critiques and discussions of their work and the work of others.

Required Core
Units
ART 2A Introduction to Drawing 3
ART 16A Introduction to Ceramics I 3
ART 17A Beginning Sculpture $1 \quad 3$
ART 17B Beginning Sculpture $2 \quad 3$
ART 20 All Media Sculpture 3
ART 22 Metal Sculpture - Lost Wax Bronze Casting 3
ART 23 2-D Foundations 3
ART 24
ART 45
ARTH 5 Art History - Renaissance to Modern-Day

## Art Electives (choose any 6 units)

ART 2B Drawing and Composition
ART 3A Figure and Composition I
ART 7A
ART 12A
Introduction to Watercolor Painting
ART 13A
ART 13B
Beginning Oil Painting
Acrylic Painting - Beginning I
ART 16B Introduction to Ceramics II 3
ART 18A Wood and Stone Sculpture I 3
ART 18B Wood and Stone Sculpture II 3
ART 61
DIGM 1
DIGM 2
DIGM 4A
DIGM 6A
Illustration
Introduction to Digital Art
Introduction to Graphic Design
Digital Illustration
Photoshop
(same as PHOT 6A)
DIGM 10A Introduction to Animation 3
DIGM 11 Video Editing 3
FILM 16 Documentary Filmmaking 3
PHOT 1A Digital Photography I 3
PHOT 2A Black and White Darkroom Photography 3
PHOT 3A Introduction to Studio Lighting 3
PHOT 4A Color Theory for Photographers 3
PHOT 6A Photoshop 3
(same as DIGM 6A)

## Art History Elective (Choose any 3 units)

ARTH 4 Art History-Ancient to Gothic 3
$\begin{array}{ll}\text { ARTH } 6 & \text { Art History - Twentieth- and Twenty-First } \\ & \text { Century Art }\end{array}$
ARTH $8 \quad$ Art History - A Global Perspective 3

| Major Requirements | 37.5 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

ART HISTORY (ARTH)

## Degree

AA-T Art History

## ART HISTORY

## Associate in Arts for Transfer

Correction: title for course ARTH 8 updated
Art History involves the analysis of form, historical context, and meaning in visual images made across the globe from prehistory to today. Because humans make art to communicate the breadth and depth of human experience, art historical inquiry can lead to a consideration of varied subjects, including cultural, ethnic, social, religious, economic, and political topics, in addition to artistic and aesthetic ones. The Art History major is particularly well-suited to students who consider themselves visual learners, or those seeking to enrich their cultural backgrounds, solidify their knowledge of history, develop analytical and writing skills, sharpen critical sensibilities, and prepare for opportunities in museums, galleries, historical societies, and more. Students wishing to pursue the Associate in Arts forTransfer in Art History must complete 60 semester units eligible for transfer to the California State University, including either: The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth Requirements, and a minimum of 18 units of major coursework in the major, as detailed below. Students must maintain a minimum 2.0 GPA , including grades of $C$ or higher in each course taken to fulfill the major.

## Program Learning Outcomes

1. develop the ability to interpret artistic content through the analysis of subject matter and form;
2. acquire a critical understanding of art in historical eras that accounts for changing cultural frameworks over time.

## Required Core

## Units

ARTH $4 \quad$ Art History-Ancient to Gothic
ARTH $5 \quad$ Art History - Renaissance to Modern-Day
ART 2A Introduction to Drawing

## List A (select one)

ARTH $7 \quad$ Multicultural History of American Art
ARTH $8 \quad$ Art History - A Global Perspective

## List B (select one)

ART 3A Figure and Composition I 3
ARTH $6 \quad$ Art History - Twentieth- and Twenty-First Century Art
3
ART 23 2-D Foundations 3
ART 24 3-D Foundations 3

List C (select one)
ARTH 3 Film History and Appreciation 3
ARTH 20 History of Photography 3
(same as PHOT 20)
PHOT 20 History of Photography
(same as ARTH 20)
Electives: Any CSU transferable units. Only needed if major \& GE units do not total 60 CSU transfer units.
NOTE: Grades of "C" or higher is required for major courses, IGETC courses, and CSU GE Areas A2 and B4.

| Major Requirements | 18 units |
| :--- | ---: |
| General Education | CSU GE 39 units |
|  | IGETC (CSU) 37 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## ART HISTORY (ARTH) COURSE UPDATES

## 1 Introduction to Art 3 Units

Why does art matter? Art matters because human beings makehave always made and always will make-images to communicate the great breadth of human experience. And why does the history of art matter? Because without it, the meaning of our forebears' images-their messages, teachings, gifts-will be lost to us. In this introduction to art, our class will travel through history and across the globe to learn how we humans use painting, sculpture, architecture, photography and other artforms to respond to our circumstances, to solve our problems, to demonstrate our values, and to make beauty from the materials we find around us. (Formerly ART 1; may not receive credit if ART 1 has been completed.) 54 hours lecture.

## ASTRONOMY (ASTR)

## ASTRONOMY (ASTR) COURSES

## 30 Introduction to Astronomy Lab

1 Unit
Introduction to laboratory principles and techniques in astronomy. Includes operation of local and/or remote robotic telescopes, calculation of angular sizes, spectroscopy, lunar phases, eclipses, computer simulations, digital image analysis and processing, motions of the sun, moon, and planets, and identification of constellations and stars in the seasonal night skies. 54 hours laboratory. Prerequisite: ASTR 10 May be taken concurrently or ASTR 20 may be taken concurrently

## BIOLOGICAL SCIENCES (BIOS)

## Degree

AS-T Public Health Science

## PUBLIC HEALTH SCIENCE

## Associate in Science for Transfer

Correction: removed the 'or' between BIOS 42 and BIOS 43
The AS-T in Public Health Science provides a clearly articulated curricular track for students who wish to transfer to baccalaureate degree programs at a California State University (CSU) campus. California Community College students who are awarded an AS-T in Public Health Science are guaranteed admission with junior standing in the CSU System and given priority admission consideration to their local CSU campus to a program in areas such as Public Health, Health Science, Kinesiology with a Health Education or a Health and Wellness Promotion concentration, Collaborative Health and Human Services with Community Health option, as well as related fields. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their chosen major. AS-T Requirements: • Completion of 60 semester units or 90 quarter units of degree-applicable courses, $\cdot$ Minimum overall grade point average of 2.0, • Minimum grade of " C " (or "P") for each course in the major, and - Completion of IGETC or CSU GE-Breadth.

## Program Learning Outcomes

1. Demonstrate an understanding of health and wellness information using the scientific method, scientific research and established knowledge.
2. Explain the interdependence of molecular through organismal structure and function in both health and disease.
3. Acquire, conduct, analyze, and interpret data using scientific terminology, measurements, and protocols.


## BIOLOGICAL SCIENCES (BIOS) COURSE UPDATES


#### Abstract

43 Human Physiology 5 Units Human cellular and systemic body functions are studied. Emphasis is placed on physics, chemistry, and clinical concepts. Students will learn collection and analysis of data, extrapolations and conclusions. Working models, including human responses, and computer simulations are studied. Intended for students needing preparation for careers and program prerequisites in nursing, dental hygiene, physical therapy and other allied health sciences. May not receive credit if PHSI 1 has been completed successfully. 54 hours lecture, 108 hours laboratory. Prerequisite: CHEM 30A and BIOS 42 Strongly Recommended: CHEM 30 B and Eligibility for ENGL 1.


## BUSINESS (BUS)

## Degrees

AS Architecture

## Certificates

Basic Employability Preparation (new)
Management
Marketing

## BUSINESS

## Associate in Science

The core curriculum for the Business Associate in Science Degree involves completing the courses below and the general education requirements. Students may enroll in one of the three areas of concentration: General Business, Management, or Marketing. Only one Associate in Science Degree in Business may be earned. While all classes in the program transfer to four-year universities at least as electives, the program is not intended to prepare a student for transfer. If your main goal is transferring to a four-year school, consider completing the AS-T in Business Administration for Transfer instead.

## Career Opportunities

This program intends to prepare students for new employment or promotions in the fields of management, supervision, marketing, finance, international business, or other areas of business administration. This degree with its three areas of concentration (General Business, Marketing, and Management) can lead to positions of General and Operations managers, Marketing, and Sales managers. The labor market information data on annual openings in 2018-28 for Oakland-Hayward-Berkeley Metro Area from San Francisco Bay Center of Excellence for Labor Market Research is as follows: marketing managers: 310 annual openings, sales managers: 516 annual openings, all other managers: 1,025 annual openings. The total is 1,851 annual openings.

## Program Learning Outcomes

1. Understand and apply generally accepted accounting principles to prepare financial statements
2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.
3. Create effective oral and written business communications using modern communication technologies.
4. Apply critical thinking and analytical skills in decision making and problem solving.

## Required Core

BUS 1A Financial Accounting 4
or
BUS 7 Accounting for Small Business 3
BUS 10 Business Law 4
BUS 12 Introduction to Business 3
BUS 16 Business Mathematics 3
BUS 22 Introduction to Management 3
BUS 36 Introduction to Marketing 3
BUS 40 International Business 3
CAS 50 Introduction to Computer Application Systems 3
or
Microsoft Excel 3
or
Computer Literacy 3

## Concentration

Select one from the three areas of concentration below. Only one A.S. degree in Business may be earned

## Concentration 1 - General Business

Select a minimum of 9 units from the list below and/or any lower division course with a prefix Business or Entrepreneurship not already used for a major requirement.

BUS 1B Managerial Accounting
BUS 20 Law and Society
BUS 21 Human Resource Management
BUS 26 Small Business Management
BUS 28 Human Relations in the Workplace
BUS 43 Personal Financial Planning
BUS 50A Skills for Supervisors
BUS 50C Interviewing for Success
BUS 50D Resumes and Job Application Letters
BUS 50J Time Management Skills
BUS 50K Listening Skills
BUS 50L Careers in Business
BUS 50M Workplace Diversity
BUS 50N Dealing with Difficult People
BUS 50P Quality Customer Service
BUS 50R Being a Successful Virtual Worker
BUS 50S Managing Virtual Teams
ENTR 1 Introduction to Entrepreneurship
ENTR 5 The Entrepreneurial Mindset
ENTR 20 Marketing for Entrepreneurs
ENTR 30 The Business Plan

## Concentration 2 - Management

BUS 21 Human Resource Management
Select a minimum of $\mathbf{6}$ units from the following options:
BUS 1B Managerial Accounting 4
BUS 26 Small Business Management 3
BUS 28 Human Relations in the Workplace 3
BUS 50A Skills for Supervisors
BUS 50C Interviewing for Success
BUS 50D Resumes and Job Application Letters 1
BUS 50J Time Management Skills 1
BUS 50K Listening Skills
BUS 50L Careers in Business
1
BUS 50M Workplace Diversity
BUS 50N Dealing with Difficult People
BUS 50P Quality Customer Service
BUS 50R Being a Successful Virtual Worker
BUS 50S Managing Virtual Teams
ENTR 1 Introduction to Entrepreneurship

## Concentration 3 - Marketing

BUS 34 Introduction to Advertising 3
ENTR 20 Marketing for Entrepreneurs 3

Select a minimum of $\mathbf{3}$ units from the following options:
BUS 26 Small Business Management 3
BUS 32 Retail Store Management 3
BUS 50A Skills for Supervisors 1
BUS 50C Interviewing for Success 1
BUS 50D Resumes and Job Application Letters 1
BUS 50J Time Management Skills 1
BUS 50K Listening Skills 1
BUS 50L Careers in Business 1
BUS 50M Workplace Diversity 1
BUS 50N Dealing with Difficult People 1
BUS 50P Quality Customer Service 1
BUS 50R Being a Successful Virtual Worker 1
BUS 50S Managing Virtual Teams 1
ENTR 1 Introduction to Entrepreneurship 3
The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

## Required Major Specific G.E. Requirement

BUS 14 Business Communications 3

| Major Requirements | $34-35$ units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

BASIC EMPLOYABILITY PREPARATION

## New! <br> Certificate of Proficiency

The Certificate of Proficiency in Basic Employability Preparation assists students in developing an understanding of college and job readiness skills and professional communication required in the workplace. The focus is on providing skills for integrated employment, such as demonstrating healthy behaviors in interpersonal engagement, social settings, and employment opportunities. Successful completion of this certificate prepares students for entrylevel customer service positions.

## Program Learning Outcomes

1. Develop college and job readiness skills.
2. Demonstrate healthy behaviors in personal, social, and employment interactions.

## Required Core

| PSCN 10 | Career and Educational Planning | 2 |
| :--- | :--- | :--- |
| PSCN 20 | The College Experience | 2 |


| PSCN 24 | Personal Growth | 1 |
| :--- | :--- | :--- |
|  | or |  |

SERV 85A Learning in Action: Beginning 1
List A (select 3 units)

| BUS 50C | Interviewing for Success | 1 |
| :--- | :--- | :--- |
| BUS 50D | Resumes and Job Application Letters | 1 |
| BUS 50J | Time Management Skills | 1 |
| BUS 50K | Listening Skills | 1 |
| BUS 50L | Careers in Business | 1 |
| BUS 50M | Workplace Diversity | 1 |
| BUS 50N | Dealing with Difficult People | 1 |
| BUS 50P | Quality Customer Service | 1 |

Total

## Certificate of Achievement

Chabot's quick and flexible Certificate of Achievement in Management will provide you with the people skills and business knowledge to succeed and advance in for-profit or non-profit organizations. Graduates of the program have secured new positions or gained promotions to general managers, supervisors, assistant HR managers, office managers, retail store managers, sales managers, distribution managers, business owners, production supervisors, training coordinators, recruiters, buyers, and purchasing agents. The certificate consists of 6 classes, so it can be finished in 1-2 semesters studying part-time. Required classes can be taken in any sequence (except for BUS 1B) and there are no prerequisites to begin the program. Classes are available online, on campus, and in a hybrid format (a mix of on campus and online). The certificate can be earned fully online. All classes within the program apply toward an AS degree in Business, emphasis in Management.

## Career Opportunities

This fast and flexible certificate is popular with currently employed students looking for a promotion to a supervisory or managerial position. It is also highly beneficial to current managers who wish to upgrade their skills and improve their chances for further promotion. Labor market information informs that open positions for managers in the Oakland-Hayward-Berkeley metropolitan area are 11,140 in 2018 with annual opening of 1,025 .

## Program Learning Outcomes

1. Understand and apply generally accepted accounting principles to prepare financial statements.
2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.
3. Create effective oral and written business communications using modern communication technologies.
4. Apply critical thinking and analytical skills in decision making and problem solving.

| Required Core | Units |  |
| :--- | :--- | ---: |
| BUS 12 | Introduction to Business | 3 |
| BUS 21 | Human Resource Management. | 3 |
| BUS 22 | Introduction to Management | 3 |
| BUS 1A | Financial Accounting | 4 |
| BUS 7 | or |  |
|  | Accounting for Small Business | 3 |

## List A (Choose a minimum of six units)

BUS 1B Managerial Accounting 4
BUS 10 Business Law 4
BUS 14 Business Communications 3
BUS 16 Business Mathematics 3
BUS 28 Human Relations in the Workplace 3
BUS 36 Introduction to Marketing 3
BUS 40 International Business 3
BUS 50A Skills for Supervisors 1
BUS 50C Interviewing for Success 1
BUS 50D Resumes and Job Application Letters 1
BUS 50J Time Management Skills 1
BUS 50K Listening Skills 1
BUS 50L Careers in Business 1
BUS 50M Workplace Diversity 1
BUS 50N Dealing with Difficult People 1
BUS 50P Quality Customer Service 1
BUS 50R Being a Successful Virtual Worker 1
BUS 50S Managing Virtual Teams 1
The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

Total
18-19

## MARKETING

## Certificate of Achievement

This certificate is popular among students who are searching for an entry-level position in marketing, sales, or advertising. It is also beneficial to people currently employed in the field who wish to upgrade and improve their chances for further promotion. This flexible and quick certificate consists of only 6 classes that can be taken in any sequence. All required classes are offered every semester, including summer, with the one exception of BUS-34, Introduction to Advertising, which is offered every fall. You can finish the certificate in 2 semesters attending college part-time. The certificate can be earned fully online. All classes within the certificate will also apply towards an AS degree in Business, Marketing concentration.

## Career Opportunities

Research indicates that about one-third of the labor force is now employed in marketing. Career opportunities in marketing are also expected to grow rapidly in the future. Marketing careers offer flexibility, mobility, and pay to match your ability. Graduates of this program have become marketing managers, professional sales and customer service representatives, small business owners, buyers and merchandisers in the retail community. They are also responsible for buying and selling product offerings, planning promotions and advertising and public relations campaigns. Here is labor demand in Oakland-Hayward-Berkeley for some of the jobs the program graduates may acquire: Sales Representative Services: 8,950 jobs available in 2018, with annual job openings of 1,270. Buyers \& Purchasing Agents: 3,340 jobs available in 2018, with annual job openings of 331, Customer Service reps: 13,740 jobs available in 2018, with annual job openings of 1,781, Marketing Managers: 2,830 jobs available in 2018, with annual job openings of 310.

## Program Learning Outcomes

1. Develop a viable marketing strategy for the product offer, promotion, placement and pricing of a product or service.
2. Evaluate economic, social and regulatory impacts of advertising.
3. Create effective oral and written business communications using modern communication technologies.
4. Apply critical thinking and analytical skills in decision making and problem solving.

## Required Core

BUS 12 Introduction to Business
Units

BUS 14 Business Communications
BUS 34 Introduction to Advertising
3

BUS 36 Introduction to Marketing
ENTR 20 Marketing for Entrepreneurs

## List A (choose a minimum of three units)

BUS 1A Financial Accounting 4
BUS 7 Accounting for Small Business 3
BUS 16 Business Mathematics 3
BUS 22 Introduction to Management 3
BUS 32 Retail Store Management 3
BUS 40 International Business 3
BUS 50A Skills for Supervisors 1
BUS 50C Interviewing for Success 1
BUS 50D Resumes and Job Application Letters 1
BUS 50J Time Management Skills 1
BUS 50K Listening Skills 1
BUS 50L Careers in Business 1
BUS 50M Workplace Diversity 1
BUS 50N Dealing with Difficult People 1
BUS 50P Quality Customer Service 1
BUS 50R Being a Successful Virtual Worker 1
BUS 50S Managing Virtual Teams 1
ENTR 1 Introduction to Entrepreneurship 3
The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

Total
18-19

## BUSINESS (BUS) COURSE UPDATES

## 14 Business Communications 3 Units

This course applies the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes planning, organizing, composing, and revising business documents using word processing software for written documents and presentation-graphics software to create and deliver professional-level oral reports. This course is designed for students who already have college-level writing skills. 54 hours lecture, 18 hours laboratory. Strongly Recommended: ENGL 1 Critical Thinking and Composition

## 36 Introduction to Marketing

3 Units
Survey of marketing, including consumer behavior, company and environmental analysis, market segmentation, product development, pricing, promotion, and distribution. Marketing for small and large businesses, startups, governments, and institutions. Personal, consumer, business to business and digital marketing are included.

50R Being a Successful Virtual Worker 1 Unit
New course
Students will learn about the skills, characteristics, and strategies of successful remote/virtual workers, as well as the aspects that impede successfully working in a virtual position. Students will examine elements related to keeping productivity high and creating a healthy virtual work life and personal life balance. 18 hours lecture.

## 50S <br> Managing Virtual Teams

1 Unit
New course
Students will discover the characteristics and skills of effective virtual team members and leaders. Students will learn the virtual team life cycle (including establishing and disbanding a virtual team), effective communication in and with a virtual team, and leading virtual team members to keep them engaged. 18 hours lecture.

## 88 Introduction to Project Management

3 Units
Project management is the ability to define work efforts in terms of time, budget, and resource needs essential for business planning. Covers the forms, tools, and processes to plan and manage these efforts both efficiently and effectively. 54 hours lecture. Strongly Recommended: CAS 50, Computer Application Systems 8 or CSCl 8 and CAS 54A.

## 89 Project Planning, Scheduling and Control 3 Units

A successful Project Manager relies on an effective management plan, which provides a baseline for monitoring progress, identifying variances, and taking timely action to mitigate the impact of problems. In this course, you learn how to create such a plan and implement it through to project completion and evaluation. It explores in greater detail the tools and techniques presented in Business 88.54 hours lecture. Strongly Recommended: BUS 88.

## COMMUNICATION STUDIES (COMM)

## Certificates

Interpersonal Communication
Persuasive and Rhetorical Communication

## INTERPERSONAL COMMUNICATION

## Certificate of Achievement

Correction: PSY 33 course title update
The Interpersonal Certificate of Achievement is designed to prepare students with a strong foundation for communication in dyads and small group communication. This unique area of communication studies allows students to explore areas that are common to our everyday lives as well as many professions. Students learn theories of small group communication, interpersonal communication, intercultural and gender studies, as well as a survey of the entire discipline.

## Career Opportunities

This certificate can enhance resumes for students wishing to work in health care settings, customer service positions, and other business environments.

## Program Learning Outcomes

1. pursue and evaluate knowledge through the skills of inquiry, research and critical thinking.
2. demonstrate effective skills in written and spoken communication.

## Required Core

Units
COMM 3 Group Communication 3
COMM 10 Interpersonal Communication 3
COMM 11 Intercultural Communication 3
COMM 12 Gender, Sexual Identity, and Communication 3
COMM 50 Introduction to Communication Studies 3

## Electives (choose one course)

COMM 70B Experienced Communication Tutor Training 2-3
PSCN 1 Introduction to PsychologyCounseling in a Multicultural Environment 3
(same as APHC 9710)
PSY 3 Social Psychology 3
PSY 33 Psychology of Personal and Social Adjustment 3
SOCI 4 Marriage and Family Relations 3
SOCl 6 Introduction to Gender 3
Total 17-18

# PERSUASIVE AND RHETORICAL COMMUNICATION 

## Certificate of Achievement

This certificate develops student skills to become strong communicators by providing a foundation in the available means of persuasion (Rhetoric).

## Career Opportunities

Communication skills are vital in all industries. In particular, students who study Rhetoric often go into legal careers, but many students pursue careers in advertising, public relations, film, tv, and other emerging technological fields. Rhetoric students are often very successful in gaining acceptance into graduate programs, especially in Communication, Business, Law, and Media Studies.

## Program Learning Outcomes

1. pursue and evaluate knowledge through the skills of inquiry, research and critical thinking.
2. demonstrate effective skills in written and spoken communication.

## Required Core

## Units

## COMM 1 Fundamentals of Speech Communication

COMM 20 Persuasion and Communication ..... 3
COMM 46 Argumentation and Debate ..... 3
COMM 48 Activities in Forensics ..... 1-4

## List A (choose one course)

| MCOM 40 | Introduction to Broadcasting | 3 |
| :--- | :--- | :--- |
| MCOM 41 | Introduction to Mass Communications | 3 |
| MCOM 43 | Advertising Sales \& Media Management | 3 |
| ENGL 4A | Critical Thinking and Writing about Literature | 4 |
| ENGL 7A | Critical Thinking and Writing across Disciplines | 4 |
| PHIL 70 | Introduction to Political and Social Philosophy | 3 |
| POSC 25 | Introduction to Political Theory | 3 |

## Total <br> 16-20

## COMMUNICATION STUDIES (COMM) COURSE UPDATES

## 11 Intercultural Communication <br> 3 Units

This course will focus on the transmission and interpretation of messages between people from different cultures. Particular attention will be paid to beliefs, values, and norms reflected in American culture, specifically the crisscrossing dynamics of race, ethnicity, gender, religion and class. Emphasis on practical application of skills for effective communication between people of different domestic and international cultures. 54 hours lecture.

## COMPUTER APPLICATION SYSTEMS (CAS)

## Degrees

AS Administrative Assistant

## ADMINISTRATIVE ASSISTANT

## Associate in Science

The AS degree, Administrative Assistant covers a wide knowledge base needed for the workplace environment in diverse organizational settings. The program emphasizes technology, proofreading and editing, document formatting, electronic filing, accounting, business communication, and general business skills. Students will develop administrative skills necessary to be a part of the management team.

## Career Opportunities

The AS degree, Administrative Assistant prepares students to work in an office environment, in such positions as office managers, supervisors, administrative assistants, and clerks. These positions use a variety of office technology and computer-based applications (word processing, electronic mail, database, spreadsheets, presentation graphics), as well as such business skills as written and oral communications, accounting, basic payroll, team building, and leadership.

## Program Learning Outcomes

1. Become proficient in computer applications and use them to solve common business problems.
2. Apply critical thinking and analytical skills in decision-making and problem solving.
3. Create effective oral and written business communications, including quantitative report, using modern communication technologies.

## Required Core

BUS 7 Accounting for Small Business 3
CAS 50 Introduction to Computer Application Systems 3
CAS 54 Microsoft Excel 3
CAS 71 Keyboarding \& 10 Key 3
CAS 88 Microsoft Word 3
List A: Select three of the following courses (9 units)
BUS 12 Introduction to Business 3
BUS 16 Business Mathematics 3
BUS 21 Human Resource Management 3
BUS 22 Introduction to Management 3
BUS 28 Human Relations in the Workplace 3
BUS 36 Introduction to Marketing 3
List B: Select three of the following courses (3 Units)
BUS 50A Skills for Supervisors 1
BUS 50C Interviewing for Success 1
BUS 50D Resumes and Job Application Letters 1
BUS 50J Time Management Skills 1
BUS 50K Listening Skills 1
BUS 50M Workplace Diversity 1
BUS 50N Dealing with Difficult People 1
BUS 50P Quality Customer Service 1
BUS 50R Being a Successful Virtual Worker 1
BUS 50S Managing Virtual Teams 1

## Program-Based General Education Requirement:

BUS 14 Business Communications 3

| Major Requirements | 27 units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## DENTAL HYGIENE (DHYG)

## DENTAL HYGIENE (DHYG) COURSES

## 55A Dental Materials

1.5 Units

General, specialty, preventive and restorative materials will be covered, with focus on components, properties, classification and manipulation of specific materials. Lab activities designed to prepare student for use of materials within the dental setting. 18 hours lecture, 36 hours laboratory.

## 81A Clinical Practice I

5 Units
Continuation of clinical experience in performing dental hygiene therapy with emphasis on the young child and periodontal patient; patient education in prevention and control of dental disease and emergency procedures. 270 hours clinical. Prerequisite: DHYG 69B and DHYG 71B Corequisite: DHYG 56A and DHYG 57 and DHYG 80A and DHYG 83.

## EARLY CHILDHOOD DEVELOPMENT (ECD)

## EARLY CHILDHOOD DEVELOPMENT (ECD) COURSE UPDATES

## 11 Exploring Education

3 Units
This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, Pre-K, T-K, Kindergarten through the 12th grade. Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary education issues, California's content standards and frameworks, 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 selected and campus-approved certificated classroom teacher. 36 hours lecture, 54 hours laboratory.

## 50 Early Childhood Principles and Practices

3 Units
Historical contexts and theoretical perspectives of developmentally appropriate practice in early care and education for children and teaching strategies in supporting physical, social, creative and intellectual development of children birth through age eight. Explores the typical roles and expectations of early childhood educators emphasizing the key role of relationships, constructive adult-child interactions. Identifies professional ethics, career pathways, and professional standards. Introduces best practices for developmentally appropriate learning environments, curriculum, and effective pedagogy for young children including how play contributes to children's learning, growth, and development. 54 hours lecture.

## 54 Child Health, Safety and Nutrition

3 Units
Laws, regulations, standards, policies, procedures, and best practices related to health, safety, and nutrition in care and education settings for children birth through middle childhood. Includes the teacher's role in prevention strategies, first aid, emergency preparedness, infectious illnesses, nutrition and meal planning, integrating health safety and nutrition experiences into daily routines, overall risk management, school and family collaboration. 54 hours lecture.

## 56 Child Growth and Development

3 Units
Examines the progression of development in the physical, cognitive, social, and emotional domains and identifies developmental milestones for children both typical and atypical from conception through adolescence. Emphasis on interactions between biological processes and environmental factors. Students will observe children, evaluate individual differences, and analyze characteristics of development at various stages according to developmental theories. 54 hours lecture.

## 60 Introduction to the Young Child With Exceptional Needs

3 Units
Introduces the variations in development of infants and children with exceptional needs and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with exceptional needs, and the identification and referral process. Assessments, interventions, and learning environments for infants and children with exceptional needs. 54 hours lecture. Prerequisite: ECD 56.

## 62 Child, Family and Community <br> 3 Units

The processes of socialization focusing on development of identity and the interrelationship of family, school, and community. Examines the influence of multiple societal contexts. Explores the role of collaboration between family, community, and schools in supporting children's development, birth through adolescence. 54 hours lecture.

## 63 Early Childhood Curriculum 4 Units

Professional application of the principles of human growth and development, learning theories, and examples from various models of developmentally appropriate practice in the study of a play-based and inclusive curriculum. Students will plan learning experiences in all content areas, including indoor and outdoor settings, the facilitation and guidance of all children's experiences based on developmentally appropriate principles, and to support children's physical, social, emotional, cognitive, and creative needs from birth to age eight within a cultural context. 54 hours lecture, 54 hours laboratory. Prerequisite: ECD 50 and ECD 56.

## 67 Infant and Toddler Development and Caregiving 3 Units

 A study of infants and toddlers from preconception to 36 months including physical, cognitive, language, social, and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Examination of best practices, responsive caregiving techniques, environments, infant/toddler learning foundations, health, safety, and licensing requirements. 54 hours lecture. Prerequisite: ECD 56.
## 69 Child Study: Observation and Assessment

3 Units
Introduces the current and appropriate use of assessment and observation tools and strategies to document young children's development and learning. The use of findings to inform and plan learning environments and experiences are emphasized. Recording strategies, rating systems, portfolios, and multiple assessment tools will be discussed, along with strategies for collaboration with families and professionals. Effective observations that build on respecting and fostering all children's competence, striving for objectivity and individualizing programs to meet individual children's learning and developmental assessment. Direct observational experience and application of methods is required weekly. 54 hours lecture. Prerequisite: ECD 56.

## 79 Teaching in a Diverse Society

3 Units
Examines the historical and current perspectives on diversity and inclusion and the impact of various systemic societal influences on children's development, learning and school experiences. Critical examination of societal and personal attitudes and beliefs, values, assumptions and biases about culture, race, language, identity, family structures, ability, socio-economic status and other issues influenced by systemic oppression. Strategies for developmentally, culturally, and linguistically appropriate anti-bias curriculum will be explored as well as approaches to promote inclusive and antiracist classroom communities. Includes self-reflection on the influence of teachers' own culture and life experiences on teaching and interactions with children and families. Issues related to social identity, stereotypes, and bias will be explored; learn to recognize and confront barriers that interfere with one's ability to work effectively with diverse populations of children and families. Ethnic/ cultural groups referenced within course from the United States of America, including African American, Asian American, Chicano/ Latino, European American, Indigenous People of the Americas and Americans of Middle Eastern origin. 54 hours lecture.

## 87 Infant and Toddler Environments, Care, and Education

3 Units
Applies current theory and research to the care and education of infants and toddlers in group care. Examines essential policies, classroom environments, caregiving principles and practices that lead to quality care and developmentally appropriate curriculum for infants and toddlers which is culturally sensitive and supports families. 54 hours lecture. Strongly Recommended: ECD 67.


90 Practicum: Supervised Experience
4 Units
Practicum lab experience with young children under the supervision of an ECE/CD faculty and other qualified early education professionals where students will demonstrate developmentally appropriate early childhood program planning and teaching competencies. 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. Child centered, play-oriented approaches to teaching, learning and assessment; knowledge of curriculum content areas, and reflective practice will be emphasized as student teachers design, implement and evaluate approaches, strategies, techniques, and experiences that promote positive development and learning for all young children. Includes exploration of career pathways, professional development, and teacher responsibilities. 36 hours lecture, 108 hours laboratory. Prerequisite: ECD 50 and ECD 56 and ECD 62 and ECD 63.

## 91 Adaptive Curriculum for Children With Exceptional Needs

3 Units
Direct experience working with young children in special day classes or inclusive settings; application of intervention strategies and best practices of early childhood development and special education in adapting curriculum to meet the individual needs of children. Observation of the assessment process by the special education team and assisting in the implementation of the educational plan. Includes the role of the teacher as a professional working in partnership with families, collaboration with interdisciplinary teams, and cultural competence. Lab hours required in an inclusive classroom setting. 36 hours lecture, 54 hours laboratory. Prerequisite: ECD 60 and ECD 90.

## 95 Work Experience

1-3 Units
Supervised employment of students extending classroom-based occupational learning at an on-the-job learning station relating to the students' educational or occupational goals including paid or volunteer work experience or an internship. Cooperative effort between student, supervisor and instructor to accomplish professional work objectives, build competencies and broaden experiences in working with children in care and education settings. Course study under this section may be repeated for a maximum of 16 units for occupational or a combination of general and occupational work experience education. One unit of credit is earned for each 75 hours of paid work or 60 hours of volunteer work per semester. Corequisite: ECD 96.

## 96 Work Experience Seminar 1 Units

 Provides the focal point for the coordination of the student's curriculum with college supervised employment/volunteering in the student's major field. Emphasis on building strong working relationships with supervisors, subordinates, co-workers. Issues pertaining to the modern workplace, including problems often encountered by employees in care and education settings involving ethical dilemmas and conflicts. 18 hours lecture. Corequisite: ECD 95.
## ENGINEERING (ENGR)

## Degrees

AS Engineering

## Certificate of Achievement

Computational Design
Technical Design Drafting

## ENGINEERING

## Associate in Science

The Associate in Science degree is designed to provide the foundation for subsequent transfer to a CSU or UC Engineering program. The core courses listed below fulfill most of the lower division requirements for the majority of CSU and UC engineering majors. The Associate in Science degree, as well as putting students on the path to transfer, ensures that students develop a strong foundation in engineering, mathematics, and the sciences. Students should note that transfercourse requirements vary among universities, and between majors in the different branches of engineering. Students seeking to transfer with an engineering major are strongly advised to consult with Chabot Counseling. Counselors will assist the student with development of a Student Educational Plan (SEP) that prepares the student for transfer to the desired university in the engineering major of his/her choice. Students are also encouraged to consult the ASSIST webpage (www.assist.org) for more information on engineering transfer-course agreements between Chabot College and the CSU/ UC Colleges of Engineering.

## Career Opportunities

This degree qualifies you to be an engineering technician. Engineering technicians are in very high demand and job openings are increasing 5-10\% each year. The Associate in Science degree in engineering can prepare students for careers as civil, drafting, electrical, environmental, industrial, and mechanical engineering technicians. Average annual earnings for an engineering technician in the Bay Area are $\$ 77,000$ per year. Students can also use this degree to apply for internships while pursuing a bachelor's degree in engineering and can gain experience towards their Professional Engineering Certification.

## Program Learning Outcomes

1. demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health, safety, manufacturability, and sustainability;
2. demonstrate an ability to apply knowledge of mathematics, science, and engineering.

Required Core Units
CHEM 1A General College Chemistry I 5
MTH 1 Calculus I 5
MTH 2 Calculus II 5
MTH 3 Multivariable Calculus 5
MTH 4 Elementary Differential Equations 3
PHYS 4A General Physics I 5
PHYS 4B General Physics II 5

## List A

Complete at least 7 units.
Must complete at least one engineering course
ENGR 10 Introduction to Engineering 2
ENGR 11 Engineering Design and Analysis 2
ENGR 15 Engineered Systems and Sustainability 3
ENGR 16 Designing Information Devices and Systems I 4
ENGR 22 Engineering Design Graphics 3
ENGR 25 Computational Methods for
Engineers and Scientists
(same as MTH 25, PHYS 25)
ENGR 36 Engineering Mechanics -Statics 3
ENGR 40 Thermodynamics 3
ENGR 43 Electrical Circuits and Devices 4
ENGR 45 Materials of Engineering 4
ENGR 47 Engineering Dynamics 3
ENGR 85 Introduction to Solid Mechanics 3
CHEM 1B General College Chemistry II 5
CSCI $14 \quad$ Introduction to Structured Programming $\ln \mathrm{C}++\quad 4$
CSCl 15 Object-Oriented Programming Methods 4
CSCl 20 Introduction to Data Structures 4
BIOS 21C Principles of Cell and Molecular Biology 5
MTH 6 Elementary Linear Algebra
PHYS 4C General Physics III
PHYS 5 Modern Physics
2

## Required for Major Specific G.E. Requirement.

Complete a minimum of 3 units
COMM 1 Fundamentals of Speech Communication 3
ECN 1 Principles of Microeconomics 3
ENGL 4A Critical Thinking and Writing about Literature 4
ENGL 7A Critical Thinking and Writing across Disciplines 4
NOTE: Transfer schools (UC and CSU) typically prefer students focus on major-specific courses and minimum transfer admission requirements, and often discourage focus on, or completion of, general education patterns (ie. IGETC). Students are advised to select AS General Educational courses that will also satisfy transfer GE and/ or major requirements, when applicable.

| Major Requirements | 40 units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## COMPUTATIONAL DESIGN

## Certificate of Achievement

Students completing the Certificate of Achievement in Computational Design develop the skills for many entry level research and analytics positions, including, optimizing systems, production, manufacturing, sustainability, setting up and conducting experiments for research and development firms, and design analysis. Students will be competent in MATLab and Simulink software as well as applying both the sciences and art of computing to design problems.

## Career Opportunities

Completion of this certificate prepares students for a research assistant career with Industrial engineering, manufacturing, research, and product design firms. This certificate is especially beneficial for students applying to research apprenticeships, research \& development firms, technology companies, and companies in need of employees proficient in MATLab. This certificate gives a competitive advantage when applying to apprenticeships and entry level research positions and can increase their hourly wage earnings. Industrial engineering technicians positions are expected to grow by $12 \%$, from 1189 to 1338 over the next five years.

## Program Learning Outcomes

1. demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health, safety, manufacturability, and sustainability;
2. demonstrate an ability to apply knowledge of mathematics, science, and engineering.

## Required Courses

Units
CHEM 1A General College Chemistry I
ENGR 25 Computational Methods for
Engineers and Scientists
3
(same as MTH 25, PHYS 25)
MTH 1
Calculus I
5
MTH 2
Calculus II
5
PHYS 4A General Physics I 5
Total

## TECHNICAL DESIGN DRAFTING

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## Career Opportunities

Completion of this certificate prepares students for a Design-Drafting career with Civil-Engineering, Building Design-Construction, and Electro-Mechanical Device firms. This certificate is especially beneficial for students applying for internships in manufacturing, construction, or design. According to Labor Market Information data, engineering technician positions are expected to grow from 2707 positions in 2017 to 2869 positions by 2022, an increase of 6\%. Data also shows that demand for mechanical engineering technicians will also increase from 1127 to 1245 over the next five years, an increase of $10 \%$.

## Program Learning Outcomes

1. Demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political ethical, health and safety, manufacturability, and sustainability.
2. Demonstrate an ability to apply knowledge of mathematics, science, and engineering.

## Required Core <br> Units

ENGR 10 Introduction to Engineering 2
ENGR 11 Engineering Design and Analysis 2
ENGR 22 Engineering Design Graphics 3

## Complete 10 units from the following

## MTH 1 Calculus I 5

MTH 2 Calculus II 5
MTH 3 Multivariable Calculus 5
MTH 4 Elementary Differential Equations 3
MTH 6 Elementary Linear Algebra 3
MTH 20 Pre-Calculus Mathematics 5
MTH $21 \quad$ College Algebra for BSTEM 5
MTH 22 Trigonometry with Analytic Geometry 5
MTH 36 Trigonometry 3
MTH 36S Trigonometry with Support 4
MTH 37 Trigonometry with an
Emphasis on its Geometric Foundations 5
MTH 37S Trigonometry with an Emphasis on its Geometric Foundations with Support 5.5

MTH 55 Intermediate Algebra 5
Students who enter at a higher math level may see faculty in Engineering to request substituting higher-level math courses.

## Total

## ENGINEERING (ENGR) COURSE UPDATES

## 22 Engineering Design Graphics <br> 3 Units

Introduction to the engineering-design process, and to technicalgraphic communications tools used by engineers. Conceptual design of products. Development of spatial reasoning skills. Orthographic and axonometric projection-drawing techniques. Tolerance analysis for fabrication. Documentation of designs through engineering working-drawings. Use of 2D and 3D CAD software as a design tool. The use of CAD software is an integral part of the course. 36 hours lecture, 54 hours laboratory. Prerequisite: MTH 22 or MTH 36 or MTH 37.

## 25 Computational Methods for Engineers and Scientists 3 Units

(See also MTH 25, PHYS 25 )
Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB, SimuLink, MuPad, and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. May not receive credit if Mathematics 25 or Physics 25 has been completed. 36 hours lecture, 54 hours laboratory. Prerequisite: MTH 1 (completed with a grade of " C " or higher)

## 47 Engineering Dynamics <br> 3 Units

This course covers dynamics for engineering applications, where motion is involved. It includes the kinematics and dynamics of particles, systems of particles, and rigid bodies in two and three dimensions. Also included are orbital motion and satellites, vibrations, which are present in many engineering situations, Euler angles, which are necessary to completely describe the orientation of an object in space, and variable mass systems, such as rockets and jet engines. 54 hours lecture, 18 hours lecture. Prerequisite: ENGR 36.

ENGLISH (ENGL)

## Degree

AA-T English
AA English (Emphasis in Literature)

## Certificate of Proficiency

Creative Writing

## ENGLISH

## Associate in Arts for Transfer

Correction: title update for course MCOM 20, ENGL 22, and ENGL 31

The Associate in Arts in English for Transfer (AA-T) provides major preparation in English through an introduction to composition, critical thinking, literature, creative writing and related areas of study. It is also useful preparation for other liberal arts degrees, and will offer students an enriched background towards many diverse professional fields. The intent of the AA-T is to assist students in transferring to the California State University system. California Community College students who are awarded the English AA-T degree are guaranteed admission with junior standing in the CSU system, and given priority admission consideration to their local CSU campus to a program that is deemed similar to their community college major. Completion of 60 semester units of degree-applicable courses. Minimum overall grade point average of 2.0 . Minimum grade of " $C$ " (or " $P$ ") for each course in the major. Completion of IGETC or CSU GE-Breadth.

## Program Learning Outcomes

1. Critically respond to the ideas and information in academic texts
2. Independently read and understand complex academic texts
Required Core Units

ENGL 4A Critical Thinking and Writing about Literature 4

## List A

ENGL 35 Modern and Contemporary U.S. Literature 3
ENGL 41 World Literature (17th Century to the Present) 3

## List B (choose two courses)

ENGL 11A Introduction to Creative Writing 3
ENGL 20 Studies in Shakespeare 3
ENGL 21 The Evolution of the Black Writer 3
ENGL 22 Mexican American/Latinx Literature of the U.S. 3
ENGL 25 Asian-American Literature 3
ENGL 28 Classic and Contemporary Youth Literature 3
ENGL 31 Introduction to Queer Literature 3
ENGL 32 U.S. Women's Literature 3
ENGL 45 Studies in Fiction 3
ENGL 48 The Literature of the Holocaust 3

## List C:

Select one course from List C or any course from List B not already used.
ENGL 12A Beginning Fiction Writing
ENGL 13A Beginning Craft of Writing - Poetry
COMM 2 Oral Interpretation of Literature
THTR 10 Introduction to Theater Arts
MCOM 20 Introduction to Journalism Reporting and News Writing

Elective units: CSU transferable units (only needed if major and GE units do not total 60 units)
NOTE: Grades of "C" or higher is required for major courses, IGETC courses, and CSU GE Areas A2 and B4.

| Major Requirements | 19 units |
| :--- | ---: |
| General Education | CSU GE 39 units |
|  | IGETC (CSU) $37-39$ units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## ENGLISH (EMPHASIS IN LITERATURE)

## Associate in Arts

Correction: title for ENGL 22 and ENGL 31 courses updated
The English Associate in Arts degree enables students to complete coursework which may be applied towards a bachelor's degree in English. In addition, this degree is useful preparation for other liberal arts degrees, and can offer an enriched background towards professional preparation in fields from education to law. All of the courses for the degree transfer to universities and colleges.

## Career Opportunities

English majors go into a variety of fields, including law, education, publishing, business, government, media relations, entertainment, counseling, journalism, technical writing, nonprofit, development and fundraising, and many more.

## Program Learning Outcomes

1. demonstrate an ability to read and understand complex academic texts;
2. demonstrate a critical response to the ideas and information in academic texts.

## Required Core

Units
ENGL 4A Critical Thinking and Writing about Literature

## List A: Select four courses (12 units)

ENGL 20 Studies in Shakespeare 3
ENGL 21 The Evolution of the Black Writer 3
ENGL 22 Mexican American/Latinx Literature of the U.S. 3
ENGL 25 Asian-American Literature 3
ENGL 28 Classic and Contemporary Youth Literature 3
ENGL 31 Introduction to Queer Literature 3
ENGL 32 U.S. Women's Literature 3
ENGL 35 Modern and Contemporary U.S. Literature 3
ENGL 41 World Literature (17th Century to the Present) 3
ENGL 45
Studies in Fiction
ENGL 48 The Literature of the Holocaust 3

## List B

Select one (3-4 units) Any additional course from the list above, or:
ENGL 11A Introduction to Creative Writing 3
ENGL 12A Beginning Fiction Writing 3
ENGL 13A Beginning Craft of Writing - Poetry 3
SERV 85A Learning in Action: Beginning 2-3
ENGL 7A Critical Thinking and Writing across Disciplines 4

| Major Requirements | $19-20$ units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## CREATIVE WRITING

## Certificate of Proficiency

The Creative Writing certificate allows students to focus on developing their creative writing skills while exposing them to highquality creative work by professional writers.

## Program Learning Outcomes

1. produce a body of quality creative work.
2. develop a critical response to the creative writings of others.

## Required Core (choose three courses) Units

ENGL 11A Introduction to Creative Writing 3
ENGL 12A Beginning Fiction Writing 3
ENGL 13A Beginning Craft of Writing - Poetry 3
ENGL 11B Intermediate Creative Writing 3
ENGL 12B Intermediate Fiction Writing 3
ENGL 13B Intermediate Craft of Writing - Poetry 3

## List A (choose two courses)

| ENGL 20 | Studies in Shakespeare | 3 |
| :--- | :--- | :--- |
| ENGL 21 | The Evolution of the Black Writer | 3 |
| ENGL 22 | Mexican American/Latinx Literature of the U.S. | 3 |
| ENGL 25 | Asian-American Literature | 3 |
| ENGL 28 | Classic and Contemporary Youth Literature | 3 |
| ENGL 31 | Introduction to Queer Literature | 3 |
| ENGL 32 | U.S. Women's Literature | 3 |
| ENGL 35 | Modern and Contemporary U.S. Literature | 3 |
| ENGL 41 | World Literature (17th Century to the Present) | 3 |
| ENGL 45 | Studies in Fiction | 3 |
| ENGL 48 | The Literature of the Holocaust | 3 |
| THTR 16A | Introduction to Dramatic Writing | 3 |

Total

## ENGLISH AS A SECOND LANGUAGE (ESL)

## ENGLISH AS A SECOND LANGUAGE (ESL) COURSE CORRECTIONS

## 242B Intermediate Listening and Speaking

72 Hours
Correction: prerequisites - ESL 110A or ESL 240A or ESL 242A or appropriate skill level demonstrated through ESL assessment process.

This is a noncredit course in ESL Listening and Speaking at the Intermediate Level. Students will gain listening comprehension skills, oral fluency, study skills, and familiarity with Chabot College certificates, degrees and services. This course is free and may be repeated until mastery in the skill is met. Recommendation to take the course concurrently with ESL 110B. This course is part of a Certificate of Completion. Available Certificates can be found in the Chabot College Catalog. Prerequisite: ESL 110A or ESL 240A or ESL 242A or appropriate skill level demonstrated through ESL assessment process.

## ETHNIC STUDIES (ES)

## Degrees

AA-T Social Justice: Chicano Studies
AA-T Social Justice: Ethnic Studies
AA Ethnic Studies

## SOCIAL JUSTICE: CHICANO STUDIES

## Associate in Arts for Transfer

Correction: ENG 22, ES 52, ES 53, HIS 52, HIS 53 course title update

The AA-T in Social Justice: Chicano Studies is an interdisciplinary program of study, focusing on the intersectional analysis of the experiences and point of views of the diverse Chicanx/Latinx community. A degree in Chicano Studies provides students with the comprehension abilities and critical thinking skills related to the specific needs of the community. Moreover this field of study cultivates a skill set that is necessary to understand and engage with a complex set of social, political, and economic systems that often times are characterized by institutionalized discrimination. Students wishing to pursue the Associate in Arts for Transfer in Social Justice: Chicano Studies must complete 60 semester units eligible for transfer to the California State University, including either: The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements, and a minimum of 18 units of major coursework in Social Justice: Chicano Studies, as detailed below. Students must maintain a minimum 2.0 GPA, including grades of $C$ or higher in each course taken to fulfill the major.

## Program Learning Outcomes

1. Demonstrate an understanding of the diversity within the Chicanx community;
2. Analyze issues stemming from social, economic, and political systems characterized by institutional and structural discrimination;
3. Examine solutions toward social change, equity, and justice.


ES 42

HIS 42

NOTE: Grades of " C " or higher is required for major courses, IGETC courses, and CSU GE Areas A2 and B4.

| Major Requirements | 18 units |
| :--- | ---: |
| General Education | CSU GE 39 units |
|  | IGETC (CSU) 37 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

# NEW, CORRECTED, AND MODIFIED COURSE LISTING, ES 

## SOCIAL JUSTICE: ETHNIC STUDIES

## Associate in Arts for Transfer

Correction: ENG 22, ES 52, ES 53, HIS 52, HIS 53 course title update

The Associate in Arts for Transfer in Social Justice: Ethnic Studies degree is designed to prepare students who wish to pursue a Bachelor's degree in the field of Ethnic Studies at the CSUs. Some related majors include: African American Studies, Africana Studies, American Indian Studies, Asian American Studies, Chicana/Chicano Studies, Ethnic Studies, Gender Studies, Latin American Studies, Mexican American Studies, and Native American Studies. Ethnic Studies is an interdisciplinary and unique scholarly field that centralizes and redefines the experiences of people of color in the United States, using an intersectional analysis. Born out of the people power movements of various communities of color in the 1960s and the efforts of the third world Liberation Front, Ethnic Studies emphasizes on the praxis of resistance and liberation in order to eliminate all forms of injustice and oppression, especially along race, ethnicity, class, gender, and sexuality. Courses provide a critical racial perspective with a focus on the history, literature, and cultures of African Americans, Arab Americans, Asian Americans, Chicanx/ Latinx, Filipinx, Native Americans, and Pacific Islander Americans. Students wishing to pursue the Associate in Arts for Transfer in Social Justice: Ethnic Studies must complete 60 semester units eligible for transfer to the California State University, including either: The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements, and a minimum of 18 units of major coursework in Social Justice Studies: Ethnic Studies, as detailed below. Students must maintain a minimum 2.0 GPA , including grades of $C$ or higher in each course taken to fulfill the major. California Community College students who are awarded the Associate in Arts for Transfer in Social Justice: Ethnic Studies are guaranteed admission with junior standing somewhere in the CSU system in a major deemed similar to their Associate in Art for Transfer degree, as well as a .01 grade point average bump increase to a similar major at a CSU campus (for admissions purposes only). Students are strongly encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals.

## Program Learning Outcomes

1. Demonstrate knowledge of the histories and cultures of diverse racial/ethnic groups;
2. understand how major institutions, such as family, media, education, and government influence the experiences and opportunities of racial/ethnic groups;
3. analyze social issues and examine solutions toward social change, equality, and justice.

## Required Core <br> Units

Same courses cannot be repeated in more than one area.

| ES 1 | Introduction to Ethnic Studies |
| :--- | :--- | ---: |
| ES 7 | Women of Color in the United States: Introduction to <br> Race, Gender, and Sexuality Studies <br> (same as SOCI 7) |
| SOCI 7 | or |
|  | Women of Color in the United States: Introduction to <br> Race, Gender, and Sexuality Studies <br> (same as ES 7) |
| SOCI 6 | or <br> Introduction to Gender |

Major Preparation Core Courses (choose one course)
Same courses cannot be repeated in more than one area.

| ES 4 | Intro to Latinx Studies | 3 |
| :---: | :---: | :---: |
| ES 10 | Introduction to Asian American Studies (same as SOCl 10) | 3 |
| SOCI 10 | or Introduction to Asian American Studies (same as ES 10) | 3 |
| ES 25 | American Indian History and Culture (same as HIS 25) or | 3 |
| HIS 25 | American Indian History and Culture (same as ES 25) | 3 |
| ES 42 | Asian American History: 18th Century to 1945 (same as HIS 42) or | 3 |
| HIS 42 | Asian American History: 18th Century to 1945 (same as ES 42) | 3 |
| ES 43 | Asian American History: Early 20th Century - <br> 21st Century <br> (same as HIS 43) <br> or | 3 |
| HIS 43 | Asian American History: Early 20th Century 21st Century <br> (same as ES 43) | 3 |



## Area 3: Social Science

Same courses cannot be repeated in more than one area.

| ES 2 | Contemporary Ethnic Minority Families in the U.S. | 3 |
| :--- | :--- | :--- |
| ES 3 | Introduction to Muslim-American Studies | 3 |
| ES 4 | Intro to Latinx Studies | 3 |
| ES 5 | Critiquing Race and Gender in Popular Culture | 3 |
| ES 6 | Intro to Pacific Islands and Oceania Studies | 3 |
| ES 10 | Introduction to Asian American Studies | 3 |
|  | (same as SOCl 10) |  |
|  | or |  |
| SOCI 10 | Introduction to Asian American Studies | 3 |
|  | (same as ES 10) |  |
| ANTH 5 | Cultures of the U.S. in Global Perspective | 3 |
| ANTH 8 | Native American Cultures | 3 |
| COMM 12 | Gender, Sexual Identity, and Communication | 3 |
| PSCN 4 | Multiethnic/Cultural Communication | 3 |
| PSCN 13 | Multicultural Issues in Contemporary America | 3 |

NOTE: Grades of " C " or higher is required for major courses, IGETC courses, and CSU GE Areas A2 and B4.

| Major Requirements | 18 units |
| :--- | ---: |
| General Education | CSU GE 39 units |
|  | IGETC (CSU) 37 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## ETHNIC STUDIES

## Associate in Arts

Corrections: SOCI 3, ENGL 22, ES 52, HIS 52 and ES 53 and HIS 53 courses title updates

Ethnic Studies is an interdisciplinary and unique scholarly field that centralizes and redefines the experiences of people of color in the United States, using an intersectional analysis. Born out of the people power movements of various communities of color in the 1960s and the efforts of the third world Liberation Front, Ethnic Studies emphasizes on the praxis of resistance and liberation in order to eliminate all forms of injustice and oppression, especially along race, ethnicity, class, gender, and sexuality. Courses provide a critical racial perspective with a focus on the history, literature, and cultures of African Americans, Arab Americans, Asian Americans, Chicanx/Latinx, Native Americans, and Pacific Islander Americans.

## Career Opportunities

A degree in Ethnic Studies can lead toward any of the following career pathways, including: Education, Law, Social Work, Immigrant Rights, Civil Rights, Journalism, Public Health, Community and Union Organizing, Non-profit/social justice work, Government, Public Policy, Community Development/Urban Planning, International Relations

## Program Learning Outcomes

1. Demonstrate knowledge of diverse racial/ethnic groups and their cultures.
2. Understanding how major institutions, such as family, media, education, and government influence the experiences and opportunities of racial/ethnic groups.

## Core Courses <br> Units

ES 1 Introduction to Ethnic Studies
Ethnic/Racial Groups - Select 4 courses (12 units) from the following. At least three different racial or ethnic groups must be studied.

## Group A: Latinx/Latin American

ENGL 22 Mexican American/Latinx Literature of the U.S. 3
ES 4 Intro to Latinx Studies 3
HIS 32 Colonial Latin America 3
HIS 33 Modern Latin America 3
Group B: Mexican American
ENGL 22 Mexican American/Latinx Literature of the U.S. 3
ES 52 United States History from a Chicano Perspective I 3 (same as HIS 52)
or
HIS 52 United States History from a Chicano Perspective I 3 (same as ES 52)

ES 53 United States History from a Chicano Perspective II 3 (same as HIS 53)
or
HIS 53 United States History from a Chicano Perspective II (same as ES 53)

## Group C: African American

ENGL 21 The Evolution of the Black Writer
ES 62 The African-American Experience in U.S. History Through the Civil War
(same as HIS 62)
or
HIS 62 The African-American Experience in U.S. History Through the Civil War
(same as ES 62)
ES 63 The African American Experience in U.S. History From Reconstruction
(same as HIS 63)
or
The African American Experience in U.S. History From Reconstruction

3

## Group D: Asian American

| ENGL 25 | Asian-American Literature |
| :--- | :--- |
| ES 10 | Introduction to Asian American Studies <br> (same as SOCI 10) <br> or <br> Introduction to Asian American Studies <br> (same as ES 10) |
| SOCI 10 |  |
| ES 42 | Asian American History: 18th Century to 1945 <br> (same as HIS 42) <br> or |
| HIS 42 | Asian American History: 18th Century to 1945 <br> (same as ES 42) |
| ES 43 | Asian American History: Early 20th Century - <br> 21 2st Century <br> (same as HIS 43) <br> or |
| HIS 43 | Asian American History: Early 20th Century - <br> 21 st Century <br> (same as ES 43) |

## Group E: American Indian/Native American

ANTH $8 \quad$ Native American Cultures
ES 25 American Indian History and Culture (same as HIS 25) or
HIS 25 American Indian History and Culture (same as ES 25)

## Group F: Muslim American

ES 3
Introduction to Muslim-American Studies

## Group G: Pacific Islander

ES 6
Intro to Pacific Islands and Oceania Studies

## Comparative Courses (choose one course)

PSCN 4 Multiethnic/Cultural Communication 3
PSCN 13 Multicultural Issues in Contemporary America 3
ANTH 5 Cultures of the U.S. in Global Perspective 3
COMM 12 Gender, Sexual Identity, and Communication 3
ES 2 Contemporary Ethnic Minority Families in the U.S. 3
ES 5 Critiquing Race and Gender in Popular Culture 3
ES $7 \quad$ Women of Color in the United States: Introduction to Race, Gender, and Sexuality Studies 3 (same as SOCI 7)
or
SOCl 7 Women of Color in the United States:
Introduction to Race, Gender, and Sexuality Studies 3 (same as ES 7)

SOCl 3 Introduction to Race and Ethnicity 3
SOCI 6 Introduction to Gender 3

| Major Requirements | 18 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |
|  |  |
|  |  |

Degrees
AA Humanities

## HUMANITIES

## Associate in Arts

Correction: PHIL 60 course title update

The humanities seek to render an integrative and critical examination of the human achievements in art, literature, philosophy and music. This approach will broaden and enrich the students' appreciation of human values derived from the creative forces as expressed in the arts. Courses offered in this curriculum meet general education and transfer requirements and may be applied to a major in humanities for an Associate in Arts degree.

## Program Learning Outcomes

1. For oral and/or written form, discuss both objective and subjective responses to a work of art (literary, performing, or fine).
2. For oral and/or written form, differentiate between the arts as personal expression and the arts as socially transformative.

## Freshman Year

| HIS 1 | History of Western Civilization to 1600 |
| :--- | :--- |
| HUMN 50 | The Artful Life |
| PHIL 50 | Introduction to Philosophy |
| RELS 50 | Religions of the World |

## Sophomore Year

| HIS 2 | History of Western Civilization Since 1600 |
| :--- | :--- |
| HUMN 65 | The American Style <br> or |
| HUMN 68 | World Mythology <br> or |
| HUMN 60 Creativity and the Community |  |
| PHIL 60 | Ethics <br> or <br> Introduction to Philosophy:Theory of Knowledge <br> or <br> Introduction to Political and Social Philosophy |
| PHIL 65 |  |

## Option (Choose 6 units from at least 2 different disciplines)

ARTH 4 Art History-Ancient to Gothic
ARTH 5 Art History - Renaissance to Modern-Day

MUSL $3 \quad$ World Music
THTR 10 Introduction to Theater Arts 3
THTR 14 American Cultures in Theater 3

| Major Requirements | 27 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## INTERIOR DESIGN (ID)

## INTERIOR DESIGN (ID) COURSE UPDATES

## 48 Drafting for Interior Design

3 Units
This course will introduce basic drafting techniques as related to architectural working drawings for interior design. Emphasis is on lettering, measuring techniques, scale problems, use of architectural and NKBA graphic standards, dimensioning, plans, elevations, sections, Architectural lettering and perspective drawings. 36 hours lecture, 72 hours laboratory.

49 Digital Tools for Design and Visual Communication3 Units

## Degrees

AA International Studies

## INTERNATIONAL STUDIES

## Associate in Arts

This degree provides an understanding of the international dimensions of a variety of inquiry areas including politics, economics, and culture. The degree also offers students the opportunity to develop foreign language skills to assist in developing a deeper understanding of global societies.

## Program Learning Outcomes

1. Demonstrate a strong comprehension of globalization and international politics.
2. Engage actively with international affairs current events.
3. Link international developments to national politics, economics, and the everyday activities of individuals.

| Required Core | Units |  |
| :--- | :--- | ---: |
| POSC 30 | International Relations | 3 |
| GEO 2 | Cultural Geography | 3 |
| ANTH 3 | or |  |
| ECN 1 | Prial and Cultural Anthropology | 3 |
|  | or | 3 |
| ECN 2 | Principles of Microeconomics | 3 |
|  |  | 3 |

## List A (choose 6 units from two different disciplines)

BUS 40
COMM 6
COMM 11
ENGL 48
GEO 3
GEO 5
GEO 10
HIS 4
POSC
RELS 50

International Business
3
Introduction to Performance Studies
Intercultural Communication.
The Literature of the Holocaust
Economic Geography
World Regional Geography
Global Environmental Problems.
World History: 1500 to the Present
20 Comparative Politics
Religions of the World

## List B (choose 8-10 units)

One entry-level foreign language course may be waived with completion of a higher level language course. See the World Languages Department for the Prerequisite Challenge process.

CHIN 1A
Beginning Chinese
CHIN 1B Elementary Chinese
CHIN 2A Intermediate Chinese
CHIN 2B Advanced Chinese
FRNC 1A Beginning French
FRNC 1B Elementary French
FRNC 2A Intermediate French 4
FRNC 2B Advanced French 4
JAPN 1A Beginning Japanese 5
JAPN 1B Elementary Japanese 5
JAPN 2A Intermediate Japanese 4
JAPN 2B Advanced Japanese 4
SPA 1A Beginning Spanish 5
SPA 1B Elementary Spanish $1 \quad 5$
SPA 2A Intermediate Spanish 4
SPA 2B Advanced Spanish 4

| Major Requirements | $23-25$ units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

MACHINE TOOL TECHNOLOGY (MTT)

## MACHINE TOOL TECHNOLOGY (MTT) COURSE CORRECTIONS

## 81C Mastercam <br> 3 Units

(See also APPM 9781C)
Correction: unit to hour breakdown - 36 hours lecture, 54 hours laboratory instead of 18 hours lecture, 108 hours laboratory.

The fundamentals of the latest version of Mastercam CAD/CAM manufacturing software as it pertains to machine shop use and requirements. Instruction includes theory and laboratory practice on the use of the Mastercam software environment to create $21 / 2$ and 3 axis, lathe, and wire edm tool paths. Instruction includes part drawing, dimensioning, importing electronic files (DXF, IGES, Sldprt, and Dwg), lathe and mill tool path construction, geometry and tool path transformations, tool path editing, and post processors. May not receive credit if APPM 9781C has been completed successfully. 36 hours lecture, 54 hours laboratory. Strongly Recommended: MTT 71A or APPM 9771A.

## 82 Advanced CAD/ CAM 3 Units

New course
Build upon previous CAD and CAM experience to create projects using advanced toolpaths and 3D models, assemblies, and drawings. Design fixturing for speed and ease of operation. Experiment with cutters and inserts to optimize quality, precision, and cycle time. Coordinate with industry partners to meet the challenges of the machining field in real time. Learn advanced Mastercam multiaxis toolpaths for vertical milling machines and advanced Solidworks skills working with solids, surfaces, multibodies, and configurations. Gain specialized skills in tooling, higher machine functions, fixture design, work holding techniques and toolpath applications with multiple rotary axes. 18 hours lecture, 108 hours laboratory. Prerequisite: MTT 71A, MTT 81C, MTT 81A, Strongly Recommended: MTT 71B, MTT 71C.

MASS COMMUNICATION (MCOM)

Degrees
AA Mass Communications

## MASS COMMUNICATIONS

Associate in Arts

Correction: MCOM 20 course title update
In pursuing this degree, students will gain knowledge and handson experience in radio, television, print and online journalism. Students who successfully complete the program will be able to use their knowledge and experience or seek job entry in one of the media fields.

## Career Opportunities

In our rapidly changing society and economy, the skills associated with communications-based learning is recognized by many employers as mandatory for market success. More and more businesses and occupations prefer to hire employees who possess strong communication skills. While many media careers require at least a bachelor's degree, an associate's degree in Mass Communications opens the door to some entry-level careers. A Mass Communications major prepares students to go into a variety of fields, including careers in: advertising, broadcasting, camera operator, content developer, copy-editor, corporate communications, director, DJ, editor, journalist, media relations, news producer, online media, photographer, production design, production management, promoter, public relations, radio/TV professional, reporter, videographer and writer. If you want to finish your degree quickly and start working, an associate's degree in Mass Communications can be a good way to begin your career. In some cases, you can use the credits you earn for your associate's degree in Mass Communications to transfer to a four-year school and earn a bachelor's degree, opening up more career options.

## Program Learning Outcomes

1. demonstrate knowledge of the history, processes, and structure of a variety of media, including the ability to exercise critical judgment in the evaluation of media productions.
2. demonstrate understanding of ethical mass media practices, including standards, conventions, and principles.
Required Core

## Units

$\begin{array}{ll}\text { MCOM } 20 & \text { Introduction to Journalism Reporting and } \\ & \text { News Writing }\end{array}$
MCOM 40 Introduction to Broadcasting 3
MCOM 41 Introduction to Mass Communications 3
MCOM 50 Radio Studio Techniques 3
MCOM 60 Television Studio Techniques I 3
MCOM 21 Newspaper Production I 3
MCOM 42 Writing for Broadcasting 3
MCOM 43 Advertising Sales \& Media Management 3
MCOM 44 Radio \& Television Announcing

## List A (choose one course)

MCOM 22 Newspaper Production II 3

MCOM 56 Introduction to KCRH Radio Experience 4
MCOM 61 Television Studio Techniques II 3

| Major Requirements | 30-31 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## MATHEMATICS (MTH)

## MATHEMATICS (MTH) COURSE UPDATES

1 Calculus I
5 Units
This course is the first in the three-course calculus sequence intended for majors in math, engineering, and physical sciences. The course covers elements of analytic geometry, derivatives, limits and continuity, differentiation of algebraic and trigonometric functions, and the definite integral. Application to the sciences are also covered. 90 hours lecture. Prerequisite: MTH 20 or MTH 22 or both College Algebra (MTH 21 or MTH 31 or MTH 31S) and Trigonometry (MTH 36 or MTH 36 S or MTH 37) or an appropriate skill level demonstrated through the mathematics assessment process.

## 22 Trigonometry with Analytic Geometry <br> 5 Units

The study of trigonometric functions, their inverses and their graphs, identities and proofs related to trigonometric expressions, trigonometric equations, solving right triangles, solving triangles using the Law of Cosines and the Law of Sines, polar coordinates, and introduction to vectors. 90 hours lecture.. Prerequisite: MTH 21 or MTH 31 or MTH 31S or an appropriate skill level demonstrated through the Mathematics Assessment Process.

## 25 Computational Methods for Engineers and Scientists 3 Units

(See also ENGR 25, PHYS 25 )
Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB, SimuLink, MuPad, and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. May not receive credit if ENGR 25 or PHYS 25 has been completed. 36 hours lecture, 54 hours laboratory. Prerequisite: MTH 1 (completed with a grade of " $C$ " or higher)

## 44 Mathematics for Democracy

3 Units
An introductory study of the mathematics at the core of the political processes. Topics from statistics include describing data, measures of center and variation, normal distribution, sampling, and polling. Other topics include analysis of various voting methods, analysis of apportionment, the geometry of compactness, redistricting, and gerrymandering. This course does not meet the statistics requirement of some majors (e.g., Psychology, Sociology, Economics, and Business). 54 hours lecture, 18 hours laboratory. Prerequisite: MTH 55 or MTH 53 or equivalent or MTH 53B or appropriate placement through the Mathematics Placement process. Strongly Recommended: POSC 1 or ES 1 or concurrent or prior enrollment in any introductory course in the social sciences.

## NURSING (NURS)

## Degrees

$$
\begin{array}{ll}
\text { AS } & \text { LVN-RN } \\
\text { AS } & \text { Nursing }
\end{array}
$$

## LVN-RN

## Associate in Science

The Nursing Program is approved by the California Board of Registered Nursing. Upon completion of the major, the graduate is eligible to take the Registered Nursing Licensing Examination (NCLEX-RN). LVN students can enter into the second year of the Nursing Program on a space available basis. The student may opt for one of the following paths: A.S. in Nursing, non-degree, or 30 Unit Non- Degree option. The program prepares graduates who can contribute to the advancement of nursing science and influence changes in a variety of settings within the health care system. The graduate possesses a repertoire of knowledge, skills, and attributes that serve as the foundation for safe, competent practice and lifelong learning. SPECIAL APPLICATION REQUIRED.

## Career Opportunities

Based on the Labor Market Research data from August 2022, there appears to be an "undersupply" of Registered Nursing workers in the Bay Region compared to the demand for this occupation. Job outlook for RN's is very promising. Based on the data included in LMI report, there is a large labor market gap in the Bay region with 5,027 annual openings for the Registered Nursing occupational cluster and 3,718 annual (3-year average) awards for an annual undersupply of 1,309 students.

## Program Learning Outcomes

1. Incorporate the core of knowledge unique to the nursing profession in the delivery of health care in acute, chronic, or community health settings.
2. Utilize the nursing process to provide care for clients, families and significant others with diverse health needs and practices.
3. Practice within the profession's ethical and legal framework.
4. Use critical thinking skills in decisions related to managing care for groups of clients.
5. Respond to the demands of rapidly changing information technology by incorporating computer literacy in health care delivery and utilizing the internet for research.

## Professional Prerequisites For The As In Lvn-Rn

Student must complete the following: An Advanced Standing Application; validate previous nursing knowledge with assessment exams and have a minimum of 500 hours of work experience in direct patient care. This can be in a Skilled Nursing Facility or Hospital environment within the last 18 months. Admission is on a spaceavailable basis into the second year of the nursing program.
To progress and graduate from the Nursing Program, students must earn a minimum grade of " $C$ " in each nursing course. Graduates of this program receive an Associate in Science degree in Nursing. Note: The Board of Registered Nursing requirements supersede catalog rights for graduation.

## Program Prerequisites

Units
BIOS 42 General Human Anatomy 5
BIOS 43 Human Physiology 5
BIOS 44 Microbiology 5
There is a 7-year recency requirement (except for the 30 unit option path) for the science prerequisite courses and a minimum of 2.5 GPA . Science courses must have a lab component and be 4 semester or 5 quarter units.

| COMM 1 | Fundamentals of Speech Communication | 3 |
| :--- | :--- | :--- |
| COMM 10 | Interpersonal Communication | 3 |
| ENGL 1 | Critical Reading and Composition | 4 |
| PSY 1 | General Psychology | 3 |
| SOCl 1 | Principles of Sociology | 3 |

## Required Courses For Lvn-Rn (after advanced standing application submitted):

NURS 70 LVN-RN Transition 1.5<br>NURS 70L Clinical Skills Practice and Assessment Lab 0.5<br>NURS $84 \quad$ Prescriptive Clinical Nursing Skills Practice 0.5

Student must take benchmark exams to validate competency in the following: pediatrics, maternity, pharmacology and fundamentals. Each exam must be passed with a threshold score established by Kaplan. If unable to pass any exam after 2 attempts the student may take the following theory courses: NURS81 Maternity, NURS82 Pediatrics, and/or NURS64 Pharmacology. If the student fails the Fundamentals exam the student my not continue in this pathway and may apply as a generic student.

## Nursing Program Courses For Admitted Students

NURS 53 Mental Health Nursing
NURS 60B Adult Health II
NURS 60C Adult Health III
NURS 88 Pathophysiology

## Required Major Specific G.E. Requirement

## (Choose a minimum of $\mathbf{3}$ units from the following)

For specific GE courses refer to catalog section of A.S. Graduation Requirements. Students with a BA/BS degree or higher from US regionally accredited colleges or universities are exempt from Chabot GE/Graduation requirements.

| BIOS 41 | Fundamentals of Biology for Health Sciences | 4 |
| :--- | :--- | :--- |
| BIOS 42 | General Human Anatomy | 5 |
| BIOS 43 | Human Physiology | 5 |
| BIOS 44 | Microbiology | 5 |
| CHEM 30A | Introductory and Applied Chemistry I | 4 |
| ENGL 4A | Critical Thinking and Writing about Literature | 4 |
| ENGL 7A | Critical Thinking and Writing across Disciplines | 4 |
| PSY 12 | Lifespan Psychology | 3 |
| Courses Needed to Continue for a BSN |  |  |
| MTH 43 | Introduction to Probability and Statistics | 4 |
|  | or <br> PSY 5 | Introductory Statistics for the |
|  | Behavioral and Social Sciences |  |
|  |  | 4 |


| Major Requirements | 19.5 units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## NURSING

## Associate in Science

The Nursing Program is approved by the California Board of Registered Nursing. Upon completion of the major, the graduate is eligible to take the Registered Nursing Licensing Examination (NCLEX-RN). The program prepares graduates who can contribute to the advancement of nursing science and influence changes in a variety of settings within the health care system. The graduate possesses a repertoire of knowledge, skills, and attributes that serve as the foundation for safe, competent practice and lifelong learning.

## SPECIAL APPLICATION REQUIRED

## Career Opportunities

Based on the Labor Market Research data from May 2019 there is a projected annual gap of about 3,929 students in the Bay region. Job outlook for RN's is very promising. Some students must look outside the Bay Area to more rural cities for employment. Once they have at least one year experience it is easier to gain employment in the Bay Area. As a Registered Nurse you can work in the following areas: Intensive Care Unit (ICU), hospital unit, Oncology, Medical/Surgical unit, Operating Room, Case Manager, Home Health, Emergency Room, Pediatrics, Labor and Delivery, Psychiatric unit or be a traveling nurse.

## Program Learning Outcomes

1. Incorporate the core of knowledge unique to the nursing profession in the delivery of health care in acute, chronic, or community health settings.
2. Utilize the nursing process to provide care for clients, families and significant others with diverse health needs and practices.
3. Practice within the profession's ethical and legal framework.
4. Use critical thinking skills in decisions related to managing care for groups of clients.
5. Respond to the demands of rapidly changing information technology by incorporating computer literacy in health care delivery and utilizing the internet for research.

## Program Prerequisites

Additional Nursing Program Information: Graduates of this program receive an Associate in Science degree in Nursing. Note: The Board of Registered Nursing requirements supersede catalog rights for graduation.

BIOS 42
General Human Anatomy
BIOS 43 Human Physiology 5
BIOS 44
Microbiology
There is a 7 year recency requirement for the science prerequisite courses and a minimum of 2.5 GPA. Science courses must have a lab component and must be a minimum of 4 semester or 5 quarter units.
$\begin{array}{lll}\text { SOCI } 1 & \text { Principles of Sociology } & 3 \\ \text { PSY } 1 & \text { General Psychology } & 3\end{array}$
COMM 1 Fundamentals of Speech Communication 3
COMM 10 Interpersonal Communication 3
ENGL 1 Critical Reading and Composition

## Nursing Program Courses - Year One

NURS $55 \quad$ Fundamentals of Nursing Practice 8.5
NURS 51 Maternity Nursing 4.5
NURS 52 Pediatric Nursing
To progress and graduate from the Nursing Program, students must earn a minimum grade of "C" in each nursing course.

## Nursing Program Courses - Year Two

| NURS 60A | Adult Health I | 4.5 |
| :--- | :--- | ---: |
| NURS 53 | Mental Health Nursing | 4.5 |
| NURS 60B | Adult Health II | 6 |
| NURS 60C | Adult Health III | 3.5 |

## Required Major Specific G.E. Requirement (Choose a minimum of $\mathbf{3}$ units from the following)

For specific GE courses refer to catalog section of A.S. Graduation Requirements. Students with a BA/BS degree or higher from US regionally accredited colleges or universities are exempt from Chabot GE/Graduation requirements.

BIOS 41
Fundamentals of Biology for Health Sciences
BIOS 42
BIOS 43
BIOS 44
CHEM 30A
ENGL 4A
ENGL 7A
PSY 12

General Human Anatomy
Human Physiology
Microbiology
Introductory and Applied Chemistry I
Critical Thinking and Writing about Literature
Critical Thinking and Writing across Disciplines
Lifespan Psychology

Recommended Courses for a BSN
MTH 43 Introduction to Probability and Statistics 4
PSY 5 Introductory Statistics for the Behavioral and Social Sciences

NUTR 1 Introduction to Nutrition Science 3
Nutrition is not required in all BSN programs

| Major Requirements | 36 units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |
| NURSING (NURS) COURSE UPDATES |  |

## 51 Maternity Nursing <br> 4.5 Units

(Formerly 4.0 unit course)
Nursing care of the childbearing family. The focus is on the physiological and psychological needs of families as they are affected by pregnancy, labor and birth, postpartum, and newborn stages. Theory and clinical practice include integration of assessment skills, women's health, nutrition, pain management, ethical issues, implicit bias and teaching strategies unique to childbearing families. Quality, Safety, Education in Nursing (QSEN) concepts are incorporated. Total weeks - 9.45 hours lecture, 18 hours laboratory, 108 hours clinical. Prerequisite: NURS 55.

## 52 Pediatric Nursing

4.5 Units
(Formerly 4.0 unit course)
Emphasis placed on the use of the nursing process in promoting adaptive processes necessary for coping with the health issues of infants, children and adolescents. Theory and clinical practice includes integration of assessment skills, growth and development, family abuse issues, nutrition, pharmacological concepts, ethical issues, and teaching strategies unique to child-rearing families. Clinical focuses on care of clients in community and acute care settings. Concepts related to the California Nursing Practice Act, and Quality, and Safety Education in Nursing (QSEN) will be incorporated. Total weeks-9. 45 hours lecture, 18 hours laboratory, 108 hours clinical. Prerequisite: NURS 55.

## 53 Mental Health Nursing

4.5 Units
(Formerly 4.0 units course)
Emphasis on the use of the nursing process in the care of clients of all ages experiencing selected conditions requiring treatment in psychiatric care settings. Theory and clinical practice includes integration of assessment skills, nutrition, pharmacological and crisis intervention concepts, legal-ethical issues, and anger management. Concepts related to the California Nursing Practice Act, and Quality, and Safety Education in Nursing (QSEN) will be incorporated. Total - 9 weeks. 45 hours lecture, 18 hours laboratory, 108 hours clinical. Prerequisite: NURS 70 or NURS 55.

## 55 Fundamentals of Nursing Practice

(Formerly 9.0 units course)
Introduction to fundamental concepts and practices in nursing care across the life span. Application of the nursing process to the care of adult and geriatric clients with acute and chronic disorders and fundamental nursing skills. Theoretical content provides an overview of the care of clients with diverse cultural backgrounds and spiritual needs as well as principles of therapeutic communication. Concepts related to the California Nursing Practice Act, as well and principles of safe clinical practice. 81 hours lecture, 36 hours laboratory, 189 hours clinical. Prerequisite: Acceptance into the Nursing Program.

## 60A Adult Health I

4.5 Units
(Formerly 4.0 units course)
Emphasis on the use of the nursing process in the care of adults experiencing selected conditions requiring treatment in medicalsurgical care settings. Theory and clinical practice includes integration of assessment skills, nutrition, medication administration and legalethical issues. Concepts related to the California Nursing Practice Act, and Quality, and Safety Education in Nursing (QSEN) will be incorporated. Total -9 weeks. 45 hours lecture, 18 hours laboratory, 108 hours clinical. Prerequisite: NURS 55.

## 60B Adult Health II

( 6 Units
Nursing interventions that assist the adult client in adaptation to stressors of acute and chronic illnesses with unpredictable outcomes. Focus on caring for groups of clients in the medical-surgical and critical care setting. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included. Total - 12 weeks. 54 hours lecture, 162 hours clinical. Prerequisite: NURS 51, NURS 52, NURS 53, NURS 60A.

## 60C Adult Health III

### 3.5 Units

Discussion of leadership styles, delegation of care, evidence based practice, conflict management, delegation of assignments, prioritization of client care, and organizational structure the health care organization. Concepts related to the California Nursing Practice Act, and Quality, and Safety Education in Nursing (QSEN) will be incorporated. Total - 6 weeks. 9 hours lecture, 162 hours clinical. Prerequisite: NURS 60B.

PARALEGAL STUDIES (PLGL)

## PARALEGAL STUDIES (PLGL) COURSE UPDATES

[^1]
## PHYSICAL EDUCATION

## KINESIOLOGY (KINE) COURSE CORRECTIONS

## DMP Prevention of Type II Diabetes through Nutrition and Exercise <br> Correction: course title updated to lower case letters.

2 Units

Designed to lower the risk factors of metabolic syndrome and adult type II diabetes in young adults. This course will include both lecture and exercise activities aimed at lowering body fat, elevated blood pressure and elevated blood sugar levels. 18 hours lecture, 54 hours laboratory.

## PHYSICAL EDUCATION (PEAC) COURSE CORRECTIONS

WLK2 Advanced Walking for Fitness
0.50-2 Units

Correction: unit correction, course is 0.5-2 units not 3-6 units.
This is course is for students of intermediate-to-advanced fitness levels who would like to utilize walking as a fitness enhancing activity. Walking routes are on campus and will utilize the stadium bleachers, stairs and track. Multiple discussion topics will include: interval training, fitness and health assessment, equipment and safety, walking techniques, motivation, nutrition basics, program design and evaluation. Students will learn about target heart rate training and recording and monitoring their heart rate in this course. 54-108 hours laboratory. Prerequisite: PEAC WLK1.

## TEN3 Advanced Tennis

0.50-2 Units

Correction: unit correction, course is $0.5-2$ units not 2 units.
This course is for tennis players who are at an advanced level of play. The course will involve singles and doubles strategies that utilize high percentage play, footwork and conditioning drills, strategies for courts positioning in both singles and doubles play. 36-108 hours laboratory. Prerequisite: PEAC TEN2.

## PRECISION MANUFACTURING (APPM) COURSE CORRECTIONS

## 9781C Mastercam X

3 Units
(See also MTT 81C)
Correction: unit to hour breakdown - 36 hours lecture, 54 hours laboratory instead of 18 hours lecture, 108 hours laboratory.

The fundamentals of the latest version of Mastercam CAD/CAM manufacturing software as it pertains to machine shop use and requirements. Instruction includes theory and laboratory practice on the use of the Mastercam software environment to create $21 / 2$ and 3 axis, lathe, and wire edm tool paths. Instruction includes part drawing, dimensioning, importing electronic files (DXF, IGES, SIdprt, and Dwg), lathe and mill tool path construction, geometry and tool path transformations, tool path editing, and post processors. Registration in this course is limited to apprentices accepted into, and registered with, the state of California Department of Apprenticeship Standards. Each apprenticeship has different eligibility and admission requirements but includes being at least 18 years of age and having earned a high school diploma or GED. For information, see www.apprenticeship4you.com/our-programs. May not receive credit if MTT 81C has been completed successfully. 36 hours lecture, 54 hours laboratory. Strongly Recommended: MTT 71A or APPM 9771A.


#### Abstract

\section*{Degree} | AA-T | Psychology |
| :--- | :--- |
| AA | Behavioral Science |

\section*{PSYCHOLOGY}

\section*{Associate in Arts for Transfer}

Correction: list B header "List B: Select one course (any course not already used in list A may be used in list B" instead of "choose a minimum of 6 units"

The Associate in Arts in Psychology for Transfer degree prepares students for transfer into bachelor's degree program in Psychology and similar programs at a CSU campus and guarantees admission to the CSU system. Psychology is a broad discipline with many areas of specialty. It continually seeks to understand and explain the human experience: how we think, act, feel and relate to ourselves and others. Students completing this degree will learn to apply science, as well as use multiple theoretical perspectives and levels of analysis to understand problems related to behavior and mental processes. The successful student will apply critical and creative thinking to problem solving, and apply psychological knowledge to personal, social, organizational, cross-cultural, and global issues. This degree provides students with foundational knowledge, skills, and values consistent with the science and application of Psychology while preparing them for upper division course work in the field. California Community College students who are awarded the Associate in Arts in Psychology for Transfer degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is like their community college major. Students are encouraged to meet with a counselor to review their options for transfer and to develop a student educational plan that best meets their goals. Students wishing to pursue the Associate in Arts for Transfer in Psychology must complete 60 semester units eligible for transfer to the California State University, including either: The Intersegmental General Education Transfer Curriculum (IGETC) for CSU or the California State University General Education-Breadth Requirements, and a minimum of 19 units of major coursework in the major, as detailed below. Students must maintain a minimum 2.0 GPA, including grades of "C" (or "P") in each course taken to fulfill the major.


## Program Learning Outcomes

1. Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.

## Require Core

PSY 1 General Psychology 3
PSY 2 Introduction to Psychological Methodology

| PSY 5 | Introductory Statistics for the Behavioral and |
| :--- | :--- |
| Social Sciences |  | Social Sciences

or
MTH $43 \quad$ Introduction to Probability and Statistics or
BUS 19 Business Statistics

## List A (chose one course)

| PSY 4 | Brain, Mind and Behavior | 3 |
| :--- | :--- | ---: |
| BIOS 1 | Introduction to the Science of Biology | 4 |
| BIOS 41 | or | Fundamentals of Biology for Health Sciences |

## List B

Select one course. Any course not already used in List A may be used.

| PSY 3 | Social Psychology | 3 |
| :--- | :--- | :--- |
| PSY 6 | Abnormal Psychology | 3 |
| PSY 12 | Lifespan Psychology | 3 |


| List C |  |
| :--- | :--- |
| Select one course. Any course not already used in List B may be |  |
| PSY 7 | Introduction to Counseling Theory and Skills <br> PSY 8 |
| Human Sexuality <br> (same as HLTH 8, SOCl 8) |  |
| PSY 25 | Happiness, Health, and Wellness Psychology <br> PSY 33 |
| PSY 45 | Psychology of Personal and Social Adjustment <br> Psychology of Creativity and Innovation |

All courses in the major area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

| Major Requirements | 19-20 units |
| :--- | ---: |
| General Education | CSU GE 39 units |
|  | IGETC (CSU) 37 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## BEHAVIORAL SCIENCE

## Associate in Arts

Correction: SOCI 3 title is Introduction to Race and Ethnicity not Introduction to Race and Ethnic Relations

This major is highly recommended for transfer students because it provides a basic foundation for subsequent specialization in many liberal arts fields of study. It is strongly based in the international arena. The value of the degree is now recognized by business and industry as it requires a variety of skills demanded in business, education, health, law, and government, as well as the social services. The general studies student should market educational accomplishments as a collection of career transferable skills in communication, the global arena, public service, problem solving, production and personnel management.

## Program Learning Outcomes

1. Demonstrate an understanding of research methods used in the behavioral sciences.
2. Demonstrate an understanding of the major theoretical perspectives included the behavioral sciences
Freshman Year Units
ANTH 1 Biological/Physical Anthropology ..... 3
PSY 1 General Psychology ..... 3
SOCI 1 Principles of Sociology ..... 3
Sophomore Year
Anthropology Option (Choose one from the following)
ANTH $3 \quad$ Social and Cultural Anthropology ..... 3
ANTH 5 Cultures of the U.S. in Global Perspective ..... 3
ANTH 12 Magic, Religion, Witchcraft and Healing ..... 3
Psychology Option (choose one from the following)
PSY 3 Social Psychology ..... 3
PSY 6 Abnormal Psychology ..... 3
PSY $8 \quad$ Human Sexuality ..... 3(same as HLTH 8, SOCl 8)
or
SOCI 8 Human Sexuality ..... 3
(same as HLTH 8, PSY 8)

\section*{Sociology Option (choose one from the following) <br> SOCI 2 Social Problems <br> SOCl 3 Introduction to Race and Ethnicity <br> SOCl 6 <br> Introduction to Gender <br> | Major Requirements | 18 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units | <br> PSYCHOLOGY - COUNSELING (PSCN) <br> Degrees <br> AS <br> AA <br> Human Services <br> Liberal Arts <br> AS Liberal Arts and Sciences: Science, Math, and Technology <br> Certificate of Achievement <br> Behavioral Health <br> CSU GE Breadth <br> Intersegmental General Education Transfer Curriculum (IGETC)}

## HUMAN SERVICES

## Associate in Science

An introduction to the theories and skills needed for entry-level work in a social services setting. Sociological, psychological, and multicultural theories will be addressed to provide a foundation for student self-reflection and the application of theory for human services work. This program is designed to provide entry-level skills to work in human service positions and/or provide an applied foundation for further education in a variety of areas, including (but not limited to) counseling, psychology, social work, social justice work, health care.

## Career Opportunities

Entry-level positions in Human Services with local community-based organizations, county, or state service centers.

## Program Learning Outcomes

1. demonstrate cultural awareness and sensitivity needed to respectfully serve the diverse service population.:
2. provide an overview of the field of human and social services in both the public and private sector.
3. demonstrate an increase in self-awareness, the ability to implement boundaries and the ability to make ethical decisions.
4. demonstrate the ability to assess the needs of clients and provide appropriate referral for them.

Required Core Units
$\begin{array}{ll}\text { PSCN } 1 & \text { Introduction to Psychology-Counseling in a } \\ & \text { Multicultural Environment }\end{array}$
(same as APHC 9710)
PSCN 2 Introduction to Case Management for Human Services
(same as APHC 9711)
PSCN 5 Introduction to Social Work and Human Services 3
PSCN 95 Social Work and Human Services Fieldwork 1-4
PSCN 96 Social Work and Human Services Seminar

## List A (choose 1 course)

PSCN 11 Interpersonal Relationships 2
PSCN 12 Self-Esteem For Success 2
PSCN 30 Life Transitions 3

## List B (choose 1 course)

PSCN 10 Career and Educational Planning 2
PSCN 20 The College Experience 2
PSCN 15 College Study Skills 2
PSCN 23 Creating Success in College and Life 3

## List C (choose 1 course)

PSCN 3 Drugs, Recovery and Prevention in Modern Society 3
PSCN 4 Multiethnic/Cultural Communication 3
PSY 1 General Psychology 3
SOCI 1 Principles of Sociology 3

## Required for Major Specific G.E. Requirement.

Complete a minimum of 3 units
COMM 1 Fundamentals of Speech Communication 3
ENGL 4A Critical Thinking and Writing about Literature 4
ENGL 7A Critical Thinking and Writing across Disciplines 4
PSCN 13 Multicultural Issues in Contemporary America 3

| Major Requirements | $18-23$ units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## LIBERAL ARTS

Associate in Arts
The AA in Liberal Arts is a program for students seeking a broad-based degree that can serve as an educational foundation for a wide variety of careers and transfer majors. Students pursuing an AA in Liberal Arts may complete either the Chabot College Associate in Arts General Education course requirements, the CSU General Education Breadth, or the Intersegmental General Education Transfer Curriculum (IGETC) as well as 18 units of courses within one of the following four broad disciplinary options, for a total 60 degree-applicable units. With careful course planning, this degree offers students a foundation, as well as the flexibility, to align with many transfer pathways.

## Career Opportunities

Entry-level positions in a wide variety of fields requiring skills such as: oral communications, writing, team work, critical thinking, problem solving, creativity, and innovation.

## Program Learning Outcomes

1. develop effective writing and speaking skills;
2. apply logic, reasoning, and problem solving
3. demonstrate creativity and innovation.

## Options

Complete 18 units from within one option area below. Courses must be from at least two different academic disciplines. Option courses may also be applied toward general education requirements, where applicable.

- Option 1: Arts and Humanities
- Option 2: Language and Communications
- Option 3: Social and Behavioral Sciences
- Option 4: Kinesiology and Wellness


## Option 1: Arts and Humanities

This option focuses on the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

## Select at least 18 units from the courses listed below. Courses must be from at least two different disciplines.

| ARCH 14 | California Architecture and Urban Design |
| :--- | :--- |
| ART 2A | Introduction to Drawing |
| ART 2B | Drawing and Composition |
| ART 3A | Figure and Composition I |
| ART 3B | Figure and Composition II |
| ART 3C | Figure and Composition III |
| ART 3D | Figure and Composition IV |
| ART 7A | Introduction to Watercolor Painting |

ART 7B
ART 7C
ART 7D
ART 12A
ART 12B
ART 12C
ART 12D
ART 13A
ART 13B
ART 13C
ART 13D
ART 16A
ART 16B
ART 16C
ART 16D
ART 17A
ART 17B
ART 18A
ART 20
ART 22
ART 23
ART 24
ART 25
ARTH 1
ARTH 3
ARTH 4
ARTH 5
ARTH 6

ARTH 7
ARTH 8
ARTH 20

DIGM 1
DIGM 2
DIGM 6A

DIGM 10A
ENGL 11A
ENGL 11B
ENGL 12A
ENGL 12B
ENGL 13A
ENGL 13B
ENGL 20
ENGL 21
ENGL 22
ENGL 25
ENGL 31
ENGL 32
ENGL 35
ENGL 41
ENGL 45
ENGL 48
ES 5
FILM 14

Intermediate Watercolor Painting 3
Advanced Watercolor Painting I
Advanced Watercolor Painting II
Beginning Oil Painting
Intermediate Oil Painting
Advanced Oil Painting I
Advanced Oil Painting II

- 3

Acrylic Painting - Beginning I 3
Acrylic Painting - Beginning II 3
Acrylic Painting - Advanced I 3
Acrylic Painting - Advanced II 3
Introduction to Ceramics I 3
Introduction to Ceramics II 3
Introduction to Ceramics III 3
Ceramics - Intermediate 3
Beginning Sculpture 13
Beginning Sculpture 2
Wood and Stone Sculpture I 3
All Media Sculpture 3
Metal Sculpture - Lost Wax Bronze Casting 3
2-D Foundations 3
3-D Foundations 3
Color Theory 3
Introduction to Art 3
Film History and Appreciation 3
Art History-Ancient to Gothic 3
Art History - Renaissance to Modern-Day 3
Art History - Twentieth- and Twenty-First
Century Art
Multicultural History of American Art 3
Art History - A Global Perspective 3
History of Photography
(same as PHOT 20)
Introduction to Digital Art 3
Introduction to Graphic Design 3
Photoshop
(same as PHOT 6A)
Introduction to Animation
Introduction to Creative Writing 3
Intermediate Creative Writing
Beginning Fiction Writing
Intermediate Fiction Writing 3
Beginning Craft of Writing - Poetry 3
Intermediate Craft of Writing - Poetry 3
Studies in Shakespeare 3
The Evolution of the Black Writer 3
Mexican American/Latinx Literature of the U.S.
Asian-American Literature
Introduction to Queer Literature
U.S. Women's Literature

Modern and Contemporary U.S. Literature
World Literature (17th Century to the Present)
Studies in Fiction
The Literature of the Holocaust
Critiquing Race and Gender in Popular Culture 3
Introduction to Cinematic Arts
Introduction to Digital Filmmaking

| FILM 16 | Documentary Filmmaking |
| :---: | :---: |
| HIS 1 | History of Western Civilization to 1600 |
| HIS 2 | History of Western Civilization Since 1600 |
| HIS 3 | World History: Beginnings to 1500 |
| HIS 4 | World History: 1500 to the Present |
| HUMN 50 | The Artful Life |
| HUMN 60 | Creativity and the Community |
| HUMN 65 | The American Style |
| HUMN 68 | World Mythology |
| KINE 4 | Introduction to Sports Management |
| MUSA 20A | Guitar I |
| MUSA 20B | Guitar II |
| MUSA 21A | Piano I |
| MUSA 21B | Piano II |
| MUSA 22A | Jazz Piano and Musicianship I |
| MUSA 22B | Jazz Piano and Musicianship II |
| MUSA 23A | Voice I |
| MUSA 23B | Voice II |
| MUSA 40 | Applied Lessons |
| MUSL 1 | Introduction to Music |
| MUSL 2A | Harmony and Musicianship I |
| MUSL 2B | Harmony and Musicianship II |
| MUSL 2C | Harmony and Musicianship III |
| MUSL 2D | Harmony and Musicianship IV |
| MUSL 3 | World Music |
| MUSL 4 | History of Jazz Music |
| MUSL 6 | Basic Music Skills |
| MUSL 8 | History of Rock and Roll and Popular Music |
| MUSP 10 | Orchestra |
| MUSP 12 | Wind Ensemble |
| MUSP 13 | Wind Symphony |
| MUSP 15 | Jazz Ensemble |
| MUSP 16 | Jazz Orchestra |
| MUSP 18 | Percussion Ensemble |
| MUSP 41 | Chamber Winds |
| MUSP 44 | Concert Choir |
| MUSP 45 | Chamber Choir |
| MUSP 47 | College Productions-Music |
| PHIL 50 | Introduction to Philosophy |
| PHIL 60 | Ethics |
| PHIL 65 | Introduction to Philosophy: Theory of Knowledge |
| PHIL 70 | Introduction to Political and Social Philosophy |
| PHOT 20 | History of Photography (same as ARTH 20) |
| PHOT 1A | Digital Photography I |
| PHOT 2A | Black and White Darkroom Photography |
| PHOT 3A | Introduction to Studio Lighting |
| PHOT 4A | Color Theory for Photographers |
| PHOT 6A | Photoshop (same as DIGM 6A) |
| RELS 50 | Religions of the World |
| RELS 64 | The Nature of Islam |
| RELS 65 | Religions of Asia |
| RELS 70 | Spiritual Traditions and Contemporary Voices |
| THTR 1 | Introduction to Acting |
| THTR 2A | Intermediate Acting |
| THTR 2B | Advanced Acting |


| THTR 3 | Improvisation for the Theater | 3 |
| :---: | :---: | :---: |
| THTR 4A | Introduction to Acting on Camera |  |
| THTR 4B | Advanced Acting on Camera |  |
| THTR 5A | Introduction to Theater for Young Audiences |  |
| THTR 5B | Intermediate Theater for Young Audiences |  |
| THTR 6A | Movement for the Actor |  |
| THTR 6B | Advanced Movement for the Actor | 3 |
| THTR 7 | Voice for the Actor |  |
| THTR 8A | Audition Technique and the Business of Acting | 3 |
| THTR 8B | Advanced Audition Technique and the Business of Acting | 3 |
| THTR 10 | Introduction to Theater Arts |  |
| THTR 14 | American Cultures in Theater |  |
| THTR 15A | Introduction to Directing for Theater |  |
| THTR 16A | Introduction to Dramatic Writing |  |
| THTR 16B | Basics of Dramatic Writing |  |
| THTR 16C | Intermediate Dramatic Writing |  |
| THTR 16D | Advanced Dramatic Writing |  |
| THTR 17 | Script Analysis |  |
| THTR 21 | Introduction to Design for the Theater |  |
| THTR 22 | Introduction to Design for the Theater: Emphasis in Costume and Makeup | 3 |
| THTR 23 | Introduction to Lighting Design for Theater |  |
| THTR 46 | Stagecraft |  |
| THTR 47A | Introduction to College Theater Acting |  |
| THTR 47B | College Theater Acting: The Basics |  |
| THTR 47C | College Theater Acting: Intermediate |  |
| THTR 47D | College Theater Acting: Advanced |  |
| THTR 48A | College Theater Technical: Introduction | 3 |
| THTR 48B | College Theater Technical: Beginning | 1-6 |
| THTR 48C | College Theater Technical: Intermediate | 6 |
| THTR 48D | College Theater Technical: Advanced | 1-6 |
| Option 2: Language And Communications |  |  |
| This option focuses on the content of communication as well as the form and should provide an understanding of the psychological basis and social significance of communication. Students will be able to assess communication as the process of human symbolic interaction. Students will also develop skills in the areas of reasoning and advocacy, organization, accuracy, reading and listening effectively. |  |  |
| Students will be able to integrate important concepts of critical thinking as related to the development of analysis, critical evaluation, the ability to reason inductively and deductively that will enable them to make important decisions regarding their own lives and society at large. |  |  |

THTR 4A
THTR 4B
THTR 5A
THTR 5B
THTR 6A
THTR 6B
THTR 7
THTR 8A
THTR 8B
THTR 10
THTR 14
THTR 15A
THTR 16A
THTR 16B
THTR 16C
THTR 16D
THTR 17
Script Analysis3

THR 21 Introductionto Design for the Theater

3
4
4

THTR 23
THTR 46
Stagecraft
THTR 47A Introduction to College Theater Acting
College Theater Acting: The Basics
THTR 47D
THTR 48A
THTR 48B
THTR 48C
College Theater Technical: Intermediate
THTR 48D

## Option 2: Language And Communications

This option focuses on the content of communication as well as the frm and should provide an understanding of the psychological basis social significance of communication. Students will be able to assess com mill Students will also develop skills in the areas of reasoning and advocacy, organization, accuracy, reading and listening effectively.

Students will be able to integrate important concepts of critical thinking as related to the development of analysis, critical evaluation, the ability to reason inductively and deductively that will enable them to make important decisions regarding their own lives and society at large.

Select at least 18 units from the courses listed below. Courses must be from at least two different disciplines.
BUS 14 Business Communications
CHIN 1A Beginning Chinese
CHIN 1B Elementary Chinese
CHIN 2A Intermediate Chinese
CHIN 2B Advanced Chinese
COMM 1 Fundamentals of Speech Communication
COMM 2 Oral Interpretation of Literature
COMM 3 Group Communication
COMM 6 Introduction to Performance Studies
COMM 10 Interpersonal Communication
COMM 11 Intercultural Communication
COMM 12 Gender, Sexual Identity, and Communication
COMM 20 Persuasion and Communication
COMM 46 Argumentation and Debate
COMM 50 Introduction to Communication Studies
ENGL 4A Critical Thinking and Writing about Literature
ENGL 7A Critical Thinking and Writing across Disciplines
ENGL 11A Introduction to Creative Writing
ENGL 11B Intermediate Creative Writing
ENGL 12A Beginning Fiction Writing
ENGL 12B Intermediate Fiction Writing
ENGL 13A Beginning Craft of Writing - Poetry
ENGL 13B Intermediate Craft of Writing - Poetry
FRNC 1A Beginning French
FRNC 1A1 Beginning French 1
FRNC 1A2 Beginning French 2
FRNC 1B Elementary French
FRNC 1B1 Elementary French 1
FRNC 1B2 Elementary French 2
FRNC 2A Intermediate French
FRNC 2B Advanced French
HIS $5 \quad$ Critical Thinking in History
JAPN 1A Beginning Japanese
JAPN 1B Elementary Japanese
JAPN 2A Intermediate Japanese
JAPN 2B Advanced Japanese
MCOM 20 Introduction to
Journalism Reporting and News Writing
MCOM 42 Writing for Broadcasting
MCOM 21 Newspaper Production I
PHIL 55 Symbolic Logic
PSCN 4 Multiethnic/Cultural Communication
SL 64 Beginning Sign Language
SL 65 Intermediate Sign Language
SL 66
SL 67
SPA 1A
Advanced Sign Language

Beginning Spanish
SPA 1B Elementary Spanish 1
SPA 2A Intermediate Spanish
SPA 2B Advanced Spanish
SPA 1A1 Beginning Spanish 1
SPA 1A2 Beginning Spanish 2
SPA 1B1 Elementary Spanish 1
SPA 1B2 Elementary Spanish 2

## Option 3: Social And Behavioral Sciences

This option emphasizes the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

Select at least 18 units from the courses listed below. Courses must be from at least two different disciplines.

ADMJ 45 Law and Democracy 3
ADMJ 50 Introduction to the Administration of Justice Criminal Law
Community Relations
Biological/Physical Anthropology
Introduction to Archaeology
Social and Cultural Anthropology 3
Language and Culture 3
Cultures of the U.S. in Global Perspective 3
Native American Cultures 3
Magic, Religion, Witchcraft and Healing 3
Introduction to Public Health
(same as BIOS 18, HLTH 18)
Introduction to Psychology-Counseling in a
Multicultural Environment
(same as PSCN 1)
APHC 9712 Introduction to Social Work and Human Services 3
(same as PSCN 5)
Introduction to Public Health
(same as APHC 9702, HLTH 18)
Business Law
Introduction to Business 3
Law and Society
Introduction to Marketing
nroduction Marking
Gentur Sox
Gender, Sexual Identity, and Communication 3
Introduction to Communication Studies 3
Childhood and Adolescence
Child Growth and Development
Child, Family and Community
Infant and Toddler Development and Caregiving
Principles of Microeconomics
Principles of Macroeconomics
General Economics
Introduction to Environmental Studies 3
The Entrepreneurial Mindset 3
Introduction to Ethnic Studies 3
Contemporary Ethnic Minority Families in the U.S. 3
Introduction to Muslim-American Studies
Intro to Latinx Studies
Critiquing Race and Gender in Popular Culture
Intro to Pacific Islands and Oceania Studies
Women of Color in the United States:
Introduction to Race, Gender, and Sexuality Studies 3
(same as SOCl 7)

| ES 10 | Introduction to Asian American Studies (same as SOCI 10) | 3 | KINE 8 KINE 70 |
| :---: | :---: | :---: | :---: |
| ES 25 | American Indian History and Culture (same as HIS 25) | 3 | MCOM 40 |
| ES 42 | Asian American History: 18th Century to 1945 (same as HIS 42) | 3 | MCOM 41 POSC 1 |
| ES 43 | Asian American History: |  | POSC 12 |
|  | Early 20th Century - 21st Century (same as HIS 43) | 3 | POSC 20 |
| ES 52 | United States History from a Chicano Perspective I (same as HIS 52) | 3 | $\begin{aligned} & \text { POSC } 25 \\ & \text { POSC } 30 \end{aligned}$ |
| ES 53 | United States History from a Chicano Perspective II (same as HIS 53) | 3 | POSC 35 |
| ES 62 | The African-American Experience in U.S. History |  | PSY 1 |
|  | Through the Civil War (same as HIS 62) | 3 | PSY 2 |
| ES 63 | The African American Experience in U.S. History From |  | PSY 4 |
|  | Reconstruction <br> (same as HIS 63) | 3 | PSY 6 |
| GEO 2 | Cultural Geography | 3 | PSY 8 |
| GEO 3 | Economic Geography | 3 |  |
| GEO 5 | World Regional Geography | 3 | PSY 12 |
| GEO 10 | Global Environmental Problems | 3 | PSY 33 |
| GEO 12 | Geography of California | 3 | PSY 25 |
| GEO 20 | Introduction to Geographic Information Systems | 3 | PSY 45 |
| HLTH 8 | Human Sexuality <br> (same as PSY 8, SOCI 8) | 3 | PSCN 1 |
| HIS 1 | History of Western Civilization to 1600 | 3 |  |
| HIS 2 | History of Western Civilization Since 1600 | 3 | PSCN 3 |
| HIS 3 | World History: Beginnings to 1500 | 3 | PSCN 4 |
| HIS 4 | World History: 1500 to the Present | 3 | PSCN 5 |
| HIS 7 | U.S. History Through Reconstruction | 3 |  |
| HIS 8 | U.S. History Since Reconstruction | 3 | PSCN 13 |
| HIS 12 | History of California | 3 | SOCI 1 |
| HIS 22 | Mexican American History and Culture | 3 | SOCI 2 |
| HIS 25 | American Indian History and Culture (same as ES 25) | 3 | $\begin{aligned} & \text { SOCI } 3 \\ & \text { SOCI } 4 \end{aligned}$ |
| HIS 32 | Colonial Latin America | 3 | SOCI 5 |
| HIS 33 | Modern Latin America | 3 | SOCI 6 |
| HIS 42 | Asian American History: 18th Century to 1945 (same as ES 42) | 3 | SOCI 7 |
| HIS 43 | Asian American History: Early 20th Century 21st Century <br> (same as ES 43) | 3 | SOCI 8 |
| HIS 48 | U. S. Women's History Through Reconstruction | 3 | SOCI 10 |
| HIS 49 | U.S. Women's History Post-Reconstruction | 3 |  |
| HIS 52 | United States History from a Chicano Perspective I (same as ES 52) | 3 |  |
| HIS 53 | United States History from a Chicano Perspective II (same as ES 53) | 3 |  |
| HIS 62 | The African-American Experience in U.S. History Through the Civil War (same as ES 62) | 3 |  |
| HIS 63 | The African American Experience in U.S. History From Reconstruction (same as ES 63) | 3 |  |
| KINE 4 | Introduction to Sports Management | 3 |  |

Introduction to Sport in Contemporary Society 3
History and Philosophy of Sport and Physical Activity 3
Introduction to Broadcasting 3
Introduction to Mass Communications 3
Introduction to American Government 3
Introduction to California State and Local 3
Government 3
Comparative Politics 3
Introduction to Political Theory 3
International Relations 3
Politics of Race and Gender:
History, Governance, and Public Policy 3
General Psychology 3
Introduction to Psychological Methodology 3
Social Psychology 3
Brain, Mind and Behavior 3
Abnormal Psychology 3
Introduction to Counseling Theory and Skills 3
Human Sexuality 3
(same as HLTH 8, SOCI 8)
Lifespan Psychology
3
Psychology of Personal and Social Adjustment 3
Happiness, Health, and Wellness Psychology 3
Psychology of Creativity and Innovation 3
Introduction to Psychology-Counseling in a
Multicultural Environment
(same as APHC 9710)
Drugs, Recovery and Prevention in Modern Society 3
Multiethnic/Cultural Communication 3
Introduction to Social Work and Human Services 3
(same as APHC 9712)
Multicultural Issues in Contemporary America 3
Principles of Sociology 3
Social Problems 3
Introduction to Race and Ethnicity 3
Marriage and Family Relations 3
Introduction to Social Research Methods 3
Introduction to Gender 3
Women of Color in the United States: Introduction to
Race, Gender, and Sexuality Studies 3
(same as ES 7)
Human Sexuality 3
(same as HLTH 8, PSY 8)
Introduction to Asian American Studies 3
(same as ES 10)

## Option 4: Kinesiology and Wellness

Select at least 18 units from the courses listed below, to include at least 15 units from Group 1; and at least 3 units from Group 2. Group 1 courses must include courses from at least two different disciplines.

The Kinesiology and Wellness option combines exercise science fundamentals along with a signature experience in community based physical activity, fitness and wellness. This option may provide a foundation for careers in areas such as corporate fitness, cardiac rehabilitation, and strength and conditioning.

This option may also align with programs in exercise science/ kinesiology, nursing, physical therapy, medicine and physician assistant programs, occupational therapy, public health, and a variety of other programs that train health professionals.

## Group $1 \quad 15$ units from a least two different subjects

BIOS 1
BIOS 5
BIOS 41
BIOS 42
Introduction to the Science of Biology
Human Heredity and Evolution
Fundamentals of Biology for Health Sciences
General Human Anatomy
BIOS 43 Human Physiology
BIOS 44 Microbiology
CHEM 10 Introduction to Chemistry
CHEM 30A Introductory and Applied Chemistry I
CHEM 30B Introductory and Applied Chemistry II
CHEM 31 Introduction to College Chemistry
EMS 1 Emergency Medical Responder
HLTH 1 Introduction to Personal Health
HLTH 4
Women and Health
HLTH 8

HLTH 60 Responding to Emergencies
KINE 1 Introduction to Kinesiology \& Physical Education
KINE 2 Introduction to Athletic Training
KINE 3 Introduction to Principles of Coaching Sports: Beyond the Basics

3
KINE 3BB Introduction to the Principles of Coaching Baseball
KINE 3BK Introduction to the Principles of Coaching Basketball
KINE 3FT Introduction to Coaching Football
KINE 3SF Introduction to Coaching Softball
KINE 3SO Introduction to Coaching Soccer
KINE 3TK Introduction to Coaching Track and Field
KINE 4 Introduction to Sports Management
4
3
4
5
5
5
4

## PSY 25

SOCI 1
SOCI 8
Introduction to Health and Fitness For Your Disability3
Introduction to Personal Fitness Training ..... 3
Theory \& Technique of Offensive Football ..... 2
Theory \& Technique of Defensive Football ..... 2
Techniques of Strength Training Instruction ..... 3
History and Philosophy of Sport and Physical Activity ..... 3

KINE BBDT

Theory and Technique of Defensive Baseball

KINE BBOT
KINE CSA
KINE PDBB
KINE POBB
NUTR 1
NUTR 4
NUTR 6
NUTR 10
NUTR 11
PHYS 11
PSCN 10
PSCN 11
PSCN 12
Theory and Technique of Offensive Baseball
College Success for Athletes
Principles of Defensive Baseball
Principles of Offensive Baseball
Introduction to Nutrition Science
Mother and Childhood Nutrition
Nutrition for Healthy Living
Weight Management for Healthy Aging 3
Sports Nutrition
Descriptive Physics
Career and Educational Planning 2
Interpersonal Relationships 2

PSCN 20
PSCN 30
PSCN 21 Strategies for College Success 1
PSCN 22 College Success Series 0.5-1.5
PSCN 23 Creating Success in College and Life 3
PSY 1 General Psychology
PSY 8 Human Sexuality
(same as SOCI 8, HLTH 8)
Lifespan Psychology
Happiness, Health, and Wellness Psychology 3
Principles of Sociology
Human Sexuality 3

## Group 2

3 units
Strongly recommended: Students who are getting the AA degree with a concentration in Kinesiology and Wellness are encouraged to take a minimum of three activity courses in at least three different PEAC activity areas: Aquatics, Fitness, Individual Sports, Team Sports, and Dance.

PEAC AQDW Aqua Aerobics - Deep Water 2 0.5-2
PEAC SMLP Lap Swimming for Cardiovascular Conditioning 0.5-2
PEAC AQA1 Aqua Aerobics 0.5-2
PEAC BAB1 Bay Area Biking 0.5-2
PEAC BTC1 Beginning Boot Camp 0.5-2
PEAC CYC1 Introduction to Spin Cycling 0.5-2
PEAC DWA1 Aqua Aerobics - Deep Water $1 \quad$ 0.5-2
PEAC FUN1 Core Conditioning for Abs, Hips and Thighs 0.5-2
PEAC HM1 Training for Your First Half Marathon 0.5-2
PEAC HTA1 Guts and Butts Workout 0.5-2
PEAC LSF1 Introductory Lap Swimming for
Cardiovascular Fitness
0.5-2

PEAC PIL1 Introduction to Pilates 0.5-2
PEAC STP1 Introduction to Cardio- Step 0.5-2

| PEAC SWM1 | Beginning Swimming | $0.5-2$ |
| :--- | :--- | ---: |
| PEAC TRI1 | Beginning Triathlon Training | $0.5-2$ |
| PEAC WEI1 | Introduction to Weight Training | $0.5-2$ |
| PEAC WLK1 | Walking for Fitness | $0.5-2$ |
| PEAC WOW1 | Women's Weight Training 1 | $0.5-2$ |
| PEAC YOG1 | Introduction to Yoga | $0.5-2$ |
| PEAC SSTK | Track and Field Skills | $0.5-2$ |
| PEAC AKD1 | AIKIDO 1 | $0.5-2$ |
| PEAC ARH1 | Archery 1 | $0.5-2$ |
| PEAC BAD1 | Introduction to Badminton | $0.5-2$ |
| PEAC BSK1 | Introduction to Basketball | $0.5-2$ |
| PEAC DIS1 | Introduction to Disc Sports | $0.5-2$ |
| PEAC FTS1 | Futsal | $0.5-2$ |
| PEAC JUD1 | Beginning Judo | $0.5-2$ |
| PEAC SOC1 | Introduction to Soccer | $0.5-2$ |
| PEAC TEN1 | Introduction to Tennis | $0.5-2$ |
| PEAC TKD1 | Tae-kwon-do | $0.5-2$ |
| PEAC VOL1 | Introduction to Volleyball | $0.5-2$ |
| PEAC WAP1 | Introduction to Water Polo | $0.5-2$ |
| ATHL FT1 | Intercollegiate Football | 3 |
| ATHL SW2 | Intercollegiate Women's Soccer | 3 |
| ATHL SM3 | Men's Intercollegiate Soccer | 3 |
| ATHL VB4 | Women's Intercollegiate Volleyball | 3 |
| ATHL WR5 | Intercollegiate Wrestling | 3 |
| ATHL WCC6 | Women's Intercollegiate Cross Country | 3 |
| ATHL MCC7 | Men's Intercollegiate Cross Country | 3 |
| ATHL WWP8 | Intercollegiate Women's Water Polo | 3 |
| ATHL WB10 | Intercollegiate Women's Basketball | 3 |
| ATHL MB11 | Men's Intercollegiate Basketball | 1.5 |
| ATHL SB12 | Women's Intercollegiate Softball | 1.5 |
| ATHL BB13 | Men's Intercollegiate Baseball | 3 |
| ATHL WS14 | Women's Intercollegiate Swimming \& Diving | 3 |
| ATHL MS15 | Men's Intercollegiate Swimming \& Diving | 3 |
| ATHL TK16 | Women's Intercollegiate Track \& Field | 3 |
| ATHL TK17 | Men's Intercollegiate Track \& Field | 3 |
| ATHL WT18 | Women's Intercollegiate Tennis | 3 |
| ATHL MT19 | Men's Intercollegiate Tennis | 3 |
| ATHL MG21 | Men's Intercollegiate Golf | 3 |
|  |  | 3 |


| Major Requirements | 18 units |
| :--- | ---: |
| General Education | 25 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

# LIBERAL ARTS AND SCIENCES: SCIENCE, MATH, AND TECHNOLOGY 

## Associate in Science

The AS in Liberal Art and Sciences: Science, Math and Technology is a program for students seeking a broad-based degree that can serve as an educational foundation for a wide variety of careers and transfer majors in STEM fields. Students pursuing this degree may complete either the Chabot College Associate in Science General Education course requirements, the CSU General Education Breadth, or the Intersegmental General Education Transfer Curriculum (IGETC for CSU or UC) as well as 18 units of courses in the science and mathematics, for a total 60 degree-applicable units. With careful course planning, this degree offers students a foundation, as well as the flexibility, to align with many transfer pathways.

## Career Opportunities

Entry-level positions in a wide variety of fields requiring skills such as: critical thinking, problem solving, communications, teamwork, creativity, and innovation.

## Program Learning Outcomes

Upon the completion of the program the student should be able to

1. develop effective writing and speaking skills;
2. apply logic, reasoning, and problem solving;
3. demonstrate creativity and innovation.

Courses Units
Complete 18 units from courses listed below. Courses must be from at least two different academic disciplines. Major courses may also be applied toward general education requirements, where applicable.

| ANTH 1 | Biological/Physical Anthropology | 3 |
| :--- | :--- | :--- |
| ANTH 1L | Biological/Physical Anthropology Laboratory | 1 |
| ANTH 13 | Forensic Anthropology | 3 |
| ANTH 13L | Forensic Anthropology Laboratory | 1 |
| ASTR 10 | Introduction to Astronomy:The Solar System | 3 |
| ASTR 20 | Introduction to Astronomy: Stars and the Universe | 3 |
| ASTR 30 | Introduction to Astronomy Lab | 1 |
| ASTR 45 | Descriptive Astronomy | 3 |
| BIOS 1 | Introduction to the Science of Biology | 4 |
|  | or |  |
| BIOS 41 | Fundamentals of Biology for Health Sciences | 4 |
| BIOS 15 | Anatomy and Physiology | 4 |
| BIOS 21A | Principles of Plant Biology and Ecology | 4 |
| BIOS 21B | Principles of Animal Biology and Evolution | 4 |
| BIOS 21C | Principles of Cell and Molecular Biology | 5 |
| BIOS 42 | General Human Anatomy | 5 |
| BIOS 43 | Human Physiology | 5 |
| BIOS 44 | Microbiology | 5 |


| BUS 19 | Business Statistics or |  |
| :---: | :---: | :---: |
| MTH 43 | Introduction to Probability and Statistics | 4 |
|  | or |  |
| PSY 5 | Introductory Statistics for the |  |
|  | Behavioral and Social Sciences | 4 |
| CHEM 1A | General College Chemistry I | 5 |
| CHEM 1B | General College Chemistry II | 5 |
| CHEM 12A | Organic Chemistry I | 5 |
| CHEM 12B | Organic Chemistry II | 5 |
| CHEM 30A | Introductory and Applied Chemistry I | 4 |
| CHEM 30B | Introductory and Applied Chemistry II | 4 |
| CHEM 10 | Introduction to Chemistry or | 4 |
| CHEM 31 | Introduction to College Chemistry | 4 |
| CSCl 7 | Introduction to Computer Programming Concepts | 3 |
| CSCl 14 | Introduction to Structured Programming In C++ | 4 |
| CSCl 15 | Object-Oriented Programming Methods | 4 |
| CSCI 20 | Introduction to Data Structures | 4 |
| CSCl 21 | Computer Organization and Assembly Language Programming | 4 |
| CSCl 41 | Introduction to UNIX | 2 |
| CSCl 42 | UNIX Tools, Shell Programming and System |  |
|  | Administration Concepts | 2 |
| ENGR 10 | Introduction to Engineering | 2 |
| ENGR 11 | Engineering Design and Analysis | 2 |
| ENGR 15 | Engineered Systems and Sustainability | 3 |
| ENGR 16 | Designing Information Devices and Systems I | 4 |
| ENGR 22 | Engineering Design Graphics | 3 |
| ENGR 25 | Computational Methods for |  |
|  | Engineers and Scientists (same as MTH 25, PHYS 25) | 3 |
| MTH 25 | Computational Methods for |  |
|  | Engineers and Scientists (same as ENGR 25, PHYS 25) | 3 |
| PHYS 25 | Computational Methods for |  |
|  | Engineers and Scientists (same as ENGR 25, MTH 25) | 3 |
| ENGR 36 | Engineering Mechanics -Statics | 3 |
| ENGR 40 | Thermodynamics | 3 |
| ENGR 43 | Electrical Circuits and Devices | 4 |
| ENGR 45 | Materials of Engineering | 4 |
| ENGR 85 | Introduction to Solid Mechanics | 3 |
| ENSC 10 | Humans and the Environment or | 3 |
| ENSC 11 | Humans and the Environment with Laboratory | 4 |
| ENSC 15 | Agroecology | 3 |
| ENSC 15L | Agroecology Laboratory | 1 |
| GEO 1 | Introduction to Physical Geography | 3 |
| GEO 1L | Introduction to Physical Geography Laboratory |  |
| GEO 8 | Introduction to Weather and Climate | 3 |
| GEO 13 | Climate Studies | 3 |
| GEOS 1 | Physical Geology with Laboratory | 4 |

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4GEO 1Introduction to Physical Geography3
Introduction 8 Weather and ClimateGEOS 1 Physical Geology with Laboratory

4 GEOS 11
GEOS 11L
MTH 1
MTH 2
MTH 3
MTH 4
MTH 6
MTH 8

CSCI 28
Physical Geology
Physical Geology Lab 1
Calculus I 5
Calculus II 5
Multivariable Calculus
Elementary Differential Equations. 3
Elementary Linear Algebra
(same as CSCl 28) Discrete Mathematics 3
or
Discrete Mathematics
(same as MTH 8)
MTH 15
MTH 16
MTH 20
MTH 21
MTH 22
MTH 31
MTH 33
MTH 36
Applied Calculus I
Applied Calculus II 3
Pre-Calculus Mathematics 5
College Algebra for BSTEM 5
Trigonometry with Analytic Geometry 5
College Algebra 3
Finite Mathematics 4
Trigonometry 3
MTH 37 Trigonometry with an Emphasis on its
Geometric Foundations
MTH 41 Number Systems 3
MTH 44 Mathematics for Democracy 3
MTH 47 Mathematics for Liberal Arts 3
PHYS 3A College Physics A 4
PHYS 3B College Physics B 4
PHYS 4A General Physics I 5
PHYS 4B General Physics II 5
PHYS 4C General Physics III 5
PHYS 5 Modern Physics 3
PHYS 11 Descriptive Physics 4
PSY $4 \quad$ Brain, Mind and Behavior

## Required Major Specific G.E. Requirement (choose 1 course)

ENGL 4A Critical Thinking and Writing about Literature 4
or equivalent (eg. ENGL 4)
ENGL 7A Critical Thinking and Writing across Disciplines 4
or equivalent (eg. ENGL 7)
COMM 1 Fundamentals of Speech Communication 3
COMM 20 Persuasion and Communication 3
COMM 46 Argumentation and Debate 3
PHIL 55 Symbolic Logic 3

| Major Requirements | 18 units |
| :--- | ---: |
| General Education | 19 units |
| Electives | Degree applicable units as needed |
| Total | 60 minimum degree applicable units |

## BEHAVIORAL HEALTH

## Certificate of Achievement

The Certificate of Achievement in Behavioral Health will prepare students for entry-level para-professional jobs in human services. The program will provide a historical context of the human services profession, and students will learn hard and soft skill sets to include: interpersonal relationships, cultural competency/humility, active listening, case management, group process, boundary setting, self care, empathy, compassion. Students in this program will also complete a human service fieldwork experience course.

## Career Opportunities

This program is designed to provide entry-level skills to work in human service positions and/or provide an applied foundation for further education in a variety of industries, including (but not limited to) counseling, psychology, social work, social justice work, and health care. Some job titles for positions in the Social and Human Service Assistant job category include: advocate, outreach specialist, community coordinator, social services coordinator, case management assistant, human services assistant, resource coordinator, socials services assistant, independent living skills specialist, youth advocate, case worker, shelter advocate, community support specialist. Occupational demand in the East Bay for employees in this sector during 2018-23 is projected to grow 12\%, with approximately 2,511 openings. The median hourly wage is 20. per hour.

## Program Learning Outcomes

1. demonstrate cultural awareness and sensitivity needed to respectfully serve the diverse service population;
2. demonstrate the ability to assess the needs of clients and provide appropriate referrals for them;
3. demonstrate an understanding and provide an overview of the field of human and social services in both the public and private sector;
4. demonstrate appropriate boundaries and the ability to make ethical decisions;
5. demonstrate the ability to use introspection to increase self-awareness.

| Required Core | Units |  |
| :--- | :--- | ---: |
| PSCN 5 | Introduction to Social Work and Human Services | 3 |
|  | (same as APHC 9712) |  |
| PSCN 95 | Social Work and Human Services Fieldwork | $2-4$ |
| PSCN 96 | Social Work and Human Services Seminar | 1 |

## List A (choose one course)

PSCN 11 Interpersonal Relationships 2
PSCN 12 Self-Esteem For Success 2
PSCN 30 Life Transitions 3

## List B (choose one course)

| PSCN 4 | Multiethnic/Cultural Communication | 3 |
| :--- | :--- | :--- |
| PSCN 13 | Multicultural Issues in Contemporary America | 3 |

## List C (choose one course)



## List D (choose 2-3 units)

Any course not already used above or

| PSCN 3 | Drugs, Recovery and Prevention in Modern Society | 3 |
| :--- | :--- | ---: |
| PSCN 10 | Career and Educational Planning | 2 |
| PSCN 15 | College Study Skills | 2 |
| PSCN 18 | University Transfer Planning | $0.5-1$ |
| PSCN 20 | The College Experience | 2 |
| PSCN 21 | Strategies for College Success | 1 |
| PSCN 22 | College Success Series | $0.5-1.5$ |
| PSCN 24 | Personal Growth | 1 |
| PSCN 23 | Creating Success in College and Life | 3 |
| PSCN 26 | College Success and the Chicano Experience | 1 |
| ES 1 | Introduction to Ethnic Studies | 3 |
| PSY 1 | General Psychology | 3 |
| SOCl 1 | Principles of Sociology | 3 |
| Total |  | $\mathbf{1 6 - 2 0}$ |

## CSU GE BREADTH

## Certificate of Achievement

This program provides one option for students to complete lowerdivision general education requirements for the California State University. The courses listed on this certificate of achievement are approved by California State University for the 2023-2024 academic year (Fall 2023, Spring 2024, and Summer 2024), and are subject to change each academic year. For the most up-to-date course information, consult the official articulation database for UC and CSU transfer articulation used for transfer admission decisions: ASSIST at www.assist.org. NOTE: Earning this certificate is different from CSU GE Breadth "certification," which is a student-initiated process with the community college office of admissions which is completed once a student has accepted an offer of admissions at a CSU campus. Counselors are able to assist in determining if the CSU GE Breadth is appropriate for your educational goals.

## Program Learning Outcomes

1. Develop effective speaking and writing skills.
2. Apply logic, reasoning, and problem-solving.
3. Develop creative and innovative abilities.

Area A - English Language, Communication, and Critical Thinking
Complete one course from each group A1, A2, and A3 (9 units). Grades of "C-" or better are required in Area A.

A1-Oral Communication
COMM 1 Fundamentals of Speech Communication
COMM 20 Persuasion and Communication
3

COMM 46 Argumentation and Debate

## A2 - Written Communication

ENGL $1 \quad$ Critical Reading and Composition

## A3-Critical Thinking

COMM 46 Argumentation and Debate
ENGL 4A Critical Thinking and Writing about Literature
ENGL 7A Critical Thinking and Writing across Disciplines
HIS $5 \quad$ Critical Thinking in History
PHIL 55 Symbolic Logic
Area B - Scientific Inquiry And Quantitative Reasoning
Complete one course from each group B1, B2, B3, and B4 (9 units). One course from Area B1 or B2 may include a lab to satisfy Area B3.

## B1 - Physical Sciences

| ASTR 10 | Introduction to Astronomy: The Solar System | 3 |
| :--- | :--- | ---: |
| ASTR 20 | Introduction to Astronomy: Stars and the Universe | 3 |
| ASTR 45 | Descriptive Astronomy | 3 |
| CHEM 1A | General College Chemistry I | 5 |
| CHEM 1B | General College Chemistry II | 5 |
| CHEM 10 | Introduction to Chemistry | 4 |
| CHEM 12A | Organic Chemistry I | 5 |
| CHEM 12B | Organic Chemistry II | 5 |
| CHEM 30A | Introductory and Applied Chemistry I | 4 |
| CHEM 30B | Introductory and Applied Chemistry II | 4 |
| CHEM 31 | Introduction to College Chemistry | 4 |
| GEO 1 | Introduction to Physical Geography | 3 |
| GEO 8 | Introduction to Weather and Climate | 3 |
| GEO 13 | Climate Studies | 3 |
| GEOS 1 | Physical Geology with Laboratory | 4 |
| GEOS 11 | Physical Geology | 3 |
| PSC 15 | Descriptive Physical Science. |  |

PSCI 15 Descriptive Physical Science:
Introduction to Principles of Physical Science
PHYS 3A College Physics A
PHYS 3B College Physics B
PHYS 4A General Physics I 5
PHYS 4B General Physics II
PHYS 5 Modern Physics
PHYS 11 Descriptive Physics

## B2 - Life Sciences

ANTH 1 Biological/Physical Anthropology
3
ANTH 13 Forensic Anthropology
BIOS 1 Introduction to the Science of Biology
BIOS $5 \quad$ Human Heredity and Evolution
BIOS 15 Anatomy and Physiology
BIOS 21A Principles of Plant Biology and Ecology

BIOS 21B
BIOS 21C
BIOS 41
BIOS 42
BIOS 43
BIOS 44
ENSC 10
ENSC 11
ENSC 15
PSY 4

Principles of Animal Biology and Evolution
Principles of Cell and Molecular Biology Fundamentals of Biology for Health Sciences General Human Anatomy
Human Physiology
Microbiology
Humans and the Environment
Humans and the Environment with Laboratory
Agroecology
Brain, Mind and Behavior

## B3-Lab Science

ANTH 1L Biological/Physical Anthropology Laboratory
ANTH 13L Forensic Anthropology Laboratory
ASTR 30 Introduction to Astronomy Lab
BIOS 1 Introduction to the Science of Biology
BIOS 15 Anatomy and Physiology
BIOS 21A Principles of Plant Biology and Ecology
BIOS 21B Principles of Animal Biology and Evolution
BIOS 21C Principles of Cell and Molecular Biology
BIOS 41 Fundamentals of Biology for Health Sciences
BIOS 42 General Human Anatomy
Human Physiology
Microbiology
General College Chemistry I
General College Chemistry II
Introduction to Chemistry
Organic Chemistry I
Organic Chemistry II
Introductory and Applied Chemistry I
Introductory and Applied Chemistry II
Introduction to College Chemistry
Humans and the Environment with Laboratory
Agroecology Laboratory
Introduction to Physical Geography Laboratory
Physical Geology with Laboratory
Physical Geology Lab
College Physics A
College Physics B
PHYS 4A General Physics I
PHYS 4B General Physics II
PHYS 11 Descriptive Physics
PSCI 15 Descriptive Physical Science: Introduction to Principles of Physical Science

## B4 - Mathematics

A grade of "C-" or better is required in Area B4.
BUS 19 Business Statistics 4
CSCI 28 Discrete Mathematics 3
(same as MTH 8)
Calculus I
Calculus II
Multivariable Calculus
Elementary Differential Equations
Elementary Linear Algebra
MTH 6

| MTH 8 | Discrete Mathematics (same as CSCl 28) |
| :---: | :---: |
| MTH 15 | Applied Calculus I |
| MTH 16 | Applied Calculus II |
| MTH 20 | Pre-Calculus Mathematics |
| MTH 21 | College Algebra for BSTEM |
| MTH 22 | Trigonometry with Analytic Geometry |
| MTH 31 | College Algebra |
| MTH 31S | College Algebra with Support |
| MTH 33 | Finite Mathematics |
| MTH 33S | Finite Mathematics with Support |
| MTH 36 | Trigonometry |
| MTH 36S | Trigonometry with Support |
| MTH 37 | Trigonometry with an Emphasis on its Geometric Foundations |
| MTH 375 | Trigonometry with an Emphasis on its Geometric Foundations with Support |
| MTH 41 | Number Systems |
| MTH 41S | Number Systems with Support |
| MTH 43 | Introduction to Probability and Statistics |
| MTH 43S | Introduction to Probability and Statistics with Support |
| MTH 44 | Mathematics for Democracy |
| MTH 47 | Mathematics for Liberal Arts |
| MTH 47S | Mathematics for Liberal Arts with Support |
| PSY 5 | Introductory Statistics for the Behavioral and Social Sciences |
| Area C-Arts and Humanities |  |
| Complete 9 units, with at least one course from each group, C1 and |  |
| C1-Arts |  |
| ARCH 14 | California Architecture and Urban Design |
| ARTH 1 | Introduction to Art |
| ARTH 3 | Film History and Appreciation |
| ARTH 4 | Art History-Ancient to Gothic |
| ARTH 5 | Art History - Renaissance to Modern-Day |
| ARTH 6 | Art History - Twentieth- and Twenty-First Century Art |
| ARTH 7 | Multicultural History of American Art |
| ARTH 8 | Art History - A Global Perspective |
| ARTH 20 | History of Photography (same as PHOT 20) |
| ES 5 | Critiquing Race and Gender in Popular Culture |
| FILM 14 | Introduction to Cinematic Arts |
| MUSL 1 | Introduction to Music |
| MUSL 2A | Harmony and Musicianship I |
| MUSL 3 | World Music |
| MUSL 4 | History of Jazz Music |
| MUSL 8 | History of Rock and Roll and Popular Music |
| PHOT 20 | History of Photography (same as ARTH 20) |
| THTR 1 | Introduction to Acting |
| THTR 7 | Voice for the Actor |
| THTR 10 | Introduction to Theater Arts |
| THTR 14 | American Cultures in Theater |

C2 - Humanities
ARTH 4
ARTH 20
CHIN 1A
CHIN 1B
CHIN 2B
COMM 2
COMM 6
ENGL 11A
ENGL 12A
ENGL 13A
ENGL 20
ENGL 21
ENGL 22
ENGL 25
ENGL 28
ENGL 31
ENGL 32
ENGL 35
ENGL 41
ENGL 45
ENGL 48
ES 5
FRNC 1A
FRNC 1A1
FRNC 1A2
FRNC 1B
FRNC 1B1
FRNC 1B2
FRNC 2A
FRNC 2B
HIS 1
3
3
3
3
3
3
3

RELS 50
RELS 64
RELS 65
RELS 70
SL 64
Art History-Ancient to Gothic 3

History of Photography 3
(same as PHOT 20)
Beginning Chinese
Elementary Chinese 5
Advanced Chinese 4
Oral Interpretation of Literature 3
Introduction to Performance Studies 3
Introduction to Creative Writing 3
Beginning Fiction Writing 3
Beginning Craft of Writing - Poetry 3
Studies in Shakespeare 3
The Evolution of the Black Writer 3
Mexican American/Latinx Literature of the U.S. 3
Asian-American Literature 3
Classic and Contemporary Youth Literature 3
Introduction to Queer Literature 3
U.S. Women's Literature 3

Modern and Contemporary U.S. Literature 3
World Literature (17th Century to the Present) 3
Studies in Fiction
The Literature of the Holocaust
Critiquing Race and Gender in Popular Culture 3
Beginning French
Beginning French 1
Beginning French 2
Elementary French
Elementary French 1
Elementary French 2
Intermediate French
Advanced French
History of Western Civilization 1600
3
History of Western Civilization Since 16003
World History: Beginnings to 15003
World History: 1500 to the Present 3
Modern Latin America
The Artful Life
Creativity and the Community 3
The American Style
World Mythology
Beginning Japanese
Elementary Japanese
Intermediate Japanese
PHIL 50 Introduction to Philosophy 3
PHIL 65 Introduction to Philosophy:Theory of Knowledge
PHOT 20 History of Photography
(same as ARTH 20)

SL 65
3

Religions of the World 3
The Nature of Islam 3
Religions of Asia 3
Spiritual Traditions and Contemporary Voices 3
Beginning Sign Language
Intermediate Sign Language
3333
3

| SPA 1A | Beginning Spanish | 5 | ES 10 |
| :---: | :---: | :---: | :---: |
| SPA 1A1 | Beginning Spanish 1 | 3 |  |
| SPA 1A2 | Beginning Spanish 2 | 3 | ES 25 |
| SPA 1B | Elementary Spanish 1 | 5 |  |
| SPA 1B1 | Elementary Spanish 1 | 3 | ES 42 |
| SPA 1B2 | Elementary Spanish 2 | 3 |  |
| SPA 2A | Intermediate Spanish | 4 | ES 43 |
| SPA 2B | Advanced Spanish | 4 |  |
| Area D - Social Sciences |  |  | ES 52 |
| Complete 6 units |  |  |  |
|  |  |  | ES 53 |
| ADMJ 45 | Law and Democracy | 3 |  |
| ADMJ 50 | Introduction to the Administration of Justice | 3 | ES 62 |
| ADMJ 60 | Criminal Law | 3 |  |
| ANTH 1 | Biological/Physical Anthropology | 3 |  |
| ANTH 2 | Introduction to Archaeology | 3 | ES 63 |
| ANTH 3 | Social and Cultural Anthropology | 3 |  |
| ANTH 4 | Language and Culture | 3 |  |
| ANTH 5 | Cultures of the U.S. in Global Perspective | 3 | GEO 2 |
| ANTH 6 | Anthropology of Sex and Gender | 3 | GEO 3 |
| ANTH 8 | Native American Cultures | 3 | GEO 5 |
| ANTH 12 | Magic, Religion, Witchcraft and Healing | 3 | GEO 10 |
| APHC 9702 | Introduction to Public Health (same as BIOS 18, HLTH 18) | 3 | $\begin{aligned} & \text { GEO } 12 \\ & \text { GEO } 20 \end{aligned}$ |
| APHC 9710 | Introduction to Psychology-Counseling in a Multicultural Environment (same as PSCN 1) | 3 | HLTH 18 HIS 1 |
| BIOS 18 | Introduction to Public Health (same as APHC 9702, HLTH 18) | 3 | HIS 2 HIS 3 |
| BUS 20 | Law and Society | 3 | HIS 4 |
| BUS 36 | Introduction to Marketing | 3 | HIS 7 |
| COMM 11 | Intercultural Communication | 3 | HIS 8 |
| COMM 12 | Gender, Sexual Identity, and Communication | 3 | HIS 12 |
| COMM 50 | Introduction to Communication Studies | 3 | HIS 19 |
| CAS 50 | Introduction to Computer Application Systems | 3 | HIS 22 |
| ECD 52 | Childhood and Adolescence | 3 | HIS 25 |
| ECD 56 | Child Growth and Development | 3 |  |
| ECD 62 | Child, Family and Community | 3 | HIS 32 |
| ECD 67 | Infant and Toddler Development and Caregiving | 3 | HIS 33 |
| ECN 1 | Principles of Microeconomics | 3 | HIS 42 |
| ECN 2 | Principles of Macroeconomics | 3 |  |
| ECN 10 | General Economics | 3 | HIS 43 |
| ENGL 21 | The Evolution of the Black Writer | 3 |  |
| ENGL 22 | Mexican American/Latinx Literature of the U.S. | 3 |  |
| ENTR 5 | The Entrepreneurial Mindset | 3 | HIS 48 |
| ENST 1 | Introduction to Environmental Studies | 3 | HIS 49 |
| ES 1 | Introduction to Ethnic Studies | 3 | HIS 52 |
| ES 2 | Contemporary Ethnic Minority Families in the U.S. | 3 |  |
| ES 3 | Introduction to Muslim-American Studies | 3 | HIS 53 |
| ES 4 | Intro to Latinx Studies | 3 |  |
| ES 5 | Critiquing Race and Gender in Popular Culture | 3 | HIS 62 |
| ES 6 | Intro to Pacific Islands and Oceania Studies | 3 |  |
| ES 7 | Women of Color in the United States: Introduction |  |  |
|  | Race, Gender, and Sexuality Studies (same as SOCI 7) | 3 | HIS 63 |

Introduction to Asian American Studies3
(same as SOCl 10)American Indian History and Culture3
(same as HIS 25)Asian American History: 18th Century to 19453
(same as HIS 42)Asian American History: Early 20th Century -21st Century3
(same as HIS 43)
United States History from a Chicano Perspective I ..... 3
(same as HIS 52)
United States History from a Chicano Perspective II ..... 3
(same as HIS 53)The African-American Experience in U.S. HistoryThrough the Civil War3
(same as HIS 62)
The African American Experience in U.S. History FromReconstruction3
(same as HIS 63)
Cultural Geography ..... 3
Economic Geography ..... 3
World Regional Geography ..... 3
Global Environmental Problems ..... 3
Geography of California ..... 3
Introduction to Geographic Information Systems ..... 3
Introduction to Public Health ..... 3
(same as APHC 9702, BIOS 18)
History of Western Civilization to 1600 ..... 3
History of Western Civilization Since 1600 ..... 3
World History: Beginnings to 1500 ..... 3
World History: 1500 to the Present ..... 3
U.S. History Through Reconstruction ..... 3
U.S. History Since Reconstruction ..... 3
History of California ..... 3
Hist Modern China and Japan ..... 3
Mexican American History and Culture ..... 3
American Indian History and Culture ..... 3
(same as ES 25)
Colonial Latin America3
Modern Latin AmericaAsian American History: 18th Century to 19453
(same as ES 42)Asian American History: Early 20th Century -21st Century3
(same as ES 43)
U. S. Women's History Through Reconstruction ..... 3
U.S. Women's History Post-Reconstruction ..... 3
United States H(same as ES 52)United States History from a Chicano Perspective II 3(same as ES 53)The African-American Experience in U.S. HistoryThrough the Civil War3
(same as ES 62)The African American Experience in U.S. History FromReconstruction3


## Area E -Lifelong Learning And Self Development

Complete 3 semester units. Physical activity courses limited to two semester units.

COMM 10
RCD 54
Interpersonal Communication
ELD 56
ENS 12
FT 7
HETH 1
HETH 4
HETH 8
HETH 16
Child Health, Safety and Nutrition
Child Growth and Development
Current Issues in Environmental Science
Health and Fitness for the Fire Service

KINE $6 \quad$ Performance Enhancement thru Mental Training 3

(same as KINE 24)

Any course with the prefix of: ADPE, ATHL, DANC, PEAC. Physical activity course credit for Area E is limited to 2 units.

KINE 14 Introduction to Health and Fitness For Your Disability
KINE 19 Fit for Duty: Health and Fitness for Law Enforcement 3
KINE 24 Health and Fitness for the Fire Service 3
(same as FT 7)
KINE DMP Prevention of Type II Diabetes through Nutrition and Exercise2

NUTR 1

Introduction to Nutrition Science
Happiness, Health, and Wellness Psychology ..... 3
PSY 33 Psychology of Personal and Social Adjustment ..... 3
PSCN 10 Career and Educational Planning ..... 2
PSCN 11 Interpersonal Relationships ..... 2
PSCN 20 The College Experience ..... 2
PSCN 23 Creating Success in College and Life ..... 3
PSCN 30 Life Transitions ..... 3SCI 8

3




Human Sexuality ..... 3
(same as HLTH 8, PSY 8)

ADM 9907 Physical Fitness for Law Enforcement 1
FT 88A Introduction to Fire Fitness Training 1
FT 88B Intermediate Fire Fitness Training 1
FT 88C Advanced Fire Fitness Training 1
FT 88D Tactical Fire Fitness Training 1

## Area F - Ethnic Studies

Complete 3 units. Courses not approved for Area F are not permitted.
ES 1 Introduction to Ethnic Studies 3
$\begin{array}{lll}\text { ES } 4 & \text { Intro to Latinx Studies } & 3 \\ \text { ES } 6 & \text { Intro to Pacific Islands and Oceania Studies } & 3\end{array}$
$\begin{array}{lll}\text { ES } 4 & \text { Intro to Latinx Studies } & 3 \\ \text { ES } 6 & \text { Intro to Pacific Islands and Oceania Studies } & 3\end{array}$
S 42 Asian American History: 18th Century to 19453
(same as HIS 42)
Asian American History: Early 20th Century 21st Century
(same as HIS 43)
United States History from a Chicano Perspective I 3 (same as HIS 52)
United States History from a Chicano Perspective Il 3 (same as HIS 53)
The African-American Experience in U.S. History
Through the Civil War
(same as HIS 62)
The African American Experience in U.S. History From Reconstruction
(same as HIS 63)
Asian American History: 18th Century to 19453
(same as ES 42)
KINE 10 Nutrition for Fitness and Fat Loss 3
KINE 11 Nutrition For Sports And Human Performance 3
ES 43 Asian American History: Early 20th Century -


1


KINE 1

| HIS 52 | United States History from a Chicano Perspective I <br> (same as ES 52) | 3 |
| :--- | :--- | :--- |
| HIS 53 | United States History from a Chicano Perspective II <br> (same as ES 53) | 3 |
| HIS 62 | The African-American Experience in U.S. History <br> Through the Civil War <br> (same as ES 62) |  |
| HIS 63 | The African American Experience in U.S. History From <br> Reconstruction <br> (same as ES 63) | 3 |
|  |  | 3 |
| Total |  | 39 |
| INTERSEGMENTAL GENERAL EDUCATION |  |  |

Certificate of Achievement
This program provides one option for students to complete lowerdivision general education requirements for University of California or the California State University. All courses must be completed with a grade of "C" or better. Completion of IGETC is typically not a requirement of, nor a guarantee of, transfer admissions. For some colleges and majors at UC, IGETC is not an appropriate general education pattern. Courses listed on this certificate of achievement are effective for the 2023-24 academic year (Fall 2023, Spring 2024, and Summer 2024), and are subject to change each academic year. For the most up-to-date course information, consult the official articulation database for UC and CSU transfer articulation used for transfer admission decisions: ASSIST at www.assist.org. Counselors are able to assist in determining if IGETC for CSU or UC is appropriate for your transfer goals.

## Program Learning Outcomes

1. Develop effective speaking and writing skills.
2. Apply logic, reasoning, and problem-solving.
3. Develop creative and innovative abilities.

## Area 1 - English Communication

For CSU and AA-T \& AS-T Degrees - 3 courses required, one each from group 1A, 1B, and 1C
For UC-2 courses required, one each from group 1A and 1B

## 1A - English Composition

ENGL $1 \quad$ Critical Reading and Composition

## 1B - Critical Thinking - English Composition <br> ENGL 4A Critical Thinking and Writing about Literature <br> ENGL 7A Critical Thinking and Writing across Disciplines

## 1C-Oral Communication

COMM 1 Fundamentals of Speech Communication
COMM 20 Persuasion and Communication
COMM 46 Argumentation and Debate

Choose 1 course (minimum 3 units)
BUS 19 Business Statistics 4
CSCl 28 Discrete Mathematics 3
MTH 1 Calculus I 5
MTH 2 Calculus II 5
MTH 3 Multivariable Calculus 5
MTH 4 Elementary Differential Equations 3
MTH 6 Elementary Linear Algebra 3
MTH 8 Discrete Mathematics 3
(same as CSCl 28 )
Applied Calculus I 3
Applied Calculus II 3
Pre-Calculus Mathematics 5
College Algebra for BSTEM 5
Trigonometry with Analytic Geometry 5
College Algebra 3
College Algebra with Support 4
Finite Mathematics 4
Finite Mathematics with Support 4.5
Introduction to Probability and Statistics 4
Introduction to Probability and Statistics
with Support
Mathematics for Democracy 3
$\begin{array}{lll}\text { MTH } 44 & \text { Mathematics for Liberal Arts } 47\end{array}$
MTH 47S Mathematics for Liberal Arts with Support 3.5
PSY 5 Introductory Statistics for the Behavioral and Social Sciences

4
Note: Math courses numbered "S" or those courses with similar course content may be subject to transfer unit limits at UC.

## Area 3 - Arts And Humanities

3 courses, with at least one course from the Arts and one course from $3 A$ and one course from $3 B$ (minimum 9 units)

## Area 3A - Arts

ARTH 1 Introduction to Art 3
ARTH 3 Film History and Appreciation 3
ARTH $4 \quad$ Art History-Ancient to Gothic
ARTH 5 Art History - Renaissance to Modern-Day 3
ARTH $6 \quad$ Art History - Twentieth- and Twenty-First Century Art
ARTH $7 \quad$ Multicultural History of American Art 3
ARTH $8 \quad$ Art History - A Global Perspective 3
ARTH 20 History of Photography 3
(same as PHOT 20)
ES $5 \quad$ Critiquing Race and Gender in Popular Culture 3
MUSL 1 Introduction to Music 3
MUSL 3 World Music 3
MUSL 4 History of Jazz Music 3
MUSL $8 \quad$ History of Rock and Roll and Popular Music 3
PHOT 20 History of Photography 3
(same as ARTH 20)
THTR 10 Introduction to Theater Arts 3

| 3B - Humanities |  |  |
| :--- | :--- | ---: |
| ARTH 4 | Art History-Ancient to Gothic | 3 |
| ARTH 7 | Multicultural History of American Art | 3 |
| ARTH 20 | History of Photography | 3 |
|  | (same as PHOT 20) | 3 |
| COMM 6 | Introduction to Performance Studies | 3 |
| ENGL 20 | Studies in Shakespeare | 3 |
| ENGL 21 | The Evolution of the Black Writer | 3 |
| ENGL 22 | Mexican American/Latinx Literature of the U.S. | 3 |
| ENGL 25 | Asian-American Literature | 3 |
| ENGL 28 | Classic and Contemporary Youth Literature | 3 |
| ENGL 31 | Introduction to Queer Literature | 3 |
| ENGL 32 | U.S. Women's Literature | 3 |
| ENGL 35 | Modern and Contemporary U.S. Literature | 3 |
| ENGL 41 | World Literature (17th Century to the Present) | 3 |
| ENGL 45 | Studies in Fiction | 3 |
| ENGL 48 | The Literature of the Holocaust | 3 |
| ES 5 | Critiquing Race and Gender in Popular Culture | 3 |
| FRNC 2A | Intermediate French | 4 |
| FRNC 2B | Advanced French | 4 |
| HIS 1 | History of Western Civilization to 1600 | 3 |
| HIS 2 | History of Western Civilization Since 1600 | 3 |
| HIS 3 | World History: Beginnings to 1500 | 3 |
| HIS 4 | World History: 1500 to the Present | 3 |
| HIS 33 | Modern Latin America | 3 |
| HUMN 60 | Creativity and the Community | 3 |
| HUMN 68 | World Mythology | 3 |
| JAPN 2A | Intermediate Japanese | 3 |
| JAPN 2B | Advanced Japanese | 3 |
| PHIL 50 | Introduction to Philosophy | 3 |
| PHIL 60 | Ethics | 3 |
| PHIL 65 | Introduction to Philosophy:Theory of Knowledge | 3 |
| PHIL 70 | Introduction to Political and Social Philosophy | 3 |
| PHOT 20 | History of Photography | 3 |
|  | (same as ARTH 20) | 3 |
| RELS 50 | Religions of the World | 3 |
| RELS 64 | The Nature of Islam | 3 |
| RELS 65 | Religions of Asia | 3 |
| RELS 70 | Spiritual Traditions and Contemporary Voices |  |
| SPA 2A | Intermediate Spanish | 3 |
| SPA 2B | Advanced Spanish | 3 |

## Area 4 - Social And Behavioral Sciences

2 courses, from at least two disciplines (6 units)

| ADMJ 45 | Law and Democracy |
| :--- | :--- |
| ADMJ 50 | Introduction to the Administration of Justice |
| ADMJ 60 | Criminal Law |
| ANTH 1 | Biological/Physical Anthropology |
| ANTH 2 | Introduction to Archaeology |
| ANTH 3 | Social and Cultural Anthropology |
| ANTH 4 | Language and Culture |
| ANTH 5 | Cultures of the U.S. in Global Perspective |
| ANTH 6 | Anthropology of Sex and Gender |
| ANTH 8 | Native American Cultures |
| ANTH 12 | Magic, Religion, Witchcraft and Healing |

3

APHC 9702

APHC 9710

BIOS 18

BUS 20
COMM 11
COMM 12
COMM 50
ECD 52
ECD 56
ECN 1
ECN 2
ECN 10
ENST 1
ES 1
ES 2
ES 3
ES 4
ES 5
ES 6
ES 7

ES 10

ES 25

ES 4

ES 4

ES 52

ES 53

ES 62

ES 63

GEO 2
GEO 3
GEO 5
GEO 10
GEO 12
HLTH 18

HIS 1
HIS 2
HIS 3
HIS 4

Introduction to Public Health
(same as BIOS 18, HLTH 18)
Introduction to Psychology-Counseling in a
Multicultural Environment
(same as PSCN 1)
Introduction to Public Health
(same as APHC 9702, HLTH 18)
Law and Society
Intercultural Communication 3
Gender, Sexual Identity, and Communication 3
Introduction to Communication Studies 3
Childhood and Adolescence 3
Child Growth and Development 3
Principles of Microeconomics
Principles of Macroeconomics
General Economics
Introduction to Environmental Studies
Introduction to Ethnic Studies 3
Contemporary Ethnic Minority Families in the U.S. 3
Introduction to Muslim-American Studies 3
Intro to Latinx Studies 3
Critiquing Race and Gender in Popular Culture 3
Intro to Pacific Islands and Oceania Studies 3
Women of Color in the United States: Introduction to
Race, Gender, and Sexuality Studies
(same as SOCl 7)
Introduction to Asian American Studies
(same as SOCl 10)
American Indian History and Culture
(same as HIS 25)
Asian American History: 18th Century to 1945
(same as HIS 42)
Asian American History: Early 20th Century 21st Century
(same as HIS 43)
United States History from a Chicano Perspective I 3
(same as HIS 52)
United States History from a Chicano Perspective II 3
(same as HIS 53)
The African-American Experience in U.S. History
Through the Civil War
(same as HIS 62)
The African American Experience in U.S. History From
Reconstruction
(same as HIS 63)
Cultural Geography
Economic Geography
World Regional Geography 3
Global Environmental Problems 3
Geography of California 3
Introduction to Public Health
(same as APHC 9702, BIOS 18)
History of Western Civilization to 16003
History of Western Civilization Since 16003
World History: Beginnings to 1500
World History: 1500 to the Present
U.S. History Through Reconstruction
U.S. History Since Reconstruction

History of California
Hist Modern China and Japan
Mexican American History and Culture
American Indian History and Culture (same as ES 25)
Colonial Latin America
Modern Latin America
Asian American History: 18th Century to 1945
(same as ES 42)
Asian American History: Early 20th Century 21st Century
(same as ES 43)
U. S. Women's History Through Reconstruction
U.S. Women's History Post-Reconstruction

United States History from a Chicano Perspective I (same as ES 52)
United States History from a Chicano Perspective II 3 (same as ES 53)
The African-American Experience in U.S. History Through the Civil War (same as ES 62)
The African American Experience in U.S. History From Reconstruction
(same as ES 63)
History and Philosophy of Sport and Physical Activity

Politics of Race and Gender: History, Governance, and Public Policy

Introduction to Psychological Methodology
Social Psychology
Brain, Mind and Behavior
Abnormal Psychology
Lifespan Psychology
Psychology of Personal and Social Adjustment
Multiethnic/Cultural Communication
Multicultural Issues in Contemporary America
Principles of Sociology
Social Problems
Introduction to Race and Ethnicity
Marriage and Family Relations
Introduction to Social Research Methods
Introduction to Gender

SOCI 7
SOCI 10
Women of Color in the United States: Introduction to Race, Gender, and Sexuality Studies (same as ES 7)
Introduction to Asian American Studies (same as ES 10)

## Area 5 - Physical And Biological Sciences

2 courses, one course from 5A and one course from 5B; at least one course must include a laboratory, 5C (7 units)

## 5a - Physical Science

ASTR 10 Introduction to Astronomy:The Solar System 3 ASTR 20 Introduction to Astronomy: Stars and the Universe 3
ASTR 45 Descriptive Astronomy
CHEM 1A General College Chemistry I 5
CHEM 1B General College Chemistry II 5
CHEM 10 Introduction to Chemistry 4
CHEM 12A Organic Chemistry I 5
CHEM 12B Organic Chemistry II 5
CHEM 30A Introductory and Applied Chemistry I 4
CHEM 30B Introductory and Applied Chemistry II 4
CHEM 31 Introduction to College Chemistry
Introduction to Physical Geography 3
Introduction to Weather and Climate 3
Climate Studies
Physical Geology with Laboratory 4
Physical Geology
Descriptive Physical Science: Introduction to Principles of Physical Science
PHYS 3A College Physics A 4
PHYS 3B College Physics B 4
PHYS 4A General Physics I 5
PHYS 4B General Physics II 5
PHYS 4C General Physics III 5
PHYS 5 Modern Physics
PHYS 11 Descriptive Physics

## 5B-Biological Sciences

ANTH 1 Biological/Physical Anthropology 3
ANTH 13 Forensic Anthropology 3
BIOS 1 Introduction to the Science of Biology
BIOS 5 Human Heredity and Evolution 3
BIOS 15 Anatomy and Physiology 4
BIOS 21A Principles of Plant Biology and Ecology 4
BIOS 21B Principles of Animal Biology and Evolution 4
BIOS 21C Principles of Cell and Molecular Biology 5
BIOS 41 Fundamentals of Biology for Health Sciences 4
BIOS 42 General Human Anatomy 5
BIOS 43 Human Physiology 5
BIOS 44 Microbiology 5
ENSC 10 Humans and the Environment 3
ENSC 11 Humans and the Environment with Laboratory 4
ENSC 15 Agroecology
PSY 4 Brain, Mind and Behavior

| 5C - Lab Requirement |  |  |
| :--- | :--- | :--- |
| Courses listed in Area 5C that are also listed in Area 5A or 5B may be |  |  |
| used to satisfy both areas. |  |  |
|  |  |  |
| ANTH 1L | Biological/Physical Anthropology Laboratory | 1 |
| ANTH 13L | Forensic Anthropology Laboratory | 1 |
| ASTR 30 | Introduction to Astronomy Lab | 1 |
| BIOS 1 | Introduction to the Science of Biology | 4 |
| BIOS 15 | Anatomy and Physiology | 4 |
| BIOS 21A | Principles of Plant Biology and Ecology | 4 |
| BIOS 21B | Principles of Animal Biology and Evolution | 4 |
| BIOS 21C | Principles of Cell and Molecular Biology | 5 |
| BIOS 41 | Fundamentals of Biology for Health Sciences | 4 |
| BIOS 42 | General Human Anatomy | 5 |
| BIOS 43 | Human Physiology | 5 |
| BIOS 44 | Microbiology | 5 |
| CHEM 1A | General College Chemistry I | 5 |
| CHEM 1B | General College Chemistry II | 5 |
| CHEM 10 | Introduction to Chemistry | 4 |
| CHEM 12A | Organic Chemistry I | 5 |
| CHEM 12B | Organic Chemistry II | 5 |
| CHEM 30A | Introductory and Applied Chemistry I | 4 |
| CHEM 30B | Introductory and Applied Chemistry II | 4 |
| CHEM 31 | Introduction to College Chemistry | 4 |
| ENSC 11 | Humans and the Environment with Laboratory | 4 |
| ENSC 15L | Agroecology Laboratory | 1 |
| GEO 1L | Introduction to Physical Geography Laboratory | 1 |
| GEOS 1 | Physical Geology with Laboratory | 4 |
| GEOS 11L | Physical Geology Lab | 1 |
| PHYS 3A | College Physics A | 4 |
| PHYS 3B | College Physics B | 4 |
| PHYS 4A | General Physics I | 5 |
| PHYS 4B | General Physics II | 5 |
| PHYS 4C | General Physics III | 4 |
| PHYS 11 | Descriptive Physics | 5 |
| PSCI 15 | Descriptive Physical Science: Introduction to |  |
|  | Principles of Physical Science |  |
|  |  |  |

Area 6 - Language Other Than English (UC requirement only)
Complete one course below, or the equivalent* or higher level language other than English course.

Language Other Than English proficiency is defined as two years of high school study in the same language, and may be satisfied with high school courses as well as additional options. See a counselor for more information.

| CHIN 1B | Elementary Chinese | 5 |
| :--- | :--- | :--- |
| CHIN 2A | Intermediate Chinese | 4 |
| CHIN 2B | Advanced Chinese | 4 |
| FRNC 1B | Elementary French | 5 |
| FRNC 1B2 | Elementary French 2 | 3 |
| FRNC 2A | Intermediate French | 4 |
| FRNC 2B | Advanced French | 4 |
| JAPN 1B | Elementary Japanese | 5 |
| JAPN 2A | Intermediate Japanese | 4 |
| JAPN 2B | Advanced Japanese | 4 |

SL 65
SL 66
SL 67
SPA 1B
SPA 1B2
SPA 2A
SPA 2B

Intermediate Sign Language
Advanced Sign Language
Advanced II American Sign Language 3
Elementary Spanish 1
Elementary Spanish 2
Intermediate Spanish
Advanced Spanish4

## Area 7 - Ethnic Studies

One course (3 units).
Courses not approved for Area 7 are not permitted.

## ES 1 Introduction to Ethnic Studies

Intro to Latinx Studies
Intro to Pacific Islands and Oceania Studies ..... 3
Asian American History: 18th Century to 1945 ..... 3
(same as HIS 42)Asian American History: Early 20th Century -21st Century3
(same as HIS 43)ES 52
United States History from a Chicano Perspective I ..... 3
(same as HIS 52)United States History from a Chicano Perspective II 3
(same as HIS 53)The African-American Experience in U.S. HistoryThrough the Civil War
(same as HIS 62)
The African American Experience in U.S. History From
Reconstruction3
(same as HIS 63)
Asian American History: 18th Century to 1945 ..... 3
(same as ES 42)
Asian American History: Early 20th Century -21st Century3
(same as ES 43)
United States History from a Chicano Perspective I 3
(same as ES 52)
United States Hi
(same as ES 53)Through the Civil War3
(same as ES 62)
The African American Experience in U.S. History FromReconstruction3
(same as ES 63)
Total82.0

# PSYCHOLOGY-COUNSELING (PSCN) COURSE UPDATES 

## 2 Introduction to Case Management for Human Services

3 Units
(See also APHC 9711)
Introduction to case management theory, models and techniques. Multicultural issues affecting case management theory. Emphasis is placed on case management philosophy, ethical issues, concepts and practices. Analysis of needs, documentation and confidentiality and individualized client plan development. Analysis of interagency collaboration. Includes issues of monitoring an ongoing case management plan and maintaining client commitment to plan success. Designed to provide students with knowledge in case management theory implementation for Human Service, Social Work and/or Mental Health. May not receive credit if APHC 9711 has been completed successfully. 54 hours lecture. Strongly Recommended: PSCN 13 OR, PSCN 5 (same as APHC 9712) OR, PSCN 4.

## 10 Career and Educational Planning 2 Units

Exploration of the concept of career, educational and life planning focusing on personal career development through self-assessment. Emphasis on clarification of individual interests, values, needs, abilities and decision making styles, investigation of occupational opportunities in the world of work, and introduction to job search strategies, resume writing and interview skills. Designed for those undecided or uncertain about their career and educational plans. 36 hours lecture.

## PHYSICS (PHYS)

## PHYSICS (PHYS) COURSES

## 3A College Physics A

4 Units
Introduction to the major principles of classical mechanics using calculus for students studying life sciences and architecture. Includes: the scientific method and social responsibility of the scientist, Newtonian mechanics, energy, gravitation, fluids, thermodynamics, and vibration waves. 54 hours lecture, 54 hours laboratory. Prerequisite: MTH 1 or MTH 22 and MTH 15 (MTH 1 or MTH 15 can be taken concurrently.)

## 25 Computational Methods for Engineers and Scientists

3 Units
(See also ENGR 25, MTH 25 )
Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB, SimuLink, MuPad, and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. May not receive credit if Engineering 25 or Math 25 has been completed. 36 hours lecture, 54 hours laboratory. Prerequisite: MTH 1 (completed with a grade of " $C$ " or higher)

## SHEETMETAL (SHEE)

## SHEETMETAL (SHEE) COURSE UPDATES

## 9701 Level I Sheet Metal/HVAC (A) <br> 3 Units

This course is an introduction the Sheet Metal and Heating, Ventilation and Air Conditioning (HVAC) trades. Topics include the tools of the trade, safety practices, trade mathematics, blueprints and drawings, and basic rigging. This course is designed for students planning a career in the Sheet Metal and HVAC fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

9702 Level I Sheet Metal/HVAC (B)
3 Units
This course is a continuation of Sheet Metal and Heating, Ventilation and Air Conditioning (HVAC) trades at the introductory level. Topics include intermediate math, duct and air distribution theory and installation, welding concepts, insulation, and electricity related to the HVAC trade. This course is designed for students planning a career in the Sheet Metal and HVAC fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9703 Level II Sheet Metal/HVAC (A)

3 Units
This course is an intermediate level introduction to the concepts of cooling and sheet metal layout. Topics include layout and line development, mathematics and measurements used in the trade, bend allowances and triangulation. This course is designed for students planning a career in the Sheet Metal and Heating, Ventilation and Air Conditioning (HVAC) fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9704 Level II Sheet Metal/HVAC (B)

3 Units
This course is an intermediate study of heating and metering for the Sheet Metal and Heating, Ventilation and Air Conditioning (HVAC) trades. Topics include basic electronics, metering devices, compressors, heat pumps, and leak detection, evacuation, recovery, and charging. This course is designed for students planning a career in the Sheet Metal/HVAC fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9705 Level III Sheet Metal/HVAC (A)

## 3 Units

This course is an intermediate level study of blueprints and specifications for Heating, Ventilation and Air Conditioning (HVAC) ductwork. Topics include Sheet Metal and Air Conditioning Contractors of North America (SMACNA) Manuals, duct and fabrication standards, gutters and downspouts, roof flashing, and principles of air flow. This course is designed for students majoring in the sheet metal and HVAC fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9706 Level III Sheet Metal/HVAC (B)

This course is an advanced study of blueprint reading and system design for the sheet metal and Heating, Ventilation and Air Conditioning (HVAC) trades. Topics include indoor air quality, types of duct systems, and field measuring and fitting. This course is designed for students majoring in the sheet metal and HVAC trades. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9707 Level IV Sheet Metal/HVAC (A)

3 Units
This course covers advanced Heating, Ventilation and Air Conditioning (HVAC) and Sheet Metal applications. Topics include system start-up and shut-down, commercial and industrial refrigeration systems, hydronic heating and cooling systems, and how to design fume and exhaust systems per Occupational Safety and Health Administration (OSHA) and American Conference of Governmental Industrial Hygienists (ACGIH) standards. This course is designed for students planning a career in the Sheet Metal and HVAC fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

## 9708 Level IV Sheet Metal/HVAC (B)

3 Units
This course covers advanced Heating, Ventilation and Air Conditioning (HVAC) troubleshooting and Sheet Metal roofing. Topics include troubleshooting and repair of gas and electric heating systems, cooling systems, heat pumps, and electronic controls, as well as system balancing. Sheet Metal topics include metal roof system applications and installation. This course is designed for students planning a career in the Sheet Metal and HVAC fields. Student must be a registered State indentured apprentice. 36 hours lecture, 54 hours laboratory.

SPANISH (SPA)

## Degrees

AA Spanish

## Certificate of Achievement

Spanish

## SPANISH

Associate in Arts
Correction: ENGL 22, ES 52, HIS 52, ES 53, HIS 53 course title update

This program includes four semesters of thorough linguistic and cultural training in Spanish, along with courses that shed light on Mexico's and the Spanish-speaking world's role in history, art, the humanities, and our own contemporary society. Spanish is one of the world's most influential languages and there are opportunities for working in many industries where knowledge of Spanish is considered valuable. Many majors at four-year universities have foreign language requirements that would be satisfied with the language courses in this degree program. Courses offered in this program may also meet some general education and/or transfer requirements.

## Program Learning Outcomes

1. Demonstrate proficiency in understanding and using, orally, the grammatical structures presented and vocabulary assigned
2. Demonstrate proficiency in understanding and using, in writing, the grammatical structures presented and vocabulary assigned

| Required Core | Units |  |
| :--- | :--- | ---: |
| SPA 1A | Beginning Spanish <br> or | 5 |
| SPA 1A1 | Beginning Spanish 1 <br> and | 3 |
| SPA 1A2 | Beginning Spanish 2 |  |
| SPA 1B | Elementary Spanish 1 | 3 |
| SPA 1B1 | or | 5 |
| SPA 1B2 | Elementary Spanish 1 |  |
| and | 3 |  |
| SPA 2A | Elementary Spanish 2 | 3 |
| SPA 2B | Advanced Spanish |  |
| SERV 5A | Service Learning for World Languages: Beginning | 2 |

## Options

A minimum of 18 units is required in major courses. Allowable course substitutions in place of lower level language courses are below:


## SPANISH

## Certificate of Achievement

Correction: ENGL 22 and SOCI 3 course title update
Chabot's Spanish Certificate of Achievement is designed to prepare students with knowledge, skills, and academic accomplishment in the Spanish language and provide prospective employers with documented evidence of language proficiency. The certificate consists of 4 classes with no prerequisites to begin the program. Classes are available online and on-campus. The certificate can be earned either on campus or fully online. All classes within the program will also apply toward an AA degree in Spanish. Each course must be completed with a final grade of $C$ or higher or Pass.

## Career Opportunities

US Census indicates that as of 2017 the Hispanic population of the United States is 58.9 million making people of Hispanic origin the nation's largest ethnic or racial minority. Hispanics constituted 18.1 percent of the nation's total population. By learning Spanish, the student will be better able to communicate with Spanish speakers in the United States or abroad. In addition, Latin American countries are our most important trading partners. Being able to speak Spanish greatly enhances a resume and as bilingual the student could be more
competitive in the workplace. The ability to understand Spanish will enable the student to gain important insights which monolinguals cannot. This certificate is developed to prepare students for this growing need in the job market and to provide the Spanish language and cultural competency needed for career opportunities in the fields of education, health care, social work, law enforcement, government, interpretation/translation, tourism, banking and finance, sales, customer service, management, human resources, transportation, library services, and other relevant fields. Furthermore, students seeking foreign language proficiency for admissions to programs such as nursing and dental could also benefit from this certificate as it certifies the accomplishment and knowledge of the language.

## Program Learning Outcomes

1. Demonstrate proficiency in understanding and using, orally, the grammatical structures presented and vocabulary assigned
2. Demonstrate proficiency in understanding and using, in writing, the grammatical structures presented and vocabulary assigned

| Required Core | Units |  |
| :--- | :--- | ---: |
| SPA 1A | Beginning Spanish <br> or | 5 |
| SPA 1A1 | Beginning Spanish 1 <br> and | 3 |
| SPA 1A2 | Beginning Spanish 2 | 3 |
| SPA 1B | Elementary Spanish 1 | 5 |
| SPA 1B1 | or |  |
| SPA 1B2 | Elementary Spanish 1 | 3 |
| SPA 2A | Elementary Spanish 2 | 3 |
| SPA 2B | Intermediate Spanish | 4 |

Advanced students starting Spanish language courses at the 1B or 2A level, must complete a minimum of 16 units to earn the certificate. Advanced students may use courses from the options list to meet the total units required.
A minimum of 16 units is required in major courses. Allowable course substitutions in place of lower level language courses are below:

ENGL 22 Mexican American/Latinx Literature of the U.S. 3
SOCl 3 Introduction to Race and Ethnicity 3
PSCN 13 Multicultural Issues in Contemporary America 3
HIS 22 Mexican American History and Culture 3
SERV 5A Service Learning for World Languages: Beginning 2
SERV 5B Service Learning for World Languages: Intermediate 2
SERV 5C Service Learning for World Languages:
Advanced Intermediate
SERV 5D Service Learning for World Languages: Advanced 2
Total
18-20

## THEATER ARTS (THTR)

## THEATER ARTS (THTR) COURSE CORRECTIONS

## 47C College Theater Acting: Intermediate

3 Units
Correction: unit correction, course is 3 units not 9 units.
This is a continuation of THTR 47B. for furthering a student's skill as an actor in a college production. Emphasis in this course will be on effective rehearsal techniques, generous responses, and ensemble building. 162 hours laboratory. Prerequisite: THTR 47B.

## 47D College Theater Acting: Advanced

3 Units Correction: unit correction, course is 3 units not 9 units.

This is a continuation of THTR 47C, where students further develop their skills as actors in a college production. This course will emphasize the polish in performance, the evaluation of one's work and the development of a personal, creative process. 162 hours laboratory. Prerequisite: THTR 47C.

## WOMEN'S STUDIES (WMST)

## Certificate of Achievement

Women's Studies

## WOMEN'S STUDIES

## Certificate of Achievement

The Women's Studies program offers students an understanding of gender, socialization and women's experiences across cultures; knowledge of women's literary, political, and historical achievements; strategies for improving communication; and promoting healthy behaviors in our personal, social, and work lives. The program includes experiential learning through a service-learning requirement.

## Career Opportunities

Students who complete a cross-disciplinary course of study that focuses on women's experiences often pursue careers in the social justice field. Possible career paths include education, law, non-profit organizations, public health, and social service agencies.

## Program Learning Outcomes

1. Examine the process of gender socialization.
2. Analyze sexism in conjunction with other forms of oppression such as racism, homophobia/heterosexism, classism, ageism, transphobia.
3. Distinguish women's experiences across cultures.
4. Examine women's political, historical, and literary achievements
5. Demonstrate healthy behaviors in personal, social and work lives
6. Apply strategies for improving communication
7. Obtain work experience in programs that serve women and girls

## Required Core <br> Units

SERV 85A Learning in Action: Beginning 1

List A (choose five courses) 15

COMM 12 Gender, Sexual Identity, and Communication 3
ENGL 31 Introduction to Queer Literature 3
ENGL 32 U.S. Women's Literature 3
ES $7 \quad$ Women of Color in the United States:
Introduction to Race, Gender, and Sexuality Studies 3 (same as SOCI 7)
Women and Health
U. S. Women's History Through Reconstruction 3
U.S. Women's History Post-Reconstruction 3

Politics of Race and Gender:
History, Governance, and Public Policy 3
Introduction to Gender 3
SOCl 6 Introductionto 3

Total

## WORK EXPERIENCE (WEXP)

## WORK EXPERIENCE (WEXP) COURSE UPDATES

## 95

Work Experience
1-6 Units
This course of supervised employment provides students with the opportunity to earn college credit while working and developing desirable work habits, attitudes, and skills. Students working in any part-time or full-time, paid or unpaid position will contract, in collaboration with their work supervisor and instructor, to set measurable, achievable goals; accomplish new or expanded learning objectives; and broaden work skills and experiences. The work experience need not be related to the students' educational goals. Students can earn 1 to 6 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. Students must work 75 paid hours or 60 unpaid hours per unit earned during the semester. 60-360 unpaid work experience hours oe 75-450 paid work experience hours.) Corequisite: WEXP 96.
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## Photography Credit



Chabot College is a learning-centered institution with a culture of thoughtfulness and academic excellence, committed to creating a vibrant community of life-long learners.


[^0]:    ## Certificate of Achievement

    Students who complete this Certificate develop the technical design skills required for many Design-Drafter professional
    positions, including Drafting using AutoCAD, Inventor, Revvit, and/ design skills required for many Design-Drafter professional
    positions, including Drafting using AutoCAD, Inventor, Revvit, and/ or Solidworks, building, designing, and testing prototypes, coding,
    problem solving, technical writing, troubleshooting, and using or Solidworks, building, designing, and testing prototypes, coding,
    problem solving, technical writing, troubleshooting, and using equipment (mills, lathes, CNC, 3D printers,etc.).

[^1]:    37 Tort Law
    3 Units
    This course focuses on the fundamental concepts of tort law, including intentional torts, negligence, trespass, strict liability, personal injury, mental distress, as well as commonly employed defenses. This course will help fulfill the requirements of the 24-unit Paralegal Studies Certificate. 54 hours lecture. Strongly Recommended: PLGL 30.

