

**Fresno City College**  
***2020-2021***  
***Catalog Addendum***  
**December 2020**

**Table of Contents**

Academic Regulations ..... 1  
Certificate and Degree Requirements ..... 3  
Transfer Information and Requirements ..... 4  
Associate Degree and Certificate Programs ..... 6  
Courses Descriptions ..... 69



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# ACADEMIC REGULATIONS

*Changes to Pages 20-34*

## Earning Course and Unit Credit

### Credit for Prior Learning (CPL)

Credit for prior learning is college credit awarded for validated college-level skills and knowledge gained outside of a college classroom.

This CPL definition does not include knowledge and skills already assessed and awarded credit through formal education at regionally accredited in-state and out-of-state institutions.

### Credit for Prior Learning Categories

Students may demonstrate proficiency in a course eligible for CPL and receive college credit through the approved alternative methods for awarding credit listed below. All options may not apply for every course. The faculty determine which method, if any, is appropriate for a specific course.

- Advanced Placement (AP) Examination
- International Baccalaureate (IB)
- College Level Examination Program (CLEP)
- Military Transcripts (may include Joint Services Transcript (JST), Sailor/Marine American Council on Education Registry Transcript (SMART), Army and American Council on Education Registry Transcript Service (AARTS), Community College of the Air Force (CCAF), Coast Guard Institute (CGI), DANTES/USAFI, Defense Language Institute Foreign Language Transcripts (DLIFLC), Defense Manpower Data Center (DMDC), DLPT Examinee Results, DA Form 330 Language Proficiency Questionnaire, or verified copies of DD214 or DD295 military records.)
- Examination administered by other agencies
- Industry-recognized credential documentation
- Student-created portfolios
- Credit by examination

### CPL Assessment Methods

Qualified discipline faculty shall determine the CPL assessment that is appropriate for the student based on their experiences, and credit will be determined by qualified faculty who conduct the CPL assessment.

Examination: Credit by examination is a process whereby discipline faculty administer a locally-developed exam to determine whether a student can demonstrate sufficient mastery of the learning outcomes of that course. The college may charge a fee.

Assessment: This type of assessment can include a student developing a portfolio or completing a skills demonstration that is evaluated by faculty. This can also include faculty evaluating a Joint Services Transcript, or developing a "cross-walk" in which they assess the competencies a student achieved in a prior learning experience and determine whether they match the student learning outcomes of a designated course. College faculty can consult credit recommendations made by the American Council on Education (ACE) in assessing prior learning experiences. Once a faculty member has assessed a standard/common training, the credit recommendation can be made available for other faculty to consider for other students with identical credentials to prevent duplication of assessment and encourage consistency in credit for identical experiences. Students cannot be charged a fee for these types of assessments (this includes standardized tests, such as Advanced Placement (AP), International Baccalaureate (IB), CLEP, Defense Language Proficiency Test, and others).

### Credit for Prior Learning Process

Step 1

In consultation with a counselor, the student determines that they are eligible for CPL through an intake process.

Step 2

Student is referred to discipline faculty.

Step 3

Discipline faculty conduct the appropriate assessment.

### Eligibility for CPL

- Current students must have an education plan on file.
- The course for which the student is seeking credit is listed in the current college catalog.
- The student is not currently enrolled in the course to be challenged past census date.
- Credit by Examination:
  - The student is registered in the district and not currently enrolled in nor received credit for a more advanced course in the same subject (may be waived by department).

- The student must be in good academic standing in the District.
- The course can only be challenged once, unless the College Vice President of Instruction determines that there are extenuating circumstances that justify a subsequent retake.

Credits acquired by prior learning are not applicable to meeting such unit load requirements as Selective Service deferment, Veterans, or Social Security benefits. Credit acquired by prior learning shall not be counted in determining the 12 semester hours of credit in residence required for an associate degree.

### Transcript

The student's academic record shall be clearly annotated to reflect that credit was earned by an assessment for prior learning in lieu of a specific course.

## Advanced Placement Program Credit (AP)

### Mathematics, Science and Engineering Division

EXAM TITLE	MINIMUM SCORE	EQUIVALENT FCC COURSE	UNITS GRANTED
Biology	3	Biology 3	4
Chemistry	3	Chemistry 3A	4
Calculus AB	3	Mathematics 5A	5
Calculus BC	3	Mathematics 5B	4
Physics 1 & 2	3	Physics 2A	4
Statistics	3	Mathematics 11 or 42	4

# CERTIFICATE AND DEGREE REQUIREMENTS

*Changes to Pages 35-39*

## **Certificate of Achievement**

A certificate of achievement shall be awarded to students who successfully complete a specified curriculum (minimum of 8 units) with a minimum "C" grade in each required course.

In order to receive the certificate of achievement, the student shall apply for the certificate with Admissions and Records upon completion of the requirements.

See page 86 for a list of certificates of achievement.

## **Fresno City College General Education for the Associate Degree**

**Correction: delete**

PE 23                      Area E1: PE&/or Dance

*effective Fall 2020*

# TRANSFER INFORMATION AND REQUIREMENTS

*Changes to Pages 40-57*

## Course Identification Numbering Systems (C-ID)

**C-ID Number**      **Fresno City College Course**

**Change: add**

CMUS 130X      MUS 8, Audio Engineering  
GEOG 130      GEOG 8, Physical Geography: Weather and Climate

*effective Fall 2020*

*effective Fall 2020*

## University of California Transfer Course List (UC)

**Change: add**

Anthropology 15  
Communication 10  
Decision Science 10  
Decision Science 25  
Decision Science 40  
Mathematics 11H  
Mathematics 17  
Physical Education 46B  
Physical Education 46C

*effective Spring 2021*

*effective Fall 2020*

*effective Fall 2020*

*effective Fall 2020*

*effective Fall 2020*

*effective Fall 2020*

*effective Fall 2020*

*effective Fall 2020*

*effective Fall 2020*

## California State University Transfer Course List (CSU)

**Change: new**

Allied Health 3  
Chemistry 99  
Dance 8B  
Dental Assisting 1  
Dental Assisting 2  
Dental Assisting 3  
Dental Assisting 3A  
Dental Assisting 19  
Fire Technology 19  
Fire Technology 51A  
Fire Technology 51B  
Fire Technology 51C  
Graphic Communications 38  
Photography 14  
Photography 52  
Photography 67  
Photography 77

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

**Change: deleted**

American Indian Studies 20  
Applied Technology 11  
Asian American Studies 20  
Asian American Studies 30  
Biology 11AH  
Business Administration 10H  
Business Administration 44  
Business Administration 48  
Business Administration 58  
Computer Information Technology 17  
Computer Information Technology 20  
Computer Information Technology 24  
Computer Information Technology 26  
Computer Information Technology 81  
Electrical Systems Technology 19  
Electrical Systems Technology 63

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*

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*effective Spring 2021*

*effective Spring 2021*

*effective Spring 2021*



# ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

*Changes to Pages 115-260*

## ACCOUNTING

### ACCOUNTING – MAJOR #2010

*revised program, Spring 2021*

The AS Degree in Accounting qualifies the student for entry-level accounting positions in business, government, industry, and financial institutions. Students interested in pursuing a BS Degree in Accounting should consult the catalog of the institution to which they wish to transfer for the specific requirements of that program.

#### Associate in Science

##### Student Learning Outcomes:

1. Operate and maintain an integrated accounting system in both a manual and a computerized environment.
2. Develop and analyze accounting information to meet the needs of both external and internal users.
3. Demonstrate proficiency in accounting theory, functions, and skills.

##### Required Courses

	<b>Units</b>
ACCTG 4A Financial Accounting.....	4
ACCTG 4B Managerial Accounting.....	4
ACCTG 19 Work Experience (Cooperative), Occupational .....	1
ACCTG 51 Intermediate Accounting.....	3
ACCTG 52 Cost Accounting.....	3
ACCTG 70 QuickBooks Fundamentals, <i>or</i>	
ACCTG 73 Sage 100 Fundamentals .....	3
BA 10 Introduction to Business .....	3
CIT 15 Computer Concepts .....	3
CIT 23 Spreadsheet Fundamentals, <i>or</i>	
BT 24 Beginning Excel .....	1-2

##### Select 3 of the Following Courses:

(ACCTG 70 and ACCTG 73 can only be used if not used above.)	<b>Units</b>
ACCTG 53 Tax Accounting.....	3
ACCTG 54A Principles of Auditing.....	3
ACCTG 56 Payroll Accounting .....	3
ACCTG 57 Governmental Accounting .....	3
ACCTG 61 Forensic Accounting.....	3
ACCTG 70 QuickBooks Fundamentals.....	3
ACCTG 73 Sage 100 Fundamentals .....	3
Total 34-35	

### ACCOUNTING – MAJOR #2010

*revised program, Spring 2021*

The Accounting Certificate of Achievement qualifies the student for entry-level accounting positions in business, government, industry, and financial institutions.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Operate and maintain an integrated accounting system in both a manual and a computerized environment.
2. Develop and analyze accounting information to meet the needs of both external and internal users.
3. Demonstrate proficiency in accounting theory, functions, and skills.

##### Required Courses

	<b>Units</b>
ACCTG 4A Financial Accounting.....	4
ACCTG 4B Managerial Accounting.....	4
ACCTG 19 Work Experience (Cooperative), Occupational .....	1
ACCTG 51 Intermediate Accounting.....	3
ACCTG 52 Cost Accounting.....	3
ACCTG 70 QuickBooks Fundamentals, <i>or</i>	
ACCTG 73 Sage 100 Fundamentals .....	3
BA 10 Introduction to Business .....	3
CIT 15 Computer Concepts .....	3
CIT 23 Spreadsheet Fundamentals, <i>or</i>	

BT 24 Beginning Excel ..... 1-2

**Select 3 of the Following Courses:**

<b>(ACCTG 70 and ACCTG 73 can only be used if not used above.)</b>		<b>Units</b>
ACCTG 53	Tax Accounting .....	3
ACCTG 54A	Principles of Auditing.....	3
ACCTG 56	Payroll Accounting .....	3
ACCTG 57	Governmental Accounting .....	3
ACCTG 61	Forensic Accounting.....	3
ACCTG 70	QuickBooks Fundamentals.....	3
ACCTG 73	Sage 100 Fundamentals .....	3
		Total 34-35

**ADMINISTRATION OF JUSTICE**

**ADULT CORRECTIONAL OFFICER CORE – MAJOR #8941**

*deleted program, Spring 2021*

**AMERICAN INDIAN STUDIES**

**AMERICAN INDIAN STUDIES – MAJOR #7680**

*revised program, Spring 2021*

Fresno City College is located in an area that is rich in the history and contemporary cultures of American Indians. California has the highest American-Indian population in the United States, and has several Indigenous communities in our immediate area. American Indian Studies exists to serve Indian and non-Indian students who will be working in any service field, academic or social institution. The program leading to the associate in arts degree will also provide a foundation in American Indian Studies for students wishing to pursue a higher degree in the subject at a four-year university. In recent years, several graduate programs have begun in American-Indian Studies at universities in California and elsewhere. Student must complete 12 units of required basic core courses. Select 9 units from the course options listed below for a total of 21 units for an associate in arts degree.

**Associate in Arts**

**Student Learning Outcomes:**

1. Identify and describe cultural differences and similarities among the American Indian and Alaskan Native societies of North America.
2. Describe and analyze the material, political, spiritual, and environmental contributions made by American Indian societies to the world.
3. Identify the inappropriate uses of racial stereotypes about Indians and analyze how they have been used to advance special interests.
4. Explain historically the effects of colonization and imperialism on American Indian tribes.
5. Identify the major issues of the 20th and 21st century for American Indians, with an example on current events.
6. Evaluate the arts of diverse peoples through an expanded awareness and appreciation of North American arts.

<b>Required Core Courses</b>		<b>Units</b>
AMIND 31	American Indian Culture.....	3
AMIND 32	American Indian History .....	3
AMIND 34	The American Indian in Contemporary Society.....	3
AMIND 35	American Indian Art.....	3

<b>Course Options: Select a minimum of 9 units</b>		<b>Units</b>
AFRAM 5	The African Diaspora of the Americas.....	3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
ANTHRO/ CLS 28	Ancient Mexico .....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
ENGL 14	Folklore .....	3
GEOG 2	Cultural Geography.....	3
SOC 2	American Minority Groups .....	3
		Total 21



## ANTHROPOLOGY

### ANTHROPOLOGY – ARCHAEOLOGY ARCHAEOLOGICAL TECHNICIAN – MAJOR #7120

*revised program, Spring 2021*

The Archaeological Technician Certificate of Achievement is a program designed to provide students with education and training in the various aspects of modern archaeology in preparation for 1) entry level employment, and 2) continuing education in archaeology. An archaeological technician may work in the field doing survey or excavation or in a laboratory processing archaeological collections, doing data entry, archival research, or other tasks related to the management of archaeological data, all under the direction of a professional archaeologist. Students planning for a career in archaeology will need to earn at least a Bachelor's degree. Therefore archaeology students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU certification) early in their program. Archaeology students should also meet with the archaeology faculty about course/program offerings as soon as possible in order to complete the program in a timely manner.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Students will demonstrate knowledge of terminology, methods, and the theoretical framework of modern, scientific archaeology.
2. Students will have demonstrable skills in archaeological field methods.
3. Students will have demonstrable skills in archaeological laboratory methods.

##### Required Core Courses (15 units):

	Units
ANTHRO 1 Biological Anthropology.....	3
ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology.....	3
ANTHRO 4 Introduction to Archaeology.....	3
ANTHRO 15 Laboratory Methods in Archaeology.....	4
ANTHRO 16A Field Archaeology I.....	2

**Electives (3 units minimum). Students must complete a minimum of three units from the following list of electives. Other courses may be substituted based on the student's area of focus with faculty approval.**

	Units
ANTHRO 1L Biological Anthropology Laboratory.....	1
ANTHRO 3 Archaeology and World Prehistory.....	3
ANTHRO 16B Field Archaeology II.....	2
ANTHRO 24 Doing Archaeology: Hands-On!.....	1.5
ANTHRO/ CLS 28 Ancient Mexico.....	3
ANTHRO 30 Topics in Anthropology.....	1-4
GEOG 10 Introduction to GIS.....	3
GEOL 1 Physical Geology.....	4
HIST 3 History of Ancient Rome.....	3
HIST 18 History of Ancient Greece.....	3
HIST 30 California History.....	3
	Total 18

## ART

### ART HISTORY FOR TRANSFER – MAJOR #5206

*revised program, Spring 2021*

The Associate in Arts in Art History for Transfer Degree offers a core foundation for the study of art history across cultures and eras. The program prepares students to continue their studies towards a degree in art history or studio arts at the California State University (CSU) and the University of California (UC) systems. Students will learn skills of analyzing art within its historical and cultural context using art-specific terminology and methodologies. To earn the Associate in Arts in Art History for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

#### Associate in Arts

##### Student Learning Outcomes:

1. Analyze a variety of techniques and formal visual elements of individual works of art in different media and diverse cultures.
2. Define and differentiate various styles of art throughout history.
3. Evaluate works of art in relation to context, historical background, and influence on subsequent artistic periods.

4. Compare stylistic elements that distinguish aesthetic and cultural trends.

<b>Required Core Courses</b>		<b>Units</b>
ART 5/5H	Art History Ancient to Medieval, <i>or</i> Honors Art History Ancient to Medieval.....	3
ART 6/6H	Art History Renaissance to Modern, <i>or</i> Honors Art History Renaissance to Modern.....	3
ART 7	Beginning Drawing.....	3

<b>List A – Select one of the following:</b>		<b>Units</b>
ART 55	Introduction to Asian Art.....	3
ART 60	Art of the Ancient Americas.....	3

<b>List B – Select one of the following:</b>		<b>Units</b>
ART 3	Two-Dimensional Design.....	3
ART 4	Three-Dimensional Design.....	3
ART 8	Beginning Figure Drawing and Anatomy.....	3
ART 9	Beginning Painting: Oil/Acrylic.....	3
ART 10	Beginning Ceramics.....	3
ART 11	Beginning Sculpture.....	3
ART 14	Beginning Printmaking.....	3
ART 52	Introduction to Digital Art/New Media.....	3

**List C – Select one of the courses below or one from List A or**

<b>List B not already taken:</b>		<b>Units</b>
AFRAM 3	African-American Art.....	3
AMIND 35	American Indian Art.....	3
ANTHRO 3	Archaeology and World Prehistory.....	3
ANTHRO 4	Introduction to Archaeology.....	3
ARCH 15A	History of Architecture I.....	3
ARCH 15B	History of Architecture II.....	3
ART 70	Modern and Contemporary Art.....	3
CLS 20	Chicano Art.....	3
FILM 1	Introduction to Film Studies.....	3
FILM 3	Film and Culture.....	3
FRENCH 1	Beginning French.....	5
FRENCH 2	High-Beginning French.....	5
FRENCH 3	Intermediate French.....	5
GERMAN 1	Beginning German.....	5
GERMAN 2	High-Beginning German.....	5
HUMAN 10	Classical Humanities.....	3
HUMAN 11	Modern Humanities.....	3
PHIL 1A	Theories of Knowledge and Reality.....	3
PHIL 1D	World Religions.....	3
SPAN 1	Beginning Spanish.....	5
SPAN 2	High-Beginning Spanish.....	5
SPAN 3	Intermediate Spanish.....	5
SPAN 4	High-Intermediate Spanish.....	5

Total 18-20

## ASIAN AMERICAN STUDIES

### ASIAN AMERICAN STUDIES – MAJOR #7695

*revised program, Spring 2021*

From an historical perspective, Asians have played major roles in Fresno from the early Chinese settlers who built a Chinatown to the Japanese Americans who were confined to an assembly center at the Fresno fairground to the Hmong refugees who fled from the aftermath of the Vietnam War to create the largest Hmong American community in the state of California. The structure and purpose of the Asian American Studies associate degree is twofold: one is to enhance the skills of students to successfully transfer and complete a baccalaureate degree, second is to provide knowledge and understanding of the Asian American as an individual and as a member of the Asian American community.

#### Associate in Arts

##### Student Learning Outcomes:

1. Identify and describe major historical experiences of Asians and Asian Americans.
2. Examine the cultural practices and evaluate how culture has evolved for the Asian American community.
3. Explore the identity dilemma for Asian Americans of the various generations from recent immigrants to the assimilated and acculturated Asian American family.
4. Evaluate the issues that have confronted Asians in the past as well as those relevant in a contemporary setting.

<b>Required Core Courses</b>		<b>Units</b>
ASAMER 1	Indo-Chinese Americans .....	3
ASAMER 8	Chinese Culture .....	3
ASAMER 15	Introduction to Asian-Americans .....	3
ASAMER 25	Asian American Social Issues.....	3
ASAMER 55	Introduction to Asian Art .....	3
<b>Course Options (6 units):</b>		<b>Units</b>
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society .....	3
ASAMER 10	Hmong Culture.....	3
CHIN 1	Beginning Chinese.....	5
CHIN 2	High-Beginning Chinese.....	5
HMONG 1	Beginning Hmong .....	5
HMONG 2	High-Beginning Hmong .....	5
JAPAN 1	Beginning Japanese.....	5
JAPAN 2	High-Beginning Japanese .....	5
		Total 21

## **AUTOMOTIVE COLLISION REPAIR TECHNOLOGY**

### **AUTOMOTIVE COLLISION REPAIR TECHNOLOGY – MAJOR #8071**

*corrected program, Fall 2020*

Training in this field is designed to prepare the student for employment in auto body repairing, reconstruction, and finishing.

#### **Certificate of Achievement**

#### **Student Learning Outcomes:**

1. Straighten and fill damaged sheet metal.
2. Mix and apply body fillers, puttys and plastic repair systems.
3. Remove and reattach body panels and align.

<b>Required Core Courses</b>		<b>Units</b>
ACRT 151	Basic ACR, <i>or</i> ACRT 151A Basic ACR, <i>and</i> ACRT 151B Basic ACR .....	9
ACRT 153	Advanced ACR, <i>or</i> ACRT 153A Advanced ACR, <i>and</i> ACRT 153B Advanced ACR .....	9
AT 10	Technical Computer Applications.....	3
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
WELD 2A	Introduction to Welding Technology .....	6
<b>Recommended Electives</b>		<b>Units</b>
ACRT 155	Spray Refinishing.....	2
AT 19	Work Experience (Cooperative), Occupational .....	1-8
AUTOT 54	Suspension, Steering, and Wheel Alignment.....	5
		Total 32

## **BIOLOGY**

### **BIOLOGY – FORMERLY LIFE SCIENCE DEGREE – MAJOR #6082**

*revised program, Spring 2021*

This program is designed to provide students with foundational knowledge in biological principles and concepts. This two year associate degree program is intended for transfer students majoring in the biological sciences. The Biological and Life Sciences Program at Fresno City College provides entry level instruction in the following: fulfillment of prerequisites for entry into allied health fields, fulfillment of prerequisites for students transferring into biological sciences and fulfillment of general education requirements for transfer to four-year institutions. Specific biology courses to meet degree requirements (14 units total).

#### **Associate in Science**

#### **Student Learning Outcomes:**

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Describe the classes of organic molecules found in organisms and discuss their importance in biological systems.
3. Understand cellular processes and relate organelle structure to function.
4. Understand the structure and function of genetic material and apply the principles of genetics as they relate to organisms.
5. Appreciate biodiversity and understand the impact of human activity on ecological systems.

6. Explain the mechanisms of evolution and evaluate the scientific evidence to support it.

**Specific Biology courses to meet degree requirements:**

<b>(14 units total):</b>		<b>Units</b>
BIOL 3	Introduction to Life Science .....	4
BIOL 4	Principles of Zoology.....	5
BIOL 5	Human Biology .....	4
BIOL 6	Principles of Botany .....	5
BIOL 7	Field Biology .....	5
BIOL 11A	Biology for Science Majors I .....	5
BIOL 11B	Biology for Science Majors II .....	5
BIOL 14	Conservation Biology .....	3
BIOL 20	Human Anatomy .....	4
BIOL 21A	Human Anatomy & Physiology I.....	4
BIOL 21B	Human Anatomy & Physiology II.....	5
BIOL 22	Human Physiology .....	5
BIOL 31	Microbiology .....	5
BIOL 46	Elementary Horticulture.....	3.5
BIOL 55	Introduction to the Biology of Humans.....	3

**Specific Physical Science courses to meet degree requirements:**

<b>(6 units total)</b>		<b>Units</b>
ASTRO 10	Basic Astronomy.....	3
CHEM 1A	General Chemistry .....	5
CHEM 1B	General Chemistry and Qualitative Analysis.....	5
CHEM 3A	Introductory General Chemistry .....	4
CHEM 3B	Introductory Organic & Biological Chemistry.....	4
CHEM 8A	Elementary Organic Chemistry .....	3
GEOG 1	Physical Geography.....	4
GEOG 7	Physical Geography: Earth's Surface.....	4
GEOG 8	Physical Geography: Weather and Climate.....	4
GEOL 1	Physical Geology .....	4
GEOL 2	Historical Geology.....	3
GEOL 4	Geology of California.....	3
GEOL 5	Introduction to Oceanography.....	3
GEOL 12	Environmental Science.....	3
PHYS 2A	General Physics 1.....	4
PHYS 2B	General Physics 2.....	4
PHYS 4A	Physics for Scientists and Engineers .....	4
PHYS 4B	Physics for Scientists and Engineers .....	4
		<b>Total 20</b>

**BIOLOGY FOR TRANSFER – MAJOR #6082**

*revised program, Spring 2021*

The goal of the Associate in Science in Biology for Transfer program at Fresno City College is to prepare students to seamlessly transfer into a CSU baccalaureate program in Biology. The Associate in Science in Biology for Transfer program at Fresno City College may also prepare students to transfer into a UC baccalaureate program in Biology. An Associate in Science in Biology for Transfer is comprised of the core set of introductory Biology and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding biological phenomena. To earn the Associate in Science in Biology for Transfer, students must complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following: (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements. (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district. (2) Obtainment of a minimum grade point average of 2.0." ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

**Associate in Science**

**Student Learning Outcomes:**

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Understand the function of organic molecules in biological systems and relate organelle structure to cellular function.
3. Understand the structure and function of genetic material and apply the principles of genetics as they relate to organisms.
4. Understand the biodiversity of life on earth based on modern classification systems.
5. Understand the ecological relationships between organisms and the environment, and the impact of human activity on ecological systems.
6. Understand the scientific evidence for evolution and explain the mechanisms leading to evolutionary change over time.

<b>Required Core:</b>		<b>Units</b>
BIOL 11A	Biology for Science Majors I .....	5
<b>Select one sequence:</b>		<b>Units</b>
BIOL 11B	Biology for Science Majors II, <i>or</i>	
BIOL 4	Principles of Zoology, <i>and</i>	
BIOL 6	Principles of Botany .....	5-10
<b>Chemistry and Mathematics Requirements:</b>		<b>Units</b>
CHEM 1A	General Chemistry .....	5
CHEM 1B	General Chemistry and Qualitative Analysis.....	5
MATH 5A	Mathematical Analysis I.....	5
<b>Choose one Physics sequence:</b>		<b>Units</b>
PHYS 2A	General Physics 1, <i>and</i>	
PHYS 2B	General Physics 2, <i>or</i>	
PHYS 4A	Physics for Scientists and Engineers, <i>and</i>	
PHYS 4B	Physics for Scientists and Engineers .....	8
		Total 33-38

**FIELD BIOLOGIST – MAJOR #6083**

*revised program, Spring 2021*

The Field Biologist Certificate is a program designed to provide students with education and training in various aspects of field biology in preparation for 1) entry level employment in the environmental consulting field or government agencies 2) entry level field research assistant and 3) continuing education in biology. A certificated field biologist may work in the field doing plant and animals surveys, threatened and endangered species surveys, sensitive habitat delineation, biological construction monitoring or scientific data collection, all under the direction of qualified professional biologists. Students planning for a career in biology in most cases will need to earn at least a Bachelor’s Degree. Therefore biology students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU certification) early in their program. Biology students should also meet with biology faculty about course/program offerings as soon as possible in order to complete the program in a timely manner.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Apply field sampling techniques that qualitatively and quantitatively measure and describe the role of a living organism in its environment.
2. Identify major habitat types and ecological phenomena in the field.
3. Describe the natural history of select plants, animals, and fungi of California.
4. Correctly use various plant and animal taxonomic keys.

<b>Required Core Courses:</b>		<b>Units</b>
BIOL 7	Field Biology .....	5
BIOL 11A	Biology for Science Majors I .....	5
<b>Select One Sequence:</b>		<b>Units</b>
BIOL 11B	Biology for Science Majors II, <i>or</i>	
BIOL 4	Principles of Zoology, <i>and</i>	
BIOL 6	Principles of Botany .....	5-10

**Electives (2-7 units): Students that take the sequence BIOL 4, 6, and 7 must complete a minimum of 2 units. The alternative sequence of BIOL 11B and 7 must take 7 units. Electives may be taken in any sequence. GEOL 1 is highly recommended.**

		<b>Units</b>
ANTHRO 16A	Field Archaeology I .....	2
GEOG 1	Physical Geography.....	4
GEOG 10	Introduction to GIS.....	3
GEOL 1	Physical Geology .....	4
GEOL 3	Geology Field Studies.....	1-2
GEOL 4	Geology of California.....	3
		Total 22

**BUSINESS ADMINISTRATION****BUSINESS ADMINISTRATION – MAJOR #2050***revised program, Spring 2021*

The following courses are required for the Associate in Arts degree in Business Administration.

**Associate in Arts****Student Learning Outcomes:**

1. Demonstrate the ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the formulation and implementation of a corporate strategy.
3. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment including customer service, teambuilding, conflict management, time management, communication, and professional behavior.
4. Demonstrate the appropriate application of management theory relating to the functions of planning, organizing, leading and controlling for established businesses and entrepreneurial ventures.

<b>First Year – First Semester</b>		<b>Units</b>
BA 10	Introduction to Business .....	3
CIT 15	Computer Concepts .....	3
DS 21	Finite Mathematics.....	3
<b>First Year – Second Semester</b>		<b>Units</b>
BA 18	Business and the Legal Environment.....	4
DS 23	Business Statistics .....	3
<b>Second Year – First Semester</b>		<b>Units</b>
ACCTG 4A	Financial Accounting.....	4
BA 20	Law and the Legal System .....	3
ECON 50/50H	Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics .....	3
<b>Second Year – Second Semester</b>		<b>Units</b>
ACCTG 4B	Managerial Accounting.....	4
ECON 40/40H	Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
		<b>Total 33</b>

**BUSINESS ADMINISTRATION, MANAGEMENT – MAJOR #2181***revised program, Spring 2021*

Business Administration degree designed to provide a basic understanding of and proficiency in the important functional areas related to business management.

**Associate in Science****Student Learning Outcomes:**

1. Appropriate application of management theory relating to the functions of planning, organizing, leading and controlling as it relates to existing business and entrepreneurial ventures.
2. Ability to create and analyze the four basic financial statements and budgets, ability to perform time value of money calculations and recognize and evaluate opportunity and risk.
3. Assist in the formulation and implementation of a corporate strategy.
4. Demonstrate basic workplace written, verbal, and non-verbal communication skills including the proper use of appropriate technologies, written reports, and formal presentations.
5. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment.

<b>Required Core Courses</b>		<b>Units</b>
ACCTG 4A	Financial Accounting, <i>or</i>	
BT 131	Applied Accounting .....	3.5-4
BA/BT 5	Workplace Communication.....	3
BA 10	Introduction to Business .....	3
BA 18	Business and the Legal Environment.....	4
BA 30	Personal Finance .....	3
BA 31	Human Resource Management.....	3
BA 33	Human Relations in the Workplace .....	3
BA 40	Supervision and Leadership, <i>or</i>	
BA 43	Principles of Management .....	3
CIT 15	Computer Concepts .....	3
MKTG 10	Principles of Marketing .....	3

<b>Electives: Select 6 Units</b>		<b>Units</b>
ACCTG 4A	Financial Accounting.....	4
BA 28	E-Law and Ethics.....	3
BA 34	Fundamentals of Investing.....	3
BA 35	Financial Management for Entrepreneurs and Small Business.....	3
BA 38	Operation of the Small Business.....	3
BA 40	Supervision and Leadership.....	3
BA 43	Principles of Management.....	3
BA 52	Introduction to Entrepreneurship.....	3
BT 131	Applied Accounting.....	3.5
MKTG 11	Selling and Sales Management.....	3
MKTG 12	Advertising and Promotion.....	3
MKTG 14	Retailing.....	3
MKTG 21	Digital Marketing.....	3
RE 40	Real Estate Principles.....	3
RE 41	Real Estate Practice.....	3
<b>Total</b>		<b>37.5-38</b>

**BUSINESS ADMINISTRATION, MANAGEMENT – MAJOR #2181**

*revised program, Spring 2021*

A certificate of achievement in Business Administration may be awarded for the successful completion of 20 units. The 20 units must include the required core courses plus any of the elective courses listed below.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Appropriately apply the management functions of planning, organizing, leading and controlling.
2. Read and interpret basic financial statements.
3. Assist in the formulation and implementation of a corporate strategy.
4. Demonstrate proficiency in soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.
5. Utilize basic workplace written, verbal, and non-verbal communication skills required for the workplace, including the proper use of appropriate technologies, written reports, and formal presentations.

<b>Required Core Courses</b>		<b>Units</b>
BA/BT 5	Workplace Communication.....	3
BA 10	Introduction to Business.....	3
BA 33	Human Relations in the Workplace.....	3
BA 40	Supervision and Leadership, <i>or</i>	
BA 43	Principles of Management.....	3

<b>Electives: Select 8 Units</b>		<b>Units</b>
ACCTG 4A	Financial Accounting.....	4
BA 18	Business and the Legal Environment.....	4
BA 20	Law & the Legal System.....	3
BA 28	E-Law and Ethics.....	3
BA 30	Personal Finance.....	3
BA 31	Human Resource Management.....	3
BA 34	Fundamentals of Investing.....	3
BA 35	Financial Management for Entrepreneurs and Small Business.....	3
BA 38	Operation of the Small Business.....	3
BA 40	Supervision and Leadership.....	3
BA 43	Principles of Management.....	3
BA 51	Business Planning and New Venture Launch.....	1.5
BT 131	Applied Accounting.....	3.5
CIT 15	Computer Concepts.....	3
MKTG 10	Principles of Marketing.....	3
MKTG 11	Selling and Sales Management.....	3
MKTG 12	Advertising and Promotion.....	3
MKTG 14	Retailing.....	3
MKTG 21	Digital Marketing.....	3
RE 40	Real Estate Principles.....	3
RE 41	Real Estate Practice.....	3
<b>Total</b>		<b>20</b>

**BUSINESS ADMINISTRATION FOR TRANSFER – MAJOR #2049**

*revised program, Spring 2021*

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students must consult with a counselor when planning to complete the degree for additional information on university admission and transfer requirements. In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

**Associate in Science**

**Student Learning Outcomes:**

1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.

**Required Core Courses**

	<b>Units</b>
ACCTG 4A Financial Accounting.....	4
ACCTG 4B Managerial Accounting.....	4
BA 18 Business and the Legal Environment.....	4
CIT 15 Computer Concepts.....	3
ECON 40/40H Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
ECON 50/50H Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics.....	3

**Choose 2 of the following:**

	<b>Units</b>
BA 10 Introduction to Business.....	3
DS 21 Finite Mathematics.....	3
DS 23 Business Statistics.....	3
	<b>Total 27</b>

**HUMAN RESOURCE MANAGEMENT ASSISTANT – MAJOR #2052**

*revised program, Spring 2021*

A step incentive certificate signifying proficiency in basic knowledge and skills required for an entry-level human resource assistant.

**Certificate**

**Student Learning Outcomes:**

1. Describe basic computer software and appropriate applications.
2. Demonstrate the appropriate application of State and Federal HR laws to business situations.
3. Demonstrate the appropriate application for each of the primary HR functions.
4. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
5. Define and describe how to take personal responsibility for professional and effective workplace relationships.

**Required Courses**

	<b>Units</b>
BA 31 Human Resource Management.....	3
BA 33 Human Relations in the Workplace.....	3
BT 9 Computer Applications I, <i>or</i> BT 25 Microsoft Office.....	3-4
	<b>Total 9-10</b>



## CHILD DEVELOPMENT

### CHILD DEVELOPMENT, FORMERLY ASSOCIATE TEACHER – MAJOR #5618

*revised program, Fall 2020*

The Certificate of Achievement in Child Development is designed to prepare students for entry-level positions in a variety of early care and education settings. Completion of the Certificate of Achievement fulfills the coursework requirements for the California Child Development Permit at the Associate Teacher level.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self confidence.

##### Required Courses

	<b>Units</b>
CHDEV 1 Principles and Practices of Teaching Young Children.....	3
CHDEV 3 Introduction to Curriculum .....	3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education .....	3
CHDEV 30 Child, Family and Community .....	3
CHDEV 39 Child Growth and Development.....	3
	Total 15

## COMPUTER INFORMATION TECHNOLOGY

### CYBERSECURITY – MAJOR #2750

*revised program, Spring 2021*

The California Community College's Information Technology Cyber Security Certificate Collaborative Program is a fully online, zero textbook cost program designed to prepare students for entry level cyber security positions across industry and government and also prepare students to sit for nationally recognized certification exams from Cisco and CompTIA.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Create and implement security policies for an organization.
2. Configure computer and networks to protect information from exfiltration.

##### Required Courses

	<b>Units</b>
CIT 45 Data Communications.....	3
CIT 48A IT+ Fundamentals.....	3
CIT 48B A+ and Security Principles.....	4
CIT 54A Network Security.....	3
CIT 54B Cybersecurity Operations.....	3
CIT 58C Security+ Fundamentals.....	3
CIT 59 Linux System Administration .....	3
EST 62 Commercial & Industrial Networking .....	3
	Total 25

### NETWORKING/COMPUTER TECHNICIAN – MAJOR #2720

*revised program, Spring 2021*

This option is designed to meet the training needs for qualified entry-level microcomputer and networking technicians.

#### Associate in Science and Certificate of Achievement

##### Student Learning Outcomes:

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

<b>Required Core Courses</b>		<b>Units</b>
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English .....	3
CIT 15	Computer Concepts .....	3
CIT 19	Work Experience (Cooperative), Occupational .....	2
CIT 40	Computer Operating Systems.....	4
CIT 45	Data Communications.....	3
CIT 50	Fundamentals of Networking .....	4
EST 55A	Digital Concepts.....	3
EST 60	A+ PC Maintenance and Repair .....	3
EST 61	Networking Fundamentals.....	3
EST 62	Commercial & Industrial Networking .....	3
		Total 34

**PREPARATION IN MICROSOFT OFFICE – MAJOR #2710**

*revised program, Spring 2021*

Designed for the nontransfer student leading to employment as a microcomputer software specialist or similar computer specialist. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

**Certificate**

**Student Learning Outcomes:**

1. Given a business scenario, select and use an appropriate application program to create a solution addressing the scenario.
2. Given a Microsoft Office related software problem, troubleshoot, identify, research, and provide assistance to users.

<b>First Year</b>		<b>Units</b>
BT 28	Microsoft Word I.....	1.5
BT 29	Microsoft Word II.....	1.5
BT 127	Microsoft Outlook and E-Mail.....	1
<b>Second Year</b>		<b>Units</b>
CIT 23	Spreadsheet Fundamentals.....	2
		Total 6

**CONSTRUCTION**

**INDUSTRIAL TECHNOLOGY – FORMERLY INDUSTRIAL ARTS AND TECHNOLOGY – MAJOR #8992**

*revised program, Spring 2021*

This degree is designed for students that have a desire to learn about the different subject areas within the Applied Technology Division. A student could also transfer to a four year university and earn a Bachelor of Science degree in Industrial Technology.

**Associate in Science**

**Student Learning Outcomes:**

1. Create 3D solid models using various extrusion methods.
2. Create and modify files using Microsoft Office programs.

<b>Required Courses</b>		<b>Units</b>
AT 10	Technical Computer Applications.....	3
CADD 16	3D Solid Modeling I.....	3
WELD 1	Exploring Welding/Metals.....	3

<b>Recommended Electives (6 units minimum)</b>		<b>Units</b>
AUTOT 9	Automotive Essentials.....	3
CADD 14	2D CAD I.....	3
CAM 5	CNC Operation & Maintenance for Machinist .....	2.5
CAM 10	CNC Mill Programming & Operation I.....	4
DRAFT 12	Drafting Practices.....	3
EST 51	Direct Current Fundamentals of Electronics .....	3
EST 52	Alternating Current Fundamentals .....	3
EST 53	Lab Safety Practices .....	2
EST 54	Integrated Devices .....	3
EST 55A	Digital Concepts.....	3
EST 56B	Motor Controls.....	3
EST 58	Programmable Logic Controllers.....	3
EST 59	Instrumentation Systems.....	3
EST 60	A+ PC Maintenance and Repair .....	3

EST 61	Networking Fundamentals.....	3
EST 62	Commercial & Industrial Networking .....	3
WELD 2A	Introduction to Welding Technology.....	6
	Total	15

## CRIMINOLOGY

### CORRECTIONAL SCIENCE OPTION – MAJOR #7731

*revised program, Spring 2021*

Designed to provide specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and a probation and parole officer. This degree is also designed to provide those students who are pursuing careers in the correctional field of criminology, the opportunity to broaden their knowledge and appreciation of the many levels of corrections and the value of correctional roles in the criminal justice system. This degree will also serve as a primer for those students who wish to pursue a higher level of education in corrections at the university level.

#### Associate in Science

#### Student Learning Outcomes:

1. The students will understand state and federal regulations and have knowledge of correctional systems.

#### Required Core Courses:

		Units
CRIM 4	Principles & Procedures of the Justice System.....	3
CRIM 6	Concepts of Criminal Law.....	3
CRIM 12	Criminal Justice Communications .....	3
CRIM 13	The Constitution and Your Individual Rights.....	3
CRIM 20	Introduction to Corrections .....	3

#### Course Options: Select any 16 units

		Units
AFRAM 1	Introduction to African American Studies, <i>or</i>	
AFRAM 2	African American Cultural Adaptation, <i>or</i>	
AFRAM 4	Classical and Pre Colonial Africa, <i>or</i>	
AMIND 31	American Indian Culture, <i>or</i>	
AMIND 32	American Indian History, <i>or</i>	
AMIND 34	The American Indian in Contemporary Society, <i>or</i>	
ASAMER 1	Indo-Chinese Americans, <i>or</i>	
ASAMER 15	Introduction to Asian-Americans, <i>or</i>	
CLS 11	Introduction to Chicano-Latino Studies, <i>or</i>	
CLS 12	Mexican American History, <i>or</i>	
CLS 13	Politics and the Chicano-Latino Community, <i>or</i>	
CLS 14	Sociology of the Mexican American Community, <i>or</i>	
CLS 24	La Chicana and Latina, <i>or</i>	
CLS 28	Ancient Mexico, <i>or</i>	
CLS 29	History Of Mexico, Colonial to Contemporary Period, <i>or</i>	
CLS 30	Migration and the Family: Social and Psychological Perspectives .....	3
CRIM 1	Introduction to Criminology.....	3
CRIM 5	Community Relations .....	3
CRIM 8	Criminal Investigation.....	4
CRIM 11	Juvenile Delinquency .....	3
CRIM 18	The Psychology of Criminal Behavior.....	3
CRIM 23	Correctional Interviewing and Counseling .....	3
CRIM 24	Control and Supervision in Corrections .....	3
CRIM 25	Legal Aspects of Corrections.....	3
HMONG 1	Beginning Hmong, <i>or</i>	
HMONG 2	High- Beginning Hmong .....	5
HS 24	Fundamentals of Interviewing and Counseling .....	3
PSY 2/2H	General Psychology, <i>or</i>	
	Honors General Psychology .....	3
PSY 16	Abnormal Psychology .....	3
SPAN 2	High-Beginning Spanish, <i>or</i>	
SPAN 2NS	Preparatory Spanish for Native Speakers, <i>or</i>	
SPAN 3	Intermediate Spanish, <i>or</i>	
SPAN 3NS	Intermediate Spanish for Spanish Speakers, <i>or</i>	
SPAN 4	High-Intermediate Spanish, <i>or</i>	
SPAN 4NS	High-Intermediate Spanish for Spanish Speakers.....	5
WSTS 10	Changing Roles of Women.....	3
	Total	31

**CORRECTIONAL SCIENCE OPTION – MAJOR #7731**

*revised program, Spring 2021*

This certificate provides specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and parole officer. This certificate is also designed to provide students who are pursuing careers in the correctional field, the opportunity to broaden their technical knowledge of the many levels of correctional employment opportunities.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. The students will understand state and federal regulations and have knowledge of correctional systems.

**Required Core Courses:**

	<b>Units</b>
CRIM 4 Principles & Procedures of the Justice System.....	3
CRIM 6 Concepts of Criminal Law.....	3
CRIM 12 Criminal Justice Communications .....	3
CRIM 13 The Constitution and Your Individual Rights.....	3
CRIM 20 Introduction to Corrections .....	3

**Course Options: Select any 16 units**

	<b>Units</b>
AFRAM 1 Introduction to African American Studies, <i>or</i>	
AFRAM 2 African American Cultural Adaptation, <i>or</i>	
AFRAM 4 Classical and Pre Colonial Africa, <i>or</i>	
AMIND 31 American Indian Culture, <i>or</i>	
AMIND 32 American Indian History, <i>or</i>	
AMIND 34 The American Indian in Contemporary Society, <i>or</i>	
ASAMER 1 Indo-Chinese Americans, <i>or</i>	
ASAMER 15 Introduction to Asian-Americans, <i>or</i>	
CLS 11 Introduction to Chicano-Latino Studies, <i>or</i>	
CLS 12 Mexican American History, <i>or</i>	
CLS 13 Politics and the Chicano-Latino Community, <i>or</i>	
CLS 14 Sociology of the Mexican American Community, <i>or</i>	
CLS 24 La Chicana and Latina, <i>or</i>	
CLS 28 Ancient Mexico, <i>or</i>	
CLS 29 History Of Mexico, Colonial to Contemporary Period, <i>or</i>	
CLS 30 Migration and the Family: Social and Psychological Perspectives .....	3
CRIM 1 Introduction to Criminology.....	3
CRIM 5 Community Relations.....	3
CRIM 8 Criminal Investigation.....	4
CRIM 11 Juvenile Delinquency .....	3
CRIM 18 The Psychology of Criminal Behavior.....	3
CRIM 23 Correctional Interviewing and Counseling .....	3
CRIM 24 Control and Supervision in Corrections .....	3
CRIM 25 Legal Aspects of Corrections.....	3
HMONG 1 Beginning Hmong, <i>or</i>	
HMONG 2 High- Beginning Hmong .....	5
HS 24 Fundamentals of Interviewing and Counseling .....	3
PSY 2/2H General Psychology, <i>or</i>	
Honors General Psychology .....	3
PSY 16 Abnormal Psychology .....	3
SPAN 2 High-Beginning Spanish, <i>or</i>	
SPAN 2NS Preparatory Spanish for Native Speakers, <i>or</i>	
SPAN 3 Intermediate Spanish, <i>or</i>	
SPAN 3NS Intermediate Spanish for Spanish Speakers, <i>or</i>	
SPAN 4 High-Intermediate Spanish, <i>or</i>	
SPAN 4NS High-Intermediate Spanish for Spanish Speakers.....	5
WSTS 10 Changing Roles of Women.....	3
<b>Total</b>	<b>31</b>

**FORENSIC EVIDENCE OPTION – MAJOR #7732**

*revised program, Spring 2021*

Forensic Evidence—designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This degree is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This degree will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Degree program has been approved by the International Association for Identification (IAI).

**Associate in Science**

**Student Learning Outcomes:**

Upon successful complete of the Forensic Evidence Program, the student will be able to have the ability to:

1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.

**Required Core Courses:**

	<b>Units</b>
ANTHRO 1 Biological Anthropology.....	3
ANTHRO 1L Biological Anthropology Laboratory.....	1
BIOL 11A Biology for Science Majors I.....	5
CADD 14 2D CAD I.....	3
CHEM 1A General Chemistry.....	5
CRIM 1 Introduction to Criminology.....	3
CRIM 3 Legal Aspects of Evidence.....	3
CRIM 8 Criminal Investigation.....	4
CRIM 9 Crime Scene Forensic Evidence.....	3
CRIM 12 Criminal Justice Communications.....	3

**Course Options: Select 6 units:**

	<b>Units</b>
BIOL 11B Biology for Science Majors II.....	5
CRIM 18 The Psychology of Criminal Behavior.....	3
PHOTO 5 Introduction to Photography.....	3
PSY 2/2H General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 16 Abnormal Psychology.....	3
<b>Total 39</b>	

**FORENSIC EVIDENCE OPTION – MAJOR #7732**

*revised program, Spring 2021*

Forensic Evidence—designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This certificate of achievement is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This certificate of achievement will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Certificate of Achievement program is approved by the International Association for Identification (IAI).

**Certificate of Achievement**

**Student Learning Outcomes:**

Upon successful complete of the Forensic Evidence Program, the student will be able to have the ability to:

1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.

**Required Core Courses:**

	<b>Units</b>
ANTHRO 1 Biological Anthropology.....	3
ANTHRO 1L Biological Anthropology Laboratory.....	1
BIOL 11A Biology for Science Majors I.....	5
CADD 14 2D CAD I.....	3
CHEM 1A General Chemistry.....	5
CRIM 1 Introduction to Criminology.....	3
CRIM 3 Legal Aspects of Evidence.....	3
CRIM 8 Criminal Investigation.....	4
CRIM 9 Crime Scene Forensic Evidence.....	3
CRIM 12 Criminal Justice Communications.....	3
<b>Total 33</b>	

## CULTURAL STUDIES

### SOCIAL JUSTICE STUDIES, GENERAL FOR TRANSFER – MAJOR #7663

*revised program, Spring 2021*

Social Justice Studies was created as an "Area of Emphasis" Associates Degree for Transfer (ADT). This ADT includes Programs in Cultural or Ethnic Studies and Women's Studies, and is designed to give students a broad background in the histories of various racial and ethnic groups, and the contemporary challenges faced by these groups in our society. Social Justice is the basic principle that all members of a society are entitled to equal rights and opportunities, and Social Justice Studies seeks to examine existing inequities, particularly as they relate to race, ethnicity, gender, and sexuality. The Social Justice Studies ADT is designed to transfer into the CSU system, and can be used as the foundation for a Bachelor's Degree in the following areas: American Indian Studies, African American or Africana Studies, American Studies, Asian American Studies, Chicana and Chicano or Mexican American Studies, Comparative Ethnic Studies, Gender Studies, Women's Studies, Labor Studies, and some Sociology Programs. To earn the Associate in Arts in Social Justice for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

#### Associate in Arts

##### Student Learning Outcomes:

1. Demonstrate academic preparedness for transfer to a four-year college.
2. Examine and appraise the intersections of race, class, gender, religion and other cultural indicators in issues of social justice in the United States.
3. Compare and contrast the primary goals of social justice movements of the 20th century and evaluate correlations to contemporary social justice movements.

##### Required Core Courses

	<b>Units</b>
AFRAM 1	Introduction to African American Studies, <i>or</i>
AMIND 31	American Indian Culture, <i>or</i>
ASAMER 15	Introduction to Asian-Americans, <i>or</i>
CLS 11	Introduction to Chicano-Latino Studies..... 3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society..... 3
WSTS 10	Changing Roles of Women..... 3

##### Select three (3) courses from at least two of the following areas:

##### Area 1: History or Government

	<b>Units</b>
AFRAM 4	Classical and Pre Colonial Africa..... 3
AFRAM 34	History of the American Civil Rights Movement..... 3
AMST 11	Law and Democracy..... 3
CLS 29	History of Mexico, Colonial to Contemporary Period..... 3

##### Area 2: Arts and Humanities

	<b>Units</b>
AFRAM 3	African-American Art..... 3
AFRAM 8	African-American Creative Workshop..... 3
AFRAM 15	African American Music..... 3
AMIND 35	American Indian Art..... 3
ASAMER 8	Chinese Culture..... 3
CLS 17A	Beginning Mexican Folk Dance..... 3.5
CLS 20	Chicano Art..... 3
CLS 21	Chicano Literature..... 3
CLS 22	Art of the Ancient Americas..... 3
CLS 27B	Advanced Mexican Folk Dance..... 3.5
WSTS 36	Women's Literature..... 3

##### Area 3: Social Science

	<b>Units</b>
AMIND 31	American Indian Culture..... 3
AMIND 34	The American Indian in Contemporary Society..... 3
ASAMER 1	Indo-Chinese Americans..... 3
ASAMER 15	Introduction to Asian-Americans..... 3
CLS 12	Mexican American History..... 3
WSTS 47	Introduction to Lesbian and Gay Studies..... 3

<b>Area 4: Major Preparation</b>		<b>Units</b>
AFRAM 2	African American Cultural Adaptation.....	3
ASAMER 25	Asian American Social Issues.....	3
ASAMER 55	Introduction to Asian Art.....	3
CLS 13	Politics and the Chicano-Latino Community.....	3
CLS 14	Sociology of the Mexican American Community.....	3
CLS/WSTS 24	La Chicana and Latina.....	3
		Total 18-19

## EDUCATION

### ELEMENTARY TEACHER EDUCATION FOR TRANSFER – MAJOR #5920

*revised program, Spring 2021*

The Associate in Arts in Elementary Teacher Education for Transfer Degree is designed for students planning to transfer to a four-year university ready to continue for a bachelor's degree in Liberal Studies and a preliminary Multiple Subject Elementary Teaching Credential. To earn the Associate in Arts in Elementary Education for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 13 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. California teaching credential requirements are subject to change; consult with a counselor each semester to ensure compliance with state regulations and transfer requirements.

#### Associate in Arts

##### Student Learning Outcomes:

1. Demonstrate introductory subject matter competency required for the teaching at the elementary school level.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for teaching at the elementary school level.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

<b>Required 47 Units of Core Courses:</b>		<b>Units</b>
BIOL 3	Introduction to Life Science.....	4
CHDEV 39	Child Growth and Development.....	3
COMM 1	Introduction to Public Speaking.....	3
EDUC 19	Work Experience (Cooperative), Occupational.....	1
EDUC 30	Introduction to Teaching.....	3
ENGL 1A/1AH	Reading and Composition, <i>or</i> Honors Reading and Composition.....	4
ENGL 1B	Introduction to the Study of Literature.....	3
GEOG 4A	World Geography.....	3
GEOG 4B	World Geography.....	3
GEOL 9	Introduction to Earth Science.....	4
HIST 11	History of the United States to 1877.....	3
HIST 20	World History I, to 1600.....	3
MATH 10A	Structure and Concepts in Mathematics I.....	3
NATSCI 1A	Integrated Science: Physics and Chemistry.....	4
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3

<b>List A: Select 1 course from the following:</b>		<b>Units</b>
ENGL 3/3H	Critical Reading & Writing, <i>or</i> Honors Critical Reading & Writing.....	3
PHIL 2/2H	Critical Reasoning and Analytic Writing, <i>or</i> Honors Critical Reasoning and Analytic Writing.....	3

<b>List B: Select 1 course from the following:</b>		<b>Units</b>
ART 2	Art Appreciation.....	3
ART 5/5H	Art History Ancient to Medieval, <i>or</i> Honors Art History Ancient to Medieval.....	3
ART 6/6H	Art History Renaissance to Modern, <i>or</i> Honors Art History Renaissance to Modern.....	3
MUS 12	Music Appreciation.....	3
TA 30	Theatre Appreciation.....	3

<b>List C: Select 1 course from the following:</b>		<b>Units</b>
AFRAM/		
ENGL 17	African-American Literature .....	3
ART 7	Beginning Drawing .....	3
ART 9	Beginning Painting: Oil/Acrylic .....	3
ART 10	Beginning Ceramics .....	3
ART 11	Beginning Sculpture .....	3
ART 12A	Craft Workshop: Living Traditions .....	3
ART 15	Ceramic Sculpture .....	3
ART 17	Intermediate Drawing .....	3
ART/		
ASAMER 55	Introduction to Asian Art .....	3
CLS 21	Chicano Literature .....	3
COMM/TA 12	Fundamentals of Oral Interpretation .....	3
HIST 1	Western Civilization to 1648 .....	3
MUS 3	Music Fundamentals .....	3
MUS 13	History of Music .....	3
		<b>Total 56</b>

## ELECTRICAL SYSTEMS TECHNOLOGY

### BIOMEDICAL EQUIPMENT TECHNICIAN – FORMERLY BIOMEDICAL TECH – MAJOR #6086

*revised program, Spring 2021*

The biomedical technology program trains students to troubleshoot and repair electronics based biomedical instruments and equipment. Course topics highlight three (3) primary fields of study: Electronic Fundamentals, Human Anatomy and biomedical instrumentation. Students study electronics at the component level and human biological processes as building blocks for understanding biomedical instrumentation function, operation and troubleshooting. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Distinguish and list various medical imaging technologies.
2. Set up standard electrical measurement tools and differentiate the uses for calibration and troubleshooting of medical equipment.
3. Categorize biopotentials and electrodes as they relate to basic human anatomy and physiology systems.
4. Associate the applicable regulation with the regulating organizations.
5. Evaluate the data from basic preventive maintenance tests on the following equipment: multi-parameter physiological monitor, electrocardiogram (ECG) machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.

<b>Required Core Courses:</b>		<b>Units</b>
BIOL 5	Human Biology .....	4
EST 55A	Digital Concepts .....	3
EST 57A	Analog Communications .....	3
EST 57B	Digital Communications .....	3
EST 57C	Voice and Data Cabling .....	3
EST 60	A+ PC Maintenance and Repair .....	3
EST 83A	Industrial Robotics- Introduction .....	3
EST 84A	Introduction to Biomedical Electronics .....	3
		<b>Total 25</b>

### CISCO CCNA PREPARATION – MAJOR #8174

Certificate of Achievement

*deleted program, Spring 2021*

### ELECTRICAL SYSTEMS TECHNOLOGY – MAJOR #8171

*revised program, Spring 2021*

Electrical Systems Technology provides an opportunity for students to prepare for employment in the electronics/electrical industry. Specific occupational preparation is provided in the following program. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

#### Associate in Science and Certificate of Achievement

##### Student Learning Outcomes:

1. Define and apply various numbering systems (i.e. Binary, hexadecimal and Octal).
2. Develop a motor logic control solution using the defined parameters given.



3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and configure a control application using a PLC and PLC software.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

<b>Required Core Courses:</b>	<b>Units</b>
AT 10 Technical Computer Applications.....	3
EST 50 Introduction to Electronical Systems Technology.....	2
EST 51 Direct Current Fundamentals of Electronics .....	3
EST 52 Alternating Current Fundamentals .....	3
EST 53 Lab Safety Practices .....	2
EST 54 Integrated Devices.....	3
EST 96D National Electrical Code-Electrical Safety.....	3

**Select a minimum of thirty-three (33) additional units from the following list:**

<b>following list:</b>	<b>Units</b>
EST 55A Digital Concepts.....	3
EST 55B Facility Automation.....	3
EST 55C SCADA Systems.....	3
EST 56A Wiring Methods.....	3
EST 56B Motor Controls.....	3
EST 56C Variable Frequency Drives & Motion Control.....	3
EST 57A Analog Communications.....	3
EST 57B Digital Communications.....	3
EST 57C Voice and Data Cabling.....	3
EST 58 Programmable Logic Controllers.....	3
EST 59 Instrumentation Systems.....	3
EST 60 A+ PC Maintenance and Repair .....	3
EST 61 Networking Fundamentals.....	3
EST 62 Commercial & Industrial Networking .....	3
EST 80 Introduction to Photovoltaics.....	3
EST 81 Photovoltaic Systems.....	3
EST 82A Introduction to Robotics.....	3.5
EST 82B Robotic Applications.....	3.5
EST 83A Industrial Robotics- Introduction.....	3
EST 83B Robotics, Industrial - Advanced Application.....	3
EST 84A Introduction to Biomedical Electronics.....	3
EST 96A National Electrical Code Part 1 .....	3
EST 96B National Electrical Code Part 2.....	3
EST 96C National Electrical Code Part 3.....	3
Total 52	

**ELECTRICITY FUNDAMENTALS 1 – MAJOR #8191**

*revised program, Spring 2021*

This is an entry level certificate for students completing their first semester in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and begin looking for employment or internship opportunities.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Correctly compare Direct Current electrical values (i.e. Voltage, Current, Resistance, etc) as well as perform a hands-on ability to correctly connect components, and test instruments for a circuit defined by the instructor.
2. Correctly compare Alternating Current electrical values (i.e. Voltage, Current, Resistance, etc) as well as perform a hands-on ability to correctly connect components, and test instruments for a circuit defined by the instructor.
3. Identify and apply the device connections of a solid state device.
4. Safely and appropriately use basic electrical hand tools.
5. Create and modify files using Microsoft Office programs.

<b>Required Core Courses:</b>	<b>Units</b>
AT 10 Technical Computer Applications.....	3
EST 50 Introduction to Electronical Systems Technology.....	2
EST 51 Direct Current Fundamentals of Electronics .....	3
EST 52 Alternating Current Fundamentals .....	3
EST 53 Lab Safety Practices .....	2
EST 54 Integrated Devices.....	3
Total 16	

**ELECTRICITY FUNDAMENTALS 2 – MAJOR #8192***revised program, Spring 2021*

This is a second level certificate for students completing their second semester in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and begin looking for employment or internship opportunities. The student is advised to complete the Electricity Fundamentals 1 certificate prior.

**Certificate of Achievement****Student Learning Outcomes:**

1. Safely apply correct wiring method techniques used in residential, commercial, and industrial applications to the National Electrical Code or authority having jurisdiction specifications.
2. Identify electrical safety hazards.
3. Apply engineering and national electrical code standards for electrical branch circuit systems, and for electrical over-current protection systems.

**Required Emphasis Courses:**

	<b>Units</b>
EST 56A Wiring Methods.....	3
EST 61 Networking Fundamentals.....	3
EST 96D National Electrical Code-Electrical Safety.....	3

**Choose 2 National Electrical Code Courses (6 units):**

	<b>Units</b>
EST 96A National Electrical Code Part 1.....	3
EST 96B National Electrical Code Part 2.....	3
EST 96C National Electrical Code Part 3.....	3
	<b>Total 15</b>

**ELECTROMECHANICAL 1 – MAJOR #8193***revised program, Spring 2021*

This is an entry level certificate in Electromechanical in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and gain entry level employment or an internship in the Industrial Electromechanical field. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

**Certificate of Achievement****Student Learning Outcomes:**

1. Correctly measure machine parts with precision and non- precision tools.
2. Perform basic set ups on a drill press, milling machines or engine lathes.
3. After completing a lab weld, students will be able to identify common defects or discontinuities in their flat or horizontal welds.
4. Correctly design wiring diagrams, and line diagrams needed to deploy various motor control situations.

**Required Core Courses:**

	<b>Units</b>
AT 140 Introduction to Machine Shop.....	3
AT 150 Pneumatic & Hydraulic Systems.....	3
EST 56B Motor Controls.....	3
EST 61 Networking Fundamentals.....	3
WELD 2A Introduction to Welding Technology.....	6
	<b>Total 18</b>

**ELECTROMECHANICAL 2 – MAJOR #8194***revised program, Spring 2021*

This is an advanced Electromechanical certificate in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and gain advanced employment or an internship in the Industrial Electromechanical field. The student is advised to complete the Electromechanical 1 certificate prior.

**Certificate of Achievement****Student Learning Outcomes:**

1. Write a program in ladder logic, transfer the program to a programmable logic controller, and operate the control system.
2. Read and interpret a Process & Instrumentation Diagram (P&ID).
3. Correctly operate a robot manually and automatically, from a given point A to point B.
4. Describe the different types of collaborative operations, and which types of robots can be used in each type of operation.
5. Distinguish between the variables used to measure linear speed and rotational speed and apply these variables in determining mechanical drive specifications.

<b>Required Core Courses:</b>		<b>Units</b>
AT 160	Mechanical Power Drive Systems.....	3
EST 56C	Variable Frequency Drives & Motion Control.....	3
EST 58	Programmable Logic Controllers.....	3
EST 59	Instrumentation Systems.....	3
EST 83A	Industrial Robotics- Introduction.....	3
EST 83B	Robotics, Industrial - Advanced Application.....	3
		Total 18

**FACILITY CONTROLS – FORMERLY FACILITY CONTROL TECHNICAN & AUTOMATION CONTROL TECHNICIAN – MAJOR #8189**

*revised program, Spring 2021*

Training is designed to prepare the student for employment as a building automation technician. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Develop and implement a strategy utilizing HVAC controls.
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Design and implement a security strategy utilizing door access controls.

<b>Required Core Courses:</b>		<b>Units</b>
EST 55A	Digital Concepts.....	3
EST 55B	Facility Automation.....	3
EST 57C	Voice and Data Cabling.....	3
EST 59	Instrumentation Systems.....	3
EST 61	Networking Fundamentals.....	3
EST 62	Commercial & Industrial Networking.....	3
		Total 18

**INDUSTRIAL AUTOMATION 1 – FORMERLY INDUSTRIAL CONTROL TECHNICIAN & CONTROL SYSTEMS – MAJOR #8188**

*revised program, Spring 2021*

Training in this specialized field is designed to prepare the student for employment as a control and instrument technician. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Create a digital logic circuit using appropriate logic gates.
2. Define and apply formulas (Ohm's and Kirchoff's Laws) for electrical circuit solutions.
3. Contrast the different parts of a Supervisory Control and Data Acquisition System (SCADA).
4. Understand the purpose, functions, and operations of a PLC.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

<b>Required Core Courses:</b>		<b>Units</b>
EST 50	Introduction to Electronical Systems Technology.....	2
EST 55C	SCADA Systems.....	3
EST 56B	Motor Controls.....	3
EST 57C	Voice and Data Cabling.....	3
EST 58	Programmable Logic Controllers.....	3
EST 59	Instrumentation Systems.....	3
		Total 17

**INDUSTRIAL AUTOMATION 2 – MAJOR #8195**

*revised program, Spring 2021*

This is an advanced Industrial Automation certificate in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and gain advanced employment or an internship in the Industrial Automation field. The student is advised to complete the Industrial Automation 1 certificate prior.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Program an electronic motor controller (VFD) for motor speed control.
2. Demonstrate the correct procedure for connecting computers and network devices.
3. Correctly operate a robot manually and automatically, from a given point A to point B.
4. Describe the different types of collaborative operations, and which types of robots can be used in each type of operation.

<b>Required Core Courses:</b>		<b>Units</b>
EST 56C	Variable Frequency Drives & Motion Control.....	3
EST 61	Networking Fundamentals.....	3
EST 83A	Robotics, Industrial – Introduction.....	3
EST 83B	Robotics, Industrial - Advanced Application.....	3
		Total 12

**INTRODUCTION TO INDUSTRIAL CONTROLS – MAJOR #8185**

*revised program, Spring 2021*

This option is to prepare students for the Industrial Controls Certificate. By completing this option, a student will have the training that emphasizes industrial control systems.

**Certificate**

**Student Learning Outcomes:**

1. Define and apply digital numbering systems (i.e. Binary, Hexadecimal and Octal).
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

<b>Required Core Courses:</b>		<b>Units</b>
EST 50	Introduction to Electrical Systems Technology, <i>or</i>	
MMCTC 372	Electrical Fundamentals .....	0-2
EST 55A	Digital Concepts.....	3
EST 56B	Motor Controls .....	3
EST 58	Programmable Logic Controllers.....	3
EST 59	Instrumentation Systems.....	3
		Total 12-14

**LOW VOLTAGE – FORMERLY COMMUNICATION TECHNICIAN & COMMUNICATIONS TECHNOLOGY – MAJOR #8187**

*revised program, Spring 2021*

Training is designed to prepare the student for employment as a communication technician. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Design and implement various communication strategies that use radios to allow industrial controllers to communicate and share data.
2. Construct and analyze electronic circuits relating to digital to analog converters, analog to digital converters and time division multiplexing.
3. Design and implement a network topology for a solution to a proposed communication problem.

<b>Required Core Courses:</b>		<b>Units</b>
EST 50	Introduction to Electronical Systems Technology.....	2
EST 57A	Analog Communications.....	3
EST 57B	Digital Communications.....	3
EST 57C	Voice and Data Cabling.....	3
EST 60	A+ PC Maintenance and Repair .....	3
EST 61	Networking Fundamentals.....	3
		Total 17

**NETWORKING/COMPUTER TECHNICIAN – MAJOR #8172**

Associate in Science and  
Certificate of Achievement  
*deleted program, Spring 2021*

**PHOTOVOLTAICS – FORMERLY ADVANCED PHOTOVOLTAIC TECHNICIAN – MAJOR #8186**

*revised program, Spring 2021*

The courses in the photovoltaics certificate prepare the student for employment in the photovoltaic industry for auditors, site surveyors, designers, and other advanced positions. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Given a customers electrical usage, plan, design, document, and install various photovoltaic systems with all required hardware and electrical equipment to NEC and local/state requirements.

<b>Required Core Courses:</b>		<b>Units</b>
EST 50	Introduction to Electrical Systems Technology.....	2
EST 55A	Digital Concepts.....	3
EST 56A	Wiring Methods.....	3
EST 57C	Voice and Data Cabling.....	3
EST 61	Networking Fundamentals.....	3
EST 81	Photovoltaic Systems.....	3
		Total 17

## ENGLISH

### ENGLISH FOR TRANSFER – MAJOR #5305

*revised program, Spring 2021*

The Associate in Arts in English for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A degree in English is considered a rigorous, complementary education for careers in the legal field, editing, interpreting, translation, and teaching at the K-12 and college levels. To earn the Associate in Arts in English for Transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

#### Associate in Arts

#### Student Learning Outcomes:

1. Read and critically evaluate college-level material from various sources through analysis and synthesis of information.
2. Write appropriately documented argumentative essays and research papers to deal with ideas by definition, evaluation, interpretation, and persuasion.
3. Analyze and respond in writing to a variety of literature, including short fiction, poetry, drama, novels, and other genres, concerning thematic, rhetorical, and symbolic elements.
4. Write about and analyze the various literary elements such as plot, characterization, setting, voice, meter and tragedy in selected works.
5. Demonstrate an understanding of the importance of the assigned works to various time periods and cultures and to literary tradition.

#### MAJOR CORE

**English 1A/1AH is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.**

	<b>Units</b>
ENGL 1B	Introduction to the Study of Literature ..... 3
ENGL 3	Critical Reading & Writing..... 3

#### Major Course Options: Section A - Select one of the course sequences

**(6 units total) from the following list:**

	<b>Units</b>
ENGL 44A	World Literature to the Renaissance, <i>and</i>
ENGL 44B	World Literature since the Renaissance, <i>or</i>
ENGL 46A	English Literature to 1800, <i>and</i>
ENGL 46B	English Literature from 1800 to the Present, <i>or</i>
ENGL 48A	Introduction to American Literature to 1865, <i>and</i>
ENGL 48B	Introduction to American Literature 1865 to the Present..... 6

#### Major Course Options: Section B – Select either six (6) units from

**Section B, or three (3) units from Section B and three (3) units**

**from Section C (Courses taken to meet Section A above cannot**

**be used to fulfill Section B):**

	<b>Units</b>
ENGL 14	Folklore ..... 3
ENGL 15A	Creative Writing: Poetry ..... 3
ENGL 15B	Creative Writing: Fiction ..... 3
ENGL/TA 15C	Creative Writing: Playwriting..... 3
ENGL/	
AFRAM 17	African-American Literature ..... 3
ENGL 20	Asian American Literature ..... 3
ENGL/	
HUMAN 42	Classic Myths ..... 3
ENGL 44A	World Literature to the Renaissance ..... 3
ENGL 44B	World Literature since the Renaissance ..... 3
ENGL 45	Contemporary World Literature..... 3
ENGL 46A	English Literature to 1800..... 3
ENGL 46B	English Literature from 1800 to the Present ..... 3

ENGL 48A	Introduction to American Literature to 1865.....	3
ENGL 48B	Introduction to American Literature 1865 to the Present .....	3
LING 10	Introduction to Language.....	3
<b>Section C:</b>		<b>Units</b>
ENGL 12	The Bible as Literature .....	3
ENGL 15D	Creative Writing: Creative Nonfiction.....	3
ENGL/		
WSTS 36	Women's Literature .....	3
ENGL 40	Themes in Literature .....	3
ENGL 47	Introduction to Shakespeare.....	3
		Total 18

## FIRE TECHNOLOGY

### FIRE TECHNOLOGY – MAJOR #883A

*revised program, Spring 2021*

This program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service careers. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire fighting and fire technology.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Given a typical type of fire department, describe the organizational structure and all of the staff functions within it.
2. Given a specific function of the fire service, describe the purpose of a paid and volunteer firefighter.

##### Required Courses

		<b>Units</b>
FIRET 1	Fire Protection Organization.....	3
FIRET 2	Fire Prevention Technology.....	3
FIRET 3	Fire Protection Equipment and Systems .....	3
FIRET 4	Building Construction for Fire Protection .....	3
FIRET 5	Fire Behavior and Combustion .....	3
FIRET 14	Principles of Fire & Emergency Services Safety & Survival.....	3

##### Course Options: Select Two Courses

		<b>Units</b>
FIRET 8	Fire Hydraulics.....	3
FIRET 9	Fire Fighting Practices.....	3
FIRET 22A	Firefighter II Part A.....	2
FIRET 22B	Firefighter II Part B.....	3
FIRET 130A	Basic Fire Academy - Part 1 .....	6
FIRET 130B	Basic Fire Academy - Part 2.....	6
FIRET 131	Emergency Medical Technician I .....	9.5
		Total 23-33.5

*FIRET 130A and 130B each carries a value of up to 14.5 units; however, only 6 units can be applied to the associate in science degree and certificate of achievement.*

## FOOD AND NUTRITION

### FOOD AND NUTRITION – MAJOR #5682

*revised program, Spring 2021*

This degree is designed to prepare students for entry level employment in nutrition programs or food service. This degree prepares students for transfer to four year college in dietetics or culinology.

#### Associate in Science

##### Student Learning Outcomes:

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Identify and compare preparation methods to optimize nutritional content.
3. Evaluate the nutritional content of foods and menus.

<b>Required Core Courses:</b>		<b>Units</b>
CIT 15	Computer Concepts .....	3
FN 1	Principles of Food Preparation.....	3
FN 40	Nutrition.....	3
FN 45	Therapeutic Diets.....	3
FSM 11	Food Service Supervision.....	2
FSM 15	Food Production Management.....	2
FSM 19	Work Experience (Cooperative), Occupational .....	1-4
FSM 35	Food Services, Sanitation, Safety and Equipment .....	2

<b>Electives: Select 18 Units</b>		<b>Units</b>
BIOL 11A	Biology for Science Majors I .....	5
BIOL 22	Human Physiology .....	5
BIOL 31	Microbiology .....	5
CHEM 3A	Introductory General Chemistry .....	4
FN 41	Sports Nutrition .....	2
FN 42	Child Nutrition .....	3
FN 43	Women's Nutrition.....	2
FSM 25	Food and Beverage Purchase and Control.....	2
FSM 38	Quantity Food Preparation .....	3
		Total 37-40

**FOOD AND NUTRITION – MAJOR #5682**

*revised program, Spring 2021*

This certificate of achievement is designed to prepare students for entry level employment in nutrition programs or food service. This certificate prepares students for transfer to a four year college in dietetics or culinology.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Identify and compare preparation methods to optimize nutritional content.
3. Evaluate the nutritional content of foods and menus.

<b>Required Core Courses:</b>		<b>Units</b>
CIT 15	Computer Concepts .....	3
FN 1	Principles of Food Preparation.....	3
FN 40	Nutrition.....	3
FN 45	Therapeutic Diets.....	3
FSM 11	Food Service Supervision.....	2
FSM 15	Food Production Management.....	2
FSM 19	Work Experience (Cooperative), Occupational .....	1-4
FSM 35	Food Services, Sanitation, Safety and Equipment .....	2

<b>Electives: Select 18 Units</b>		<b>Units</b>
BIOL 11A	Biology for Science Majors I .....	5
BIOL 22	Human Physiology .....	5
BIOL 31	Microbiology .....	5
CHEM 3A	Introductory General Chemistry .....	4
FN 41	Sports Nutrition .....	2
FN 42	Child Nutrition .....	3
FN 43	Women's Nutrition.....	2
FSM 25	Food and Beverage Purchase and Control.....	2
FSM 38	Quantity Food Preparation .....	3
		Total 37-40

**GENERAL EDUCATION**

**CSU-GE BREADTH**

*revised program, Spring 2021*

The certificate of achievement in CSU GE provides students with an introduction to the breadth and depth of liberal arts and science with an emphasis in global perspectives. It provides students with a foundation in the liberal arts and sciences and prepares them for specialized study in a particular discipline or program. CSU Certification is not automatic, please request certification through Admission and Records. This Certificate of Achievement will allow the student to complete the lower division general education required courses but does not meet all the requirements for transfer (see Note). A course or sequence of courses used to satisfy a requirement in one area may not be used to satisfy a requirement in another area. Students should check with a counselor and review the FCC college catalog for further clarification. Note: The CSU Certificate of Achievement only confirms completing CSU general education requirements and does not meet Associate Degree or transfer admission requirements.

**Certificate of Achievement****Student Learning Outcomes:**

1. Evaluate and apply a global understanding of the liberal arts and sciences.

**AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING - Nine semester units minimum with one course from A1, A2, and A3 ("C" or better grade required in A1, A2, and A3).**

<b>Area A1 - Oral Communication</b>		<b>Units</b>
COMM 1	Introduction to Public Speaking .....	3
COMM 2	Interpersonal Communication .....	3
COMM 4	Persuasion .....	3
COMM 8	Group Communication .....	3

<b>Area A2 - Written Communication</b>		<b>Units</b>
ENGL 1A/1AH	Reading and Composition, <i>or</i> Honors Reading and Composition .....	4

<b>Area A3 - Critical Thinking</b>		<b>Units</b>
COMM 25	Argumentation .....	3
CRIM 13	The Constitution and Your Individual Rights .....	3
ENGL 3/3H	Critical Reading & Writing, <i>or</i> Honors Critical Reading & Writing .....	3
PHIL 2/2H	Critical Reasoning and Analytic Writing, <i>or</i> Honors Critical Reasoning and Analytic Writing .....	3
PHIL 6	Introduction to Logic .....	3
POLSCI 13	Legal and Judicial Reasoning .....	3

**AREA B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING – Nine semester units minimum with at least one course in B1, B2, and B4 ("C" or better grade required in B4). One course in B1 or B2 must contain a lab component or be accompanied by a course in B3.**

<b>Area B1 - Physical Science</b>		<b>Units</b>
ASTRO 10	Basic Astronomy .....	3
CHEM 1A	General Chemistry .....	5
CHEM 1B	General Chemistry and Qualitative Analysis .....	5
CHEM 3A	Introductory General Chemistry .....	4
CHEM 3B	Introductory Organic & Biological Chemistry .....	4
CHEM 8A	Elementary Organic Chemistry .....	3
CHEM 28A	Organic Chemistry I .....	3
CHEM 28B	Organic Chemistry II .....	3
GEOG 1	Physical Geography .....	4
GEOG 7	Physical Geography: Earth's Surface .....	4
GEOG 8	Physical Geography: Weather and Climate .....	4
GEOL 1	Physical Geology .....	4
GEOL 2	Historical Geology .....	3
GEOL 4	Geology of California .....	3
GEOL 5	Introduction to Oceanography .....	3
GEOL 12	Environmental Science .....	3
NATSCI 1A	Integrated Science: Physics and Chemistry .....	4
PHYS 2A	General Physics 1 .....	4
PHYS 2B	General Physics 2 .....	4
PHYS 4A	Physics for Scientists and Engineers .....	4
PHYS 4B	Physics for Scientists and Engineers .....	4
PHYS 4C	Physics for Scientists and Engineers .....	4
PHYSC 11	Introductory Physical Science .....	3

<b>Area B2 - Life Science</b>		<b>Units</b>
ANTHRO 1	Biological Anthropology .....	3
BIOL 3	Introduction to Life Science .....	4
BIOL 4	Principles of Zoology .....	5
BIOL 5	Human Biology .....	4
BIOL 6	Principles of Botany .....	5
BIOL 7	Field Biology .....	5
BIOL 11A	Biology for Science Majors I .....	5
BIOL 11B	Biology for Science Majors II .....	5
BIOL 14	Conservation Biology .....	3
BIOL 20	Human Anatomy .....	4



BIOL 21A	Human Anatomy & Physiology I.....	4
BIOL 21B	Human Anatomy & Physiology II.....	5
BIOL 22	Human Physiology.....	5
BIOL 31	Microbiology.....	5
BIOL 55	Introduction to the Biology of Humans.....	3

**Area B3 - Laboratory Activity** **Units**

ANTHRO 1L	Biological Anthropology Laboratory.....	1
CHEM 1A	General Chemistry.....	5
CHEM 3A	Introductory General Chemistry.....	4
CHEM 29A	Organic Chemistry Laboratory I.....	2
CHEM 29B	Organic Chemistry Lab II.....	2
GEOG 1	Physical Geography.....	4
GEOL 2L	Historical Geology Lab.....	1
PHYS 4A	Physics for Scientists and Engineers.....	4
PHYS 4B	Physics for Scientists and Engineers.....	4
PHYS 4C	Physics for Scientists and Engineers.....	4

**Area B4 - Mathematics/Quantitative Reasoning** **Units**

CSCI 26	Discrete Mathematics for Computer Science.....	4
DS 21	Finite Mathematics.....	3
DS 23	Business Statistics.....	3
MATH 3A	College Algebra.....	4
MATH 4A	Trigonometry.....	4
MATH 4B	Pre-Calculus.....	4
MATH 5A	Mathematical Analysis I.....	5
MATH 5B	Mathematical Analysis II.....	4
MATH 6	Mathematical Analysis III.....	4
MATH 10A	Structure and Concepts in Mathematics I.....	3
MATH 10B	Structure and Concepts in Mathematics II.....	3
MATH 11/11H	Elementary Statistics, <i>or</i> Honors Elementary Statistics.....	4
MATH 17	Differential Equations and Linear Algebra.....	5
MATH 21	Finite Mathematics.....	3
MATH 26	Elementary Linear Algebra.....	3
MATH/PSY 42	Statistics for the Behavioral Sciences.....	4
MATH 45	Contemporary Mathematics.....	3

**AREA C: ARTS AND HUMANITIES - Nine semester units minimum  
with at least one course each from C1 and C2.**

**Area C1 - Arts** **Units**

AFRAM 3	African-American Art.....	3
AFRAM 8	African-American Creative Workshop.....	3
AFRAM 15	African American Music.....	3
AMIND 35	American Indian Art.....	3
ARCH 15A	History of Architecture I.....	3
ARCH 15B	History of Architecture II.....	3
ART 2	Art Appreciation.....	3
ART 3	Two-Dimensional Design.....	3
ART 5/5H	Art History Ancient to Medieval, <i>or</i> Honors Art History Ancient to Medieval.....	3
ART 6/6H	Art History Renaissance to Modern, <i>or</i> Honors Art History Renaissance to Modern.....	3
ART 7	Beginning Drawing.....	3
ART 9	Beginning Painting: Oil/Acrylic.....	3
ART 10	Beginning Ceramics.....	3
ART 11	Beginning Sculpture.....	3
ART 12A	Craft Workshop: Living Traditions.....	3
ART 12B	Intermediate Craft Workshop: Living Traditions.....	3
ART 14	Beginning Printmaking.....	3
ART 15	Ceramic Sculpture.....	3
ART 17	Intermediate Drawing.....	3
ART/ ASAMER 55	Introduction to Asian Art.....	3
ART 60/CLS 22	Art of the Ancient Americas.....	3
ART 70	Modern and Contemporary Art.....	3
CLS/DANCE 17A	Beginning Mexican Folk Dance.....	3.5
CLS 20	Chicano Art.....	3
CLS/DANCE 27B	Advanced Mexican Folk Dance.....	3.5

DANCE 30	Dance Appreciation.....	3
FILM 1	Introduction to Film Studies.....	3
FILM 2A	History of Cinema 1895-1960.....	3
FILM 2B	History of Cinema 1960-Present.....	3
FILM 6	Film Genres.....	3
MUS 3	Music Fundamentals.....	3
MUS 12	Music Appreciation.....	3
MUS 13	History of Music.....	3
MUS 15	World Music Survey.....	3
MUS 16	Jazz History and Appreciation.....	3
MUS 17	History of Rock.....	3
PHOTO 5	Introduction to Photography.....	3
TA/COMM 12	Fundamentals of Oral Interpretation.....	3
TA 30	Theatre Appreciation.....	3
TA 31	Theatre History and Dramatic Literature I.....	3
TA 44A	Actors Workshop.....	3

**Area C2 - Humanities****Units**

ARMEN 1	Beginning Armenian.....	5
ARMEN 2	High-Beginning Armenian.....	5
ASAMER 8	Chinese Culture.....	3
ASL 1	Beginning American Sign Language.....	4
ASL 2	High-Beginning American Sign Language.....	4
ASL 3	Intermediate American Sign Language.....	4
ASL 4	High-Intermediate American Sign Language.....	4
ASL 5	Deaf Culture.....	3
ASL 7	Deaf History.....	3
ASL 8	American Sign Language Literature/Folklore.....	3
CHIN 1	Beginning Chinese.....	5
CHIN 2	High-Beginning Chinese.....	5
CLS 21	Chicano Literature.....	3
ENGL 1B	Introduction to the Study of Literature.....	3
ENGL 12	The Bible as Literature.....	3
ENGL 14	Folklore.....	3
ENGL 15A	Creative Writing: Poetry.....	3
ENGL 15B	Creative Writing: Fiction.....	3
ENGL/ AFRAM 17	African-American Literature.....	3
ENGL/WSTS 36	Women's Literature.....	3
ENGL 40	Themes in Literature.....	3
ENGL/ HUMAN 42	Classic Myths.....	3
ENGL 44A	World Literature to the Renaissance.....	3
ENGL 44B	World Literature since the Renaissance.....	3
ENGL 45	Contemporary World Literature.....	3
ENGL 46A	English Literature to 1800.....	3
ENGL 46B	English Literature from 1800 to the Present.....	3
ENGL 47	Introduction to Shakespeare.....	3
ENGL 48A	Introduction to American Literature to 1865.....	3
ENGL 48B	Introduction to American Literature 1865 to the Present.....	3
FILM 1	Introduction to Film Studies.....	3
FILM 2A	History of Cinema 1895-1960.....	3
FILM 2B	History of Cinema 1960-Present.....	3
FILM 3	Film and Culture.....	3
FRENCH 1	Beginning French.....	5
FRENCH 2	High-Beginning French.....	5
FRENCH 3	Intermediate French.....	5
GERMAN 1	Beginning German.....	5
GERMAN 2	High-Beginning German.....	5
HIST 1	Western Civilization to 1648.....	3
HIST 2	Western Civilization Since 1648.....	3
HMONG 1	Beginning Hmong.....	5
HMONG 2	High-Beginning Hmong.....	5
HUMAN 10	Classical Humanities.....	3
HUMAN 11	Modern Humanities.....	3
JAPAN 1	Beginning Japanese.....	5
JAPAN 2	High-Beginning Japanese.....	5
LING 10/10H	Introduction to Language, <i>or</i> Honors Introduction to Language.....	3

PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality.....	3
PHIL 1B	Social and Political Philosophy.....	3
PHIL 1C/1CH	Ethics, <i>or</i> Honors Ethics.....	3
PHIL 1D	World Religions.....	3
PHIL 3A	Ancient Philosophy.....	3
PHIL 3B	Modern Philosophy.....	3
PHIL 5	Philosophy of Religion.....	3
POLSCI 3	Introduction to Political Theory and Thought.....	3
PORT 1	Beginning Portuguese.....	5
PORT 2	High-Beginning Portuguese.....	5
SPAN 1	Beginning Spanish.....	5
SPAN 2	High-Beginning Spanish.....	5
SPAN 2NS	Preparatory Spanish for Native Speakers.....	5
SPAN 3	Intermediate Spanish.....	5
SPAN 3NS	Intermediate Spanish for Spanish Speakers.....	5
SPAN 4	High-Intermediate Spanish.....	5
SPAN 4NS	High-Intermediate Spanish for Spanish Speakers.....	5
SPAN 5	The Short Story: Mexico, Spain, and the U.S. ....	4
SPAN 6	The Short Story: Latin America.....	4
SPAN 7	Advanced SPAN 4: Composition and Grammar.....	4
SPAN 9	Spanish Business and Culture.....	4
SPAN 41	Introduction to Poetry in Spanish.....	4
SPAN 42	Hispanic American Culture.....	4
TA 32	Theatre History and Dramatic Literature II.....	3

**AREA D: SOCIAL SCIENCES - Nine semester units minimum from at least two disciplines.**

		<b>Units</b>
AFRAM 1	Introduction to African American Studies.....	3
AFRAM 4	Classical and Pre Colonial Africa.....	3
AFRAM/HIST 34	History of the American Civil Rights Movement.....	3
AMIND 31	American Indian Culture.....	3
AMIND 34	The American Indian in Contemporary Society.....	3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
AMST 11	Law and Democracy.....	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ANTHRO 3	Archaeology and World Prehistory.....	3
ANTHRO 4	Introduction to Archaeology.....	3
ANTHRO 8	Language and Culture.....	3
ANTHRO 12	Visual Anthropology: Introduction to Ethnographic Film.....	3
ASAMER 1	Indo-Chinese Americans.....	3
ASAMER 10	Hmong Culture.....	3
ASAMER 15	Introduction to Asian-Americans.....	3
ASAMER 25	Asian American Social Issues.....	3
BA 20	Law and the Legal System.....	3
CHDEV 30	Child, Family and Community.....	3
CHDEV/PSY 38	Lifespan Development.....	3
CHDEV/PSY 39	Child Growth and Development.....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS 12	Mexican American History.....	3
CLS/HIST 29	History Of Mexico, Colonial to Contemporary Period.....	3
CLS 30	Migration and the Family: Social and Psychological Perspectives.....	3
ECON 25	Introduction to Economics.....	3
ECON 40/40H	Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
ECON 50/50H	Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics.....	3
GEOG 2	Cultural Geography.....	3
GEOG 4A	World Geography.....	3
GEOG 4B	World Geography.....	3
GEOG 20	Geography of California.....	3
GLST 1	Introduction to Global Studies.....	3
GLST 2	Global Issues.....	3
HIST 1	Western Civilization to 1648.....	3
HIST 2	Western Civilization Since 1648.....	3

HIST 3	History of Ancient Rome.....	3
HIST 11	History of the United States to 1877.....	3
HIST 12/12H	History of the United States since 1877, <i>or</i> Honors History of the United States since 1877.....	3
HIST 15	History of the British Isles.....	3
HIST 17	History of the Muslim World to 1405.....	3
HIST 18	History of Ancient Greece.....	3
HIST 20	World History I, to 1600.....	3
HIST 21	United States Civil War.....	3
HIST/WSTS 22	History of American Women.....	3
HIST 23	World History II, since 1500.....	3
HIST 25	History of Religion in the United States.....	3
HIST 30	California History.....	3
HS/SOC 10	Introduction to Aging Studies.....	3
JOURN 1	Introduction to Mass Communication.....	3
JOURN 16	Race, Gender and the Media.....	3
POLSCI 1	Modern Politics.....	3
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3
POLSCI 3	Introduction to Political Theory and Thought.....	3
POLSCI 5	Comparative Government.....	3
POLSCI 24	International Relations.....	3
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology.....	3
SOC 1B	Critical Thinking about Social Problems.....	3
SOC 2	American Minority Groups.....	3
SOC 32	Introduction to Marriage and Family.....	3
WSTS 10	Changing Roles of Women.....	3
WSTS 47	Introduction to Lesbian and Gay Studies.....	3

**AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT –**

**Three semester units minimum. \*Three units of physical education alone is insufficient to fulfill AREA E.**

		<b>Units</b>
CHDEV/PSY 38	Lifespan Development.....	3
CHDEV/PSY 39	Child Growth and Development.....	3
FN 35	Nutrition and Health.....	3
FN 40	Nutrition.....	3
HLTH 1	Contemporary Health Issues.....	3
PE 3	Archery.....	1
PE 4	Badminton.....	1
PE 4B	Intermediate Badminton.....	1
PE 5	Basketball.....	1
PE 6	Fitness and Health.....	1
PE 7	Golf.....	1
PE 8	Basic Self Defense.....	1
PE 9	Circuit Training.....	1
PE 12	Swimming.....	1
PE 12B	Intermediate Swimming.....	1
PE 13	Tennis.....	1
PE 13B	Intermediate Tennis.....	1
PE 14	Volleyball.....	1
PE 15A	Weight Training (Women).....	1
PE 15B	Weight Training (Men).....	1
PE 15C	Weight Training (Coed).....	1
PE 17	Hatha Yoga.....	1
PE 27	High-Intensity Cardio Interval Training.....	1
PE 29B	Competitive Badminton.....	3
PE 29C	Off-Season Conditioning for Badminton.....	1
PE 30B	Competitive Baseball.....	3
PE 30C	Off-Season Conditioning for Baseball.....	1
PE 31B	Competitive Basketball.....	3
PE 31C	Off-Season Conditioning for Basketball.....	1
PE 32B	Competitive Cross Country.....	3
PE 33B	Competitive Football.....	3
PE 33C	Off-Season Conditioning for Football.....	1
PE 34B	Competitive Golf.....	3
PE 34C	Off-Season Conditioning for Golf.....	1

PE 35B	Cheer and Stunt.....	2
PE 36B	Competitive Soccer.....	3
PE 36C	Off-Season Conditioning for Soccer.....	1
PE 37B	Competitive Softball.....	3
PE 37C	Off-Season Conditioning for Softball.....	1
PE 38B	Competitive Tennis.....	3
PE 38C	Off-Season Conditioning for Tennis.....	1
PE 39B	Competitive Track and Field.....	3
PE 39C	Off-Season Conditioning for Track and Field.....	1
PE 40B	Competitive Volleyball.....	3
PE 40C	Off-Season Conditioning for Volleyball.....	1
PE 41B	Competitive Men's Wrestling.....	3
PE 41C	Off-Season Conditioning for Men's Wrestling.....	1
PE 42B	Competitive Water Polo.....	3
PE 42C	Off-Season Conditioning for Water Polo.....	1
PE 43B	Competitive Swimming & Diving.....	3
PE 43C	Off-Season Conditioning for Swimming & Diving.....	1
PE 44B	Competitive Sand Volleyball.....	3
PE 44C	Off-Season Conditioning for Sand Volleyball.....	1
PE 45	Performance Training and Conditioning Techniques for Intercollegiate Athletics.....	0.5
PE 46B	Competitive Women's Wrestling.....	3
PE 46C	Off-Season Conditioning for Women's Wrestling.....	1
PE 70	Fitness Aerobics.....	1
PE 71	Soccer.....	1
PE 72	Spinning for Fitness.....	1
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 25	Human Sexuality.....	3
PSY 33	Personal and Social Adjustment.....	3
	Total	39

**IGETC BREADTH**

*revised program, Spring 2021*

The general education or breadth requirements are designed to give CSU/UC undergraduates a broad background in all major academic disciplines-natural sciences, physical sciences, social sciences, mathematics, humanities and visual and performing arts. This certificate allows the student to complete Certification of the Intersegmental General Education Transfer Curriculum (IGETC) for the California State University (CSU) or University of California (UC). IGETC Certification is not automatic, please request certification through Admission and Records. This Certificate of Achievement will allow the student to complete the lower division general education required courses but does not meet all the requirements for transfer (see Note). A course or sequence of courses used to satisfy a requirement in one area may not be used to satisfy a requirement in another area. Students should check with a counselor and review the FCC college catalog for further clarification. NOTE: The IGETC Certificate of Achievement only confirms completing CSU and/or UC general education requirements and does not meet Associate Degree of transfer admission requirements. Completion of IGETC is NOT an admission requirement to CSU or UC. It is not advisable for students who are pursuing majors that require extensive lower division preparation, such as Engineering or Liberal Studies, to follow IGETC. All courses must be completed with a "C" or better. Courses must be on the college's approved IGETC list at time the course was completed. Students should check with a counselor and review the FCC college catalog for further clarification. NOTE: The IGETC Certificate of Achievement only confirms completing CSU and/or UC general education requirements and does not meet Associate Degree of transfer admission requirements. Completion of IGETC is NOT an admission requirement to CSU or UC. It is not advisable for students who are pursuing majors that require extensive lower division preparation, such as Engineering or Liberal Studies, to follow IGETC. All courses must be completed with a "C" or better. Courses must be on the college's approved IGETC list at time the course was completed. Students should check with a counselor and review the FCC college catalog for further clarification.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Evaluate and apply a global understanding of the following academic disciplines: natural sciences, physical sciences, social sciences, mathematics, humanities, and visual and performing arts.

**AREA 1: ENGLISH COMPOSITION - CSU: 3 courses required, one each from Group 1A, 1B, and 1C listed below (9 semester units minimum) UC: 2 courses required, one each from Group 1A and 1B listed below (6 semester units minimum)**

**Group 1A - English Composition:**

**One course, three semester units. Units**

ENGL 1A/1AH	Reading and Composition, <i>or</i> Honors Reading and Composition .....	4
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**Group 1B - Critical Thinking-English Composition:**

**One course, three semester units. Units**

ENGL 3/3H	Critical Reading & Writing, <i>or</i> Honors Critical Reading & Writing .....	3
PHIL 2/2H	Critical Reasoning and Analytic Writing, <i>or</i> Honors Critical Reasoning and Analytic Writing .....	3

**Group 1C - Oral Communication:**

**(CSU only) One course, three semester units. Units**

COMM 1	Introduction to Public Speaking .....	3
COMM 4	Persuasion .....	3
COMM 8	Group Communication .....	3
COMM 25	Argumentation .....	3

**AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING - One course required (three semester units minimum)**

		Units
CSCI 26	Discrete Mathematics for Computer Science .....	4
DS 21	Finite Mathematics .....	3
DS 23	Business Statistics .....	3
MATH 3A	College Algebra .....	4
MATH 4B	Pre-Calculus .....	4
MATH 5A	Mathematical Analysis I .....	5
MATH 5B	Mathematical Analysis II .....	4
MATH 6	Mathematical Analysis III .....	4
MATH 10A	Structure and Concepts in Mathematics I .....	3
MATH 10B	Structure and Concepts in Mathematics II .....	3
MATH 11	Elementary Statistics .....	4
MATH 21	Finite Mathematics .....	3
MATH 26	Elementary Linear Algebra .....	3
MATH/PSY 42	Statistics for the Behavioral Sciences .....	4

**AREA 3: ARTS AND HUMANITIES - At least three courses with at least one from Arts and one from Humanities (nine semester units minimum)**

**Group 3A - Arts**

		Units
AFRAM 3	African-American Art .....	3
AFRAM 15	African American Music .....	3
AMIND 35	American Indian Art .....	3
ARCH 15A	History of Architecture I .....	3
ARCH 15B	History of Architecture II .....	3
ART 2	Art Appreciation .....	3
ART 5/5H	Art History Ancient to Medieval, <i>or</i> Honors Art History Ancient to Medieval .....	3
ART 6/6H	Art History Renaissance to Modern, <i>or</i> Honors Art History Renaissance to Modern .....	3
ART/		
ASAMER 55	Introduction to Asian Art .....	3
ART 60/CLS 22	Art of the Ancient Americas .....	3
ART 70	Modern and Contemporary Art .....	3
CLS 20	Chicano Art .....	3
DANCE 30	Dance Appreciation .....	3
FILM 6	Film Genres .....	3
MUS 3	Music Fundamentals .....	3
MUS 12	Music Appreciation .....	3
MUS 13	History of Music .....	3
MUS 16	Jazz History and Appreciation .....	3
MUS 17	History of Rock .....	3
TA 30	Theatre Appreciation .....	3
TA 31	Theatre History and Dramatic Literature I .....	3

TA 32	Theatre History and Dramatic Literature II.....	3
<b>Group 3B - Humanities</b>		<b>Units</b>
ARMEN 2	High-Beginning Armenian.....	5
ASAMER 8	Chinese Culture.....	3
ASL 2	High-Beginning American Sign Language.....	4
ASL 3	Intermediate American Sign Language.....	4
ASL 4	High-Intermediate American Sign Language.....	4
ASL 7	Deaf History.....	3
ASL 8	American Sign Language Literature/Folklore.....	3
CHIN 2	High-Beginning Chinese.....	5
CLS 21	Chicano Literature.....	3
ENGL 1B	Introduction to the Study of Literature.....	3
ENGL 12	The Bible as Literature.....	3
ENGL 14	Folklore.....	3
ENGL/ AFRAM 17	African-American Literature.....	3
ENGL/WSTS 36	Women's Literature.....	3
ENGL/ HUMAN 42	Classic Myths.....	3
ENGL 44A	World Literature to the Renaissance.....	3
ENGL 44B	World Literature since the Renaissance.....	3
ENGL 45	Contemporary World Literature.....	3
ENGL 46A	English Literature to 1800.....	3
ENGL 46B	English Literature from 1800 to the Present.....	3
ENGL 47	Introduction to Shakespeare.....	3
ENGL 48A	Introduction to American Literature to 1865.....	3
ENGL 48B	Introduction to American Literature 1865 to the Present.....	3
FILM 1	Introduction to Film Studies.....	3
FILM 2A	History of Cinema 1895-1960.....	3
FILM 2B	History of Cinema 1960-Present.....	3
FILM 3	Film and Culture.....	3
FRENCH 2	High-Beginning French.....	5
FRENCH 3	Intermediate French.....	5
GERMAN 2	High-Beginning German.....	5
HIST 1	Western Civilization to 1648.....	3
HIST 2	Western Civilization Since 1648.....	3
HMONG 2	High-Beginning Hmong.....	5
HUMAN 10	Classical Humanities.....	3
HUMAN 11	Modern Humanities.....	3
JAPAN 2	High-Beginning Japanese.....	5
LING 10/10H	Introduction to Language, <i>or</i> Honors Introduction to Language.....	3
PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality.....	3
PHIL 1B	Social and Political Philosophy.....	3
PHIL 1C/1CH	Ethics, <i>or</i> Honors Ethics.....	3
PHIL 1D	World Religions.....	3
PHIL 3A	Ancient Philosophy.....	3
PHIL 3B	Modern Philosophy.....	3
PHIL 5	Philosophy of Religion.....	3
PORT 2	High-Beginning Portuguese.....	5
SPAN 2	High-Beginning Spanish.....	5
SPAN 2NS	Preparatory Spanish for Native Speakers.....	5
SPAN 3	Intermediate Spanish.....	5
SPAN 3NS	Intermediate Spanish for Spanish Speakers.....	5
SPAN 4	High-Intermediate Spanish.....	5
SPAN 4NS	High-Intermediate Spanish for Spanish Speakers.....	5
SPAN 5	The Short Story: Mexico, Spain, and the U.S.....	4
SPAN 6	The Short Story: Latin America.....	4
SPAN 7	Advanced Spanish: Composition and Grammar.....	4
SPAN 41	Introduction to Poetry in Spanish.....	4
SPAN 42	Hispanic American Culture.....	4

**AREA 4: SOCIAL AND BEHAVIORAL SCIENCES –**

**At least three courses from at least two different disciplines  
(nine semester units minimum)**

<b>Group 4A - Anthropology and Archaeology</b>		<b>Units</b>
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ANTHRO 3	Archaeology and World Prehistory.....	3
ANTHRO 4	Introduction to Archaeology.....	3
ANTHRO 8	Language and Culture.....	3
ANTHRO 12	Visual Anthropology: Introduction to Ethnographic Film.....	3
<b>Group 4B - Economics</b>		<b>Units</b>
ECON 40/40H	Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
ECON 50/50H	Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics.....	3
<b>Group 4C - Ethnic Studies</b>		<b>Units</b>
AFRAM 1	Introduction to African American Studies.....	3
AFRAM/HIST 34	History of the American Civil Rights Movement.....	3
AMIND 31	American Indian Culture.....	3
AMIND 34	The American Indian in Contemporary Society.....	3
ASAMER 1	Indo-Chinese Americans.....	3
ASAMER 10	Hmong Culture.....	3
ASAMER 15	Introduction to Asian-Americans.....	3
ASAMER 25	Asian American Social Issues.....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS 12	Mexican American History.....	3
JOURN 16	Race, Gender and the Media.....	3
<b>Group 4D - Gender Studies</b>		<b>Units</b>
HIST 22	History of American Women.....	3
JOURN 16	Race, Gender and the Media.....	3
WSTS 10	Changing Roles of Women.....	3
WSTS 47	Introduction to Lesbian and Gay Studies.....	3
<b>Group 4E - Geography</b>		<b>Units</b>
GEOG 2	Cultural Geography.....	3
GEOG 4A	World Geography.....	3
GEOG 4B	World Geography.....	3
GEOG 20	Geography of California.....	3
<b>Group 4F - History</b>		<b>Units</b>
AFRAM 4	Classical and Pre Colonial Africa.....	3
HIST 3	History of Ancient Rome.....	3
HIST 11	History of the United States to 1877.....	3
HIST 12/12H	History of the United States since 1877, <i>or</i> Honors History of the United States since 1877.....	3
HIST 15	History of the British Isles.....	3
HIST 17	History of the Muslim World to 1405.....	3
HIST 18	History of Ancient Greece.....	3
HIST 20	World History I, to 1600.....	3
HIST 21	United States Civil War.....	3
HIST/WSTS 22	History of American Women.....	3
HIST 23	World History II, since 1500.....	3
HIST 25	History of Religion in the United States.....	3
HIST/CLS 29	History Of Mexico, Colonial to Contemporary Period.....	3
HIST 30	California History.....	3
HIST/AFRAM 34	History of the American Civil Rights Movement.....	3
<b>Group 4G - Interdisciplinary, Social &amp; Behavioral Sciences</b>		<b>Units</b>
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
CHDEV 30	Child, Family and Community.....	3
CHDEV/PSY 39	Child Growth and Development.....	3
CLS 30	Migration and the Family: Social and Psychological Perspectives.....	3
GLST 1	Introduction to Global Studies.....	3
GLST 2	Global Issues.....	3
JOURN 1	Introduction to Mass Communication.....	3



<b>Group 4H - Political Science, Government &amp; Legal Institutions</b>		<b>Units</b>
AMST 11	Law and Democracy .....	3
POLSCI 1	Modern Politics .....	3
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3
POLSCI 3	Introduction to Political Theory and Thought.....	3
POLSCI 5	Comparative Government .....	3
POLSCI 24	International Relations.....	3

<b>Group 4I - Psychology</b>		<b>Units</b>
CHDEV/PSY 38	Lifespan Development.....	3
CHDEV/PSY 39	Child Growth and Development.....	3
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology .....	3

<b>Group 4J - Sociology &amp; Criminology</b>		<b>Units</b>
HS/SOC 10	Introduction to Aging Studies.....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology .....	3
SOC 2	American Minority Groups.....	3

**AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES –**  
**At least two courses, one Physical Science and**  
**one Biological Science (seven to nine semester units minimum).**  
**One course must have a lab component.**

<b>Group 5A - Physical Sciences</b>		<b>Units</b>
ASTRO 10	Basic Astronomy.....	3
CHEM 1A	General Chemistry.....	5
CHEM 1B	General Chemistry and Qualitative Analysis.....	5
CHEM 3A	Introductory General Chemistry.....	4
CHEM 8A	Elementary Organic Chemistry.....	3
CHEM 28A	Organic Chemistry I.....	3
CHEM 28B	Organic Chemistry II.....	3
GEOG 1	Physical Geography.....	4
GEOG 7	Physical Geography: Earth's Surface.....	4
GEOG 8	Physical Geography: Weather and Climate.....	4
GEOL 1	Physical Geology.....	4
GEOL 2	Historical Geology.....	3
GEOL 4	Geology of California.....	3
GEOL 5	Introduction to Oceanography.....	3
GEOL 12	Environmental Science.....	3
PHYS 2A	General Physics 1.....	4
PHYS 2B	General Physics 2.....	4
PHYS 4A	Physics for Scientists and Engineers.....	4
PHYS 4B	Physics for Scientists and Engineers.....	4
PHYS 4C	Physics for Scientists and Engineers.....	4
PHYS 11	Introductory Physical Science.....	3

<b>Group 5B - Biological Sciences</b>		<b>Units</b>
ANTHRO 1	Biological Anthropology.....	3
BIOL 3	Introduction to Life Science.....	4
BIOL 4	Principles of Zoology.....	5
BIOL 5	Human Biology.....	4
BIOL 6	Principles of Botany.....	5
BIOL 11A	Biology for Science Majors I.....	5
BIOL 11B	Biology for Science Majors II.....	5
BIOL 14	Conservation Biology.....	3
BIOL 20	Human Anatomy.....	4
BIOL 21A	Human Anatomy & Physiology I.....	4
BIOL 21B	Human Anatomy & Physiology II.....	5
BIOL 22	Human Physiology.....	5
BIOL 31	Microbiology.....	5
BIOL 55	Introduction to the Biology of Humans.....	3

<b>Group 5C - Science Laboratory</b>		<b>Units</b>
ANTHRO 1L	Biological Anthropology Laboratory.....	1
CHEM 1A	General Chemistry.....	5
CHEM 3A	Introductory General Chemistry.....	4
CHEM 29A	Organic Chemistry Laboratory I.....	2
CHEM 29B	Organic Chemistry Lab II.....	2

GEOG 1	Physical Geography.....	4
GEOL 2L	Historical Geology Lab.....	1
PHYS 4A	Physics for Scientists and Engineers.....	4
PHYS 4B	Physics for Scientists and Engineers.....	4
PHYS 4C	Physics for Scientists and Engineers.....	4

**AREA 6: UC REQUIREMENT IN LANGUAGE OTHER THAN ENGLISH - Proficiency equivalent to two years of high school study in same language with "C" or better grades (at Fresno City College one course required if not met by high school foreign language).**

		<b>Units</b>
ARMEN 1	Beginning Armenian.....	5
ARMEN 2	High-Beginning Armenian.....	5
ASL 1	Beginning American Sign Language.....	4
ASL 2	High-Beginning American Sign Language.....	4
ASL 3	Intermediate American Sign Language.....	4
ASL 4	High-Intermediate American Sign Language.....	4
CHIN 1	Beginning Chinese.....	5
CHIN 2	High-Beginning Chinese.....	5
FRENCH 1	Beginning French.....	5
FRENCH 2	High-Beginning French.....	5
FRENCH 3	Intermediate French.....	5
GERMAN 1	Beginning German.....	5
GERMAN 2	High-Beginning German.....	5
HMONG 1	Beginning Hmong.....	5
HMONG 2	High-Beginning Hmong.....	5
JAPAN 1	Beginning Japanese.....	5
JAPAN 2	High-Beginning Japanese.....	5
PORT 1	Beginning Portuguese.....	5
PORT 2	High-Beginning Portuguese.....	5
SPAN 1	Beginning Spanish.....	5
SPAN 2	High-Beginning Spanish.....	5
SPAN 3	Intermediate Spanish.....	5
SPAN 3NS	Intermediate Spanish for Spanish Speakers.....	5
SPAN 4	High-Intermediate Spanish.....	5
SPAN 4NS	High-Intermediate Spanish for Spanish Speakers.....	5
SPAN 7	Advanced Spanish: Composition and Grammar.....	4

**AREA 7: CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS - One course from each group (six semester units minimum). This requirement is NOT part of IGETC, but may be completed prior to transfer. CSU campuses have the discretion whether to allow courses to satisfy the CSU United States History, Constitution and American Ideals (AI) graduation requirement to count in both Areas 3B/4 and to meet the AI graduation requirement.**

<b>Group 1</b>		<b>Units</b>
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3
<b>Group 2</b>		<b>Units</b>
HIST 11	History of the United States to 1877.....	3
HIST 12	History of the United States since 1877.....	3
		Total 38-50

**GRAPHIC COMMUNICATIONS**

**DIGITAL MEDIA – FORMERLY DIGITAL MEDIA OPTION AND MULTIMEDIA OPTION – MAJOR #8508**

*revised program, Spring 2021*

This certificate provides evidence of knowledge in the preparation of images and audio for multimedia output.

**Certificate of Achievement**

**Student Learning Outcomes:**

1. Demonstrate competency in communications techniques and visual design theory through the use of application specific software and hardware.

<b>Required Core Courses</b>		<b>Units</b>
GRC 15	Web Design.....	4
GRC 22	Digital Media.....	3
GRC 24A	Intro 2-D Animation with Adobe Animate.....	3
GRC 34	Introduction to 3-D Animation .....	3
GRC 41	Visual Communications.....	3
GRC 47	Introduction to Media Appreciation.....	3
GRC 51	Storyboarding .....	1
GRC 53	Adobe After Effects .....	3
		Total 23

**DIGITAL VIDEO – FORMERLY DIGITAL VIDEO OPTION – MAJOR #8509**

*revised program, Spring 2021*

This certificate prepares the student for entry level work in digital video production.

**Certificate**

**Student Learning Outcomes:**

1. Successfully operate a digital video camera to capture footage in a variety of lighting conditions.
2. Capture audio using a digital recorder and compile it with existing audio tracks while maintaining synchronization.

<b>Required Core Courses</b>		<b>Units</b>
GRC 23	Video Editing - Adobe Premiere Pro .....	3
GRC 27	Digital Video Production .....	3
GRC 32	Cinematography .....	3
GRC 51	Storyboarding .....	1
GRC 53	Adobe After Effects .....	3
		Total 13

**GRAPHIC COMMUNICATIONS – FORMERLY PRINTING TECHNOLOGY AND REPROGRAPHICS – MAJOR #8332**

Associate in Science and

Certificate of Achievement

*deleted program, Spring 2021*

**GRAPHIC DESIGN – FORMERLY GRAPHIC DESIGN OPTION – MAJOR #8507**

*revised program, Spring 2021*

Graphic Design combines aspects of the graphic communication and business curricula to provide a foundation in graphic design. The student will receive a background in computer graphics, and introductory video, audio and web design with an understanding of the requirements and limitations of production.

**Associate in Arts and  
Certificate of Achievement**

**Student Learning Outcomes:**

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

<b>Required Core Courses</b>		<b>Units</b>
BA 38	Operation of the Small Business, <i>or</i>	
BA 52	Introduction to Entrepreneurship.....	3
GRC 15	Web Design.....	4
GRC 17	Adobe Illustrator.....	3
GRC 20A	Intro to Applied Graphics - Adobe Tools.....	3
GRC 20B	Intro to Applied Graphics – Media.....	3
GRC 30	Adobe Indesign/Professional Publishing .....	3
GRC 31	Intermediate Photoshop .....	3
GRC 39A	Introduction to Graphic Design .....	3
GRC 40A	Intermediate Graphic Design .....	3
GRC 55	Social Media Design .....	2
		Total 30

**VISUAL COMMUNICATIONS – MAJOR #8510**

Certificate

*deleted program, Spring 2021*

## HEATING, VENTILATION, AND AIR CONDITIONING

### HVAC TECHNOLOGY I – FORMERLY AIR CONDITIONING, COMMERCIAL AIR CONDITIONING, HEATING, AND DUCT SYSTEMS – MAJOR #8041

*revised program, Spring 2021*

Students who successfully complete the HVAC Technology I program are equipped with skills for entry-level employment as HVAC (Heating, Ventilation, and Air Conditioning) maintenance, diagnostic, and installation technicians. The curriculum incorporates cognitive and hands-on assignments that develop a fundamental understanding of the installation, operation, and troubleshooting of HVAC equipment and air distribution systems.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Analyze air, refrigerant, fuel, and electrical measurements in the diagnosis and repair of heating and cooling equipment.
2. Demonstration of entry-level HVAC skills through the achievement of applicable industry certification.

##### Required Courses

	<b>Units</b>
HVAC 50 Principles of HVAC .....	2
HVAC 51 Electricity for HVAC.....	6.5
HVAC 52 Heating Systems.....	6.5
HVAC 53 System Analysis and Regulations.....	6.5
HVAC 54 Brazing and Motor Technology.....	6.5
	Total 28

### HVAC TECHNOLOGY II – FORMERLY HVAC TECHNOLOGY III AND AIR CONDITIONING – MAJOR #8042

*revised program, Spring 2021*

Students who successfully complete the HVAC Technology II program are equipped with skills for employment as HVAC (Heating, Ventilation, and Air Conditioning) maintenance, diagnostic, and installation technicians. The curriculum incorporates cognitive and hands-on assignments that develop a fundamental understanding of the installation, operation, and troubleshooting of HVAC equipment and air distribution systems. Additional emphasis on communication skills and general education prepare students for leadership roles once several years of work experience have been achieved.

#### Associate in Science

##### Student Learning Outcomes:

1. Analyze and strategically document air, refrigerant, fuel, and electrical measurements in the diagnosis and repair of heating and cooling equipment.
2. Demonstrate HVAC skills through the achievement of applicable industry certification.
3. Prepare for a leadership role in the HVAC industry upon achievement of work experience.

##### Required Courses

	<b>Units</b>
HVAC 50 Principles of HVAC .....	2
HVAC 51 Electricity for HVAC.....	6.5
HVAC 52 Heating Systems.....	6.5
HVAC 53 System Analysis and Regulations.....	6.5
HVAC 54 Brazing and Motor Technology.....	6.5
	Total 28

### HVAC WIRELESS CONTROL I – MAJOR #8043

*revised program, Spring 2021*

Digital controls are perhaps the most important component of a modern HVAC system. They refine occupant comfort while communicating with other networked electro-mechanical building systems for optimum efficiency. The successful HVAC Wireless Control certificate holder has mastered basic direct digital control principles, and has practiced their knowledge in the study, programming and commissioning of wireless communicating control systems.

#### Certificate of Achievement

##### Student Learning Outcomes:

1. Identify the appropriate application for binary and/or analog, inputs and outputs.
2. Program and commission a wireless thermostatic control.
3. Configure and manage a network of wireless communicating thermostats.

##### Required Courses

	<b>Units</b>
AT 10 Technical Computer Applications.....	3
HVAC 54 Brazing and Motor Technology.....	6.5
	Total 9.5

## HISTORY

### HISTORY FOR TRANSFER – MAJOR #7380

*revised program, Spring 2021*

History is our changing perspective on the past. Historians attempt not only to understand the causes and significance of human actions in the past but also to interpret those past actions to others, through teaching, publications, lectures, exhibits, documentaries, and conversations. Knowledge of history provides insight into human nature, enhances our understanding of the present, and guides choices for the future. The Associate in Arts in History for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in History for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 units within the major, with a minimum GPA of 2.0. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

#### Associate in Arts

##### Student Learning Outcomes:

1. Analyze and evaluate the validity and significance of historical information from multiple primary and secondary sources.
2. Demonstrate a familiarity with the main figures, events and concepts in the histories of multiple societies.
3. Assess the relative significance of several factors (e.g. race, class, gender, technological change) in shaping the history of multiple societies.

<b>Required United States History Courses</b>		<b>Units</b>
HIST 11	History of the United States to 1877.....	3
HIST 12	History of the United States since 1877.....	3

<b>List A – Select one from the following:</b>		<b>Units</b>
HIST 1	Western Civilization to 1648 .....	3
HIST 20	World History I, to 1600.....	3

<b>List B – Select one of the following:</b>		<b>Units</b>
HIST 2	Western Civilization Since 1648.....	3
HIST 23	World History II, since 1500.....	3

<b>List C – Select one of the following:</b>		<b>Units</b>
HIST 17	History of the Muslim World to 1405 .....	3
HIST 20	World History I, to 1600.....	3
HIST/WSTS 22	History of American Women.....	3
HIST 23	World History II, since 1500.....	3
HIST 29	History of Mexico, Colonial to Contemporary Period.....	3
HIST/AFRAM 34	History of the American Civil Rights Movement .....	3

<b>List D – Select one of the following:</b>		<b>Units</b>
HIST 3	History of Ancient Rome.....	3
HIST 15	History of the British Isles.....	3
HIST 18	History of Ancient Greece.....	3
HIST 21	United States Civil War .....	3
HIST 25	History of Religion in the United States.....	3
HIST 30	California History.....	3

Total 18

## HONORS PROGRAM

### HONORS PROGRAM – MAJOR #5331

*revised program, Spring 2021*

A Leon S. Peters Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 15 credits of Honors courses including at least one colloquium unit with an overall GPA of 3.2 or better.

#### Certificate of Achievement

##### Student Learning Outcome:

Because this is a comprehensive general education program, students who complete the Honors Certificate program will be able to:

1. Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
2. Express an understanding of the relationships between science and other human activities.
3. Articulate an understanding of the relationships between the arts, the humanities and themselves.
4. Write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
5. Apply logical reasoning to make decisions, solve problems, explain conclusions, and evaluate evidence.

**First Semester Required Course (Students who have completed ENGL 1A or equivalent should choose 15 units from elective courses.)**

	<b>Units</b>
ENGL 1AH Honors Reading and Composition .....	4

**Elective Courses: Select 11 Units with at Least One Colloquium Unit**

	<b>Units</b>
ANTHRO 2H Honors Cultural Anthropology.....	3
ART 5H Honors Art History Ancient to Medieval.....	3
ART 6H Honors Art History Renaissance to Modern.....	3
COMM 8H Honors Group Communication .....	3
ECON 40H Honors Introduction to Microeconomics .....	3
ECON 50H Honors Introduction to Macroeconomics .....	3
ENGL 3H Honors Critical Reading & Writing.....	3
HIST 12H Honors History of the United States since 1877.....	3
HONORS 1A Honors Science Colloquium: Biological Science through Scholarly Research .....	1
HONORS 1C Honors Humanities Colloquium: Humanities through the Ages .....	1
HONORS 1D Honors Business, Economics, and Accounting Colloquium: The Local Economy and Agribusiness .....	1
HONORS 1E Honors Social Science Colloquium: Contemporary Issues in Social Science .....	1
HONORS 1F Honors Phi Theta Kappa Colloquium: Phi Theta Kappa Study Topics .....	1
MATH 11H Honors Elementary Statistics.....	4
PHIL 1AH Honors Theories of Knowledge and Reality.....	3
PHIL 1CH Honors Ethics .....	3
PHIL 2H Honors Critical Reasoning and Analytic Writing.....	3
POLSCI 2H Honors American Government .....	3
PSY 2H Honors General Psychology .....	3
SOC 1AH Honors Introduction to Sociology .....	3
<b>Total 15</b>	

**HUMAN SERVICES**

**ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION – MAJOR #7951**

*revised program, Spring 2021*

This degree is designed for students interested in working in the field of Substance Use Disorders. Completion of the total program will broaden a candidate’s understanding and assist in preparation needed to enter the field. These core classes of the degree are accredited by the California Association for Alcohol/Drug Educators (CAADE) and recognized by the other counselor certification organizations in California. The degree offers course work leading to a Certificate of Achievement, and an AS degree in Alcoholism and Drug Abuse Counseling.

**Associate in Science**

**Student Learning Outcome:**

1. Demonstrate a fundamental working knowledge of the Substance Use Disorder Treatment system.
2. Be prepared for entry-level employment in a Substance Use Disorder program.
3. Demonstrate an understanding of the 12 core competencies and their application to the treatment of substance use disorders.

**Required Core Courses**

	<b>Units</b>
HS/SOC 10 Introduction to Aging Studies.....	3
HS 18 Alcohol and Drug Abuse Counseling: Professional and Personal Growth .....	2
HS 19B Work Experience (Cooperative), Occupational .....	6
HS 20 Introduction to Social Welfare .....	3
HS 24 Fundamentals of Interviewing and Counseling .....	3
HS 40 Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, Outreach and Referral .....	3
HS 42 Introduction to Alcohol and Drug Counseling.....	3
HS 43 Alcohol and Drug Abuse Counseling: Case Management .....	3
HS 44 Drug Use: Physical and Psychological Effects.....	3

<b>Course Options: Select 3 Courses</b>		<b>Units</b>
AFRAM 1	Introduction to African American Studies, <i>or</i>	
AMIND 34	The American Indian in Contemporary Society, <i>or</i>	
CLS/SOC 14	Sociology of the Mexican American Community .....	3
CHDEV 5	Parent Education .....	3
CHDEV/PSY 12	Child Abuse .....	3
HS/WSTS 25	Assertiveness Training .....	2
PSY 2/2H	General Psychology, <i>or</i>	
	Honors General Psychology .....	3
PSY 5	Social Psychology.....	3
PSY 16	Abnormal Psychology .....	3
PSY 25	Human Sexuality.....	3
PSY 33	Personal and Social Adjustment.....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i>	
	Honors Introduction to Sociology .....	3
SOC 1B	Critical Thinking about Social Problems .....	3
SOC 2	American Minority Groups .....	3
SOC/WSTS 5	Sociology of Rape.....	3
SOC/WSTS 7	Domestic Violence: Abuse Within the Family.....	3
SOC 32	Introduction to Marriage and Family.....	3
WSTS 10	Changing Roles of Women.....	3
		Total 37-38

**ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION – MAJOR #7951**

*revised program, Spring 2021*

This certificate is designed for students interested in working in the field of substance use disorders. Completion of the total certificate of achievement will broaden a candidate’s understanding and assist in preparation needed to enter the field. This certificate is accredited by the California Association for Alcohol/Drug Educators (CAADE) and recognized by the other certifying organizations in California. The Alcoholism and Drug Abuse Counseling Certificate program offers course work leading to a certificate of achievement.

**Certificate of Achievement**

**Student Learning Outcome:**

1. Upon completion, the student will be eligible to take the State of California approved test to become an Alcohol and Other Drug Counselor.
2. Students will take and successfully complete the State of California approved written exam from one of the 3 certifying organizations.

<b>Required Core Courses</b>		<b>Units</b>
HS/SOC 10	Introduction to Aging Studies.....	3
HS 18	Alcohol and Drug Abuse Counseling: Professional and Personal Growth .....	2
HS 19B	Work Experience (Cooperative), Occupational .....	6
HS 20	Introduction to Social Welfare .....	3
HS 24	Fundamentals of Interviewing and Counseling .....	3
HS 40	Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, Outreach and Referral .....	3
HS 42	Introduction to Alcohol and Drug Counseling.....	3
HS 43	Alcohol and Drug Abuse Counseling: Case Management .....	3
HS 44	Drug Use: Physical and Psychological Effects.....	3

<b>Course Options: Select 3 Courses</b>		<b>Units</b>
AFRAM 1	Introduction to African American Studies, <i>or</i>	
AMIND 34	The American Indian in Contemporary Society, <i>or</i>	
CLS/SOC 14	Sociology of the Mexican American Community .....	3
CHDEV 5	Parent Education .....	3
CHDEV/PSY 12	Child Abuse .....	3
HS/WSTS 25	Assertiveness Training .....	2
PSY 2/2H	General Psychology, <i>or</i>	
	Honors General Psychology .....	3
PSY 5	Social Psychology.....	3
PSY 16	Abnormal Psychology .....	3
PSY 25	Human Sexuality.....	3
PSY 33	Personal and Social Adjustment.....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i>	
	Honors Introduction to Sociology .....	3
SOC 1B	Critical Thinking about Social Problems .....	3
SOC 2	American Minority Groups .....	3

SOC/WSTS 5	Sociology of Rape.....	3
SOC/WSTS 7	Domestic Violence: Abuse Within the Family.....	3
SOC 32	Introduction to Marriage and Family.....	3
WSTS 10	Changing Roles of Women.....	3
		Total 37-38

**HUMAN SERVICES: PRE-SOCIAL WORK OPTION – MAJOR #7633**

*revised program, Spring 2021*

This degree is designed to prepare students for entry-level employment in a social service setting or to transfer as a junior to a baccalaureate degree program in Social Work. This degree is for the person who has a strong desire to help people who traditionally have been underrepresented within the larger society and require interventions and assistance in increasing control of their personal destinies. These introductory courses will give the student a good fundamental working knowledge of the social services system. The program offers course work leading to a certificate of achievement and an associate in science degree in Human Services: Pre-Social Work. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

**Associate in Science**

**Student Learning Outcome:**

1. Demonstrate a fundamental working knowledge of the social services system.
2. Be prepared for entry-level employment in a social service setting.
3. Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
4. Apply the multiple perspectives of a broad liberal arts foundation to their analysis of social problems.

**Required Core Courses**

	<b>Units</b>	
AT 10	Technical Computer Applications, <i>or</i>	
BT 1	Computer Document Processing I, <i>or</i>	
CIT 12	Computer Literacy, <i>or</i>	
CIT 15	Computer Concepts.....	3
HS/SOC 10	Introduction to Aging Studies.....	3
HS 19A	Work Experience (Cooperative), Occupational.....	3
HS 20	Introduction to Social Welfare.....	3
HS 24	Fundamentals of Interviewing and Counseling.....	3
HS 30	Group and Community Social Services.....	3

**Course Options: Select 12 Units**

	<b>Units</b>	
AFRAM 1	Introduction to African American Studies.....	3
AFRAM 2	African American Cultural Adaptation.....	3
AMIND 31	American Indian Culture.....	3
AMIND 34	The American Indian in Contemporary Society.....	3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ASAMER 25	Asian American Social Issues.....	3
ASL 1	Beginning American Sign Language.....	4
CHDEV 5	Parent Education.....	3
CHDEV 30	Child, Family and Community, <i>or</i> SOC 31 The Child in Society: A Social Problems Approach.....	3
CHDEV/PSY 38	Lifespan Development.....	3
CHDEV/PSY 39	Child Growth and Development.....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS 13	Politics and the Chicano-Latino Community.....	3
COMM 1	Introduction to Public Speaking, <i>or</i> COMM 4 Persuasion, <i>or</i> COMM 8 Group Communication.....	3
COMM 25	Argumentation, <i>or</i> PHIL 6 Symbolic Logic.....	3
ECON 25	Introduction to Economics, <i>or</i> ECON 40/40H Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics, <i>or</i> ECON 50/50H Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics.....	3
FN 35	Nutrition and Health, <i>or</i> FN/WSTS 43 Women's Nutrition.....	2-3
HMONG 1	Beginning Hmong.....	5
HS/WSTS 25	Assertiveness Training.....	2
HS 44	Drug Use: Physical and Psychological Effects.....	3



PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality, <i>or</i>	
PHIL 1C/1CH	Ethics, <i>or</i> Honors Ethics .....	3
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology .....	3
SOC/WSTS 5	Sociology of Rape.....	3
SOC/WSTS 7	Domestic Violence: Abuse Within the Family.....	3
SOC 32	Introduction to Marriage and Family.....	3
SPAN 1	Beginning Spanish.....	5
WSTS 10	Changing Roles of Women.....	3
	Total 30	

## JOURNALISM

### JOURNALISM FOR TRANSFER – MAJOR #5355

*revised program, Spring 2021*

The Associate in Arts in Journalism for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in Journalism for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

#### Associate in Arts

#### Student Learning Outcomes:

1. Demonstrate an understanding of journalistic responsibility.
2. Describe how the major mass media operate and analyze its impact on American society and its diverse communities.
3. Demonstrate the uses of photography, graphics and multimedia tools in media productions.
4. Report, write and edit news stories for multimedia and meet journalistic deadlines.

#### Required Core Courses

	<b>Units</b>
JOURN 1 Introduction to Mass Communication .....	3
JOURN 3 Newswriting .....	3
JOURN 4 Writing for the College Newspaper, <i>or</i> JOURN 11A Beginning Media Writing Practicum.....	3

#### List A - Select 3 units or 1 course from the following:

	<b>Units</b>
JOURN 11B Intermediate Media Writing Practicum.....	3
JOURN 11C Advanced Media Writing Practicum .....	3
JOURN 11D Editorial Leadership .....	3
JOURN 13 Advanced Reporting and Writing .....	3
JOURN 14 Multimedia Reporting .....	3

#### List B - Select 6-7 units or 2 courses from the following:

	<b>Units</b>
COMM 1 Introduction to Public Speaking .....	3
COMM 25 Argumentation .....	3
ENGL 3/3H Critical Reading & Writing, <i>or</i> Honors Critical Reading & Writing.....	3
ECON 40/40H Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
ECON 50/50H Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics .....	3
JOURN 16 Race, Gender and the Media.....	3
MATH 11 Elementary Statistics, <i>or</i> MATH/PSY 42 Statistics for the Behavioral Sciences, <i>or</i> DS 23 Business Statistics .....	3-4
PHIL 6 Introduction to Logic.....	3
POLSCI 2/2H American Government, <i>or</i> Honors American Government.....	3

Total 18-19

**JOURNALISM – MAJOR #5351**

*revised program, Spring 2021*

The Journalism Major at Fresno City College is designed to introduce students to the mass media, both as consumers and as potential practitioners. The program focuses on the theory and practice of gathering, processing, and delivering news and that prepares individuals to be professional print journalists, news editors, and news managers. It includes instruction in news writing and editing; reporting; photojournalism; layout and graphic design; journalism law and policy; professional standards and ethics; and journalism history and criticism. All students are encouraged to meet with a counselor.

**Associate in Arts**

**Student Learning Outcomes:**

1. Demonstrate an understanding of journalistic responsibility.
2. Analyze the impact of mass media on American society and its diverse communities.
3. Describe how the major mass media operate and comprehend their contribution to American society and the world.
4. Write and edit news stories.
5. Meet journalistic deadlines.
6. Demonstrate the uses of photography, graphics and newspaper layout in media productions.

**Required Core Courses**

	<b>Units</b>
JOURN 1 Introduction to Mass Communication .....	3
JOURN 3 Newswriting .....	3
JOURN 16 Race, Gender and the Media.....	3

**Department Publication Requirement**

**(Select six units or two courses):**

	<b>Units</b>
JOURN 4 Writing for the College Newspaper.....	3
JOURN 6 Magazine Production .....	3
JOURN 11A Beginning Media Writing Practicum .....	3
JOURN 11B Intermediate Media Writing Practicum.....	3
JOURN 11C Advanced Media Writing Practicum .....	3
JOURN 11D Editorial Leadership .....	3
JOURN 12 Online Newspaper Staff .....	3

**Complete a total of twelve (12) units from the courses listed below:**

	<b>Units</b>
ART 5 Art History Ancient to Medieval.....	3
GRC 41 Visual Communications.....	3
JOURN 2 Interpreting Current Events.....	3
JOURN 13 Advanced Reporting and Writing .....	3
JOURN 14 Multimedia Reporting .....	3
JOURN 15 Basic Editing for Journalists.....	3
JOURN 19 Work Experience (Cooperative), Occupational .....	1-8
PHIL 1C Ethics .....	3
<b>Total 27</b>	

**KINESIOLOGY**

**KINESIOLOGY – MAJOR #4555**

*revised program, Spring 2021*

Kinesiology studies the function and performance of the human body through the sciences of anatomy, physiology, biomechanics, and psychology. With a diverse curriculum, students can choose from courses such as anatomy and physiology, health and wellness, nutrition, sports psychology, athletic training, and coaching. Students will be presented with both theoretical and practical applications of the science of kinesiology, as it pertains to exercise, sport, and physical activity. Coursework in this field is intended to improve students' knowledge about health, fitness, and lifetime wellness as they relate to personal and community well-being. A degree in kinesiology has become a valuable asset in pursuing relevant and rewarding professional careers.

**Associate in Science**

**Student Learning Outcomes:**

1. After completion of this program, the student will have the basic knowledge of the general foundation of kinesiology.
2. This course of study provides the student a background to pursue a career in the field of kinesiology.

**Required Courses**

	<b>Units</b>
HLTH 1 Contemporary Health Issues .....	3
HLTH 2 First Aid and Safety.....	3
PE 62 Introduction To Kinesiology .....	3

<b>Minimum of 6 units from the following courses:</b>		<b>Units</b>
BIOL 5	Human Biology .....	4
BIOL 20	Human Anatomy, <i>or</i>	
BIOL 21A	Human Anatomy & Physiology I.....	4
BIOL 22	Human Physiology, <i>or</i>	
BIOL 21B	Human Anatomy & Physiology II.....	5
FN 35	Nutrition and Health .....	3
FN 41	Sports Nutrition.....	2
PE 20	Athletic Training.....	4
PE 24	Sports Officiating.....	2
PE 26	Sports Psychology .....	3
PE 28	Foundations of Coaching.....	3

<b>Fitness/Wellness Activities: Minimum of one course (1 unit)</b>		<b>Units</b>
DANCE 9	Dance Conditioning.....	1
DANCE 10A	Beginning Modern Dance Technique .....	1
PE 6	Fitness and Health .....	1
PE 8	Basic Self Defense.....	1
PE 9	Circuit Training.....	1
PE 15A	Weight Training (Women) .....	1
PE 15B	Weight Training (Men) .....	1
PE 15C	Weight Training (Coed) .....	1
PE 17	Hatha Yoga .....	1
PE 27	High-Intensity Cardio Interval Training .....	1
PE 29C	Off-Season Conditioning for Badminton .....	1
PE 30C	Off-Season Conditioning for Baseball .....	1
PE 31C	Off-Season Conditioning for Basketball.....	1
PE 33C	Off-Season Conditioning for Football .....	1
PE 34C	Off-Season Conditioning for Golf .....	1
PE 36C	Off-Season Conditioning for Soccer.....	1
PE 37C	Off-Season Conditioning for Softball.....	1
PE 38C	Off-Season Conditioning for Tennis .....	1
PE 39C	Off-Season Conditioning for Track and Field.....	1
PE 40C	Off-Season Conditioning for Volleyball.....	1
PE 41C	Off-Season Conditioning for Men's Wrestling .....	1
PE 42C	Off-Season Conditioning for Water Polo.....	1
PE 43C	Off-Season Conditioning for Swimming & Diving.....	1
PE 45	Performance Training and Conditioning Techniques for Intercollegiate Athletics .....	1
PE 70	Fitness Aerobics .....	1
PE 72	Spinning for Fitness .....	1

<b>Individual/Dual Sports: Minimum one course (1-3 units)</b>		<b>Units</b>
PE 3	Archery.....	1
PE 4	Badminton .....	1
PE 7	Golf .....	1
PE 12	Swimming.....	1
PE 13	Tennis .....	1
PE 13B	Intermediate Tennis .....	1
PE 29B	Competitive Badminton .....	3
PE 32B	Competitive Cross Country.....	3
PE 34B	Competitive Golf .....	3
PE 38B	Competitive Tennis .....	3
PE 39B	Competitive Track and Field .....	3
PE 41B	Competitive Men's Wrestling .....	3
PE 43B	Competitive Swimming & Diving .....	3

<b>Team Sports: Minimum one course (1-3 units)</b>		<b>Units</b>
PE 5	Basketball.....	1
PE 14	Volleyball.....	1
PE 30B	Competitive Baseball .....	3
PE 31B	Competitive Basketball.....	3
PE 33B	Competitive Football .....	3
PE 35B	Cheer and Stunt.....	2
PE 36B	Competitive Soccer.....	3
PE 37B	Competitive Softball .....	3
PE 40B	Competitive Volleyball.....	3
PE 42B	Competitive Water Polo.....	3
PE 71	Soccer.....	1

Total 18-25

## LIBERAL ARTS

### ASSOCIATE OF ARTS LIBERAL ARTS DEGREE WITH AREAS OF EMPHASIS

*revised program, Fall 2020*

The Associate in Arts (A.A.) degree in Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an “Area of Emphasis”. The Associate in Arts in Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

Choose either Option I or II or III for the General Education Pattern related to your educational goal.

Complete the required number of units in one “Area of Emphasis” from those outlined below.

All classes listed below transfer to CSU. Refer to [www.ASSIST.org](http://www.ASSIST.org) for transfer details or see a counselor for additional details.

**ASSOCIATE IN ARTS DEGREE:** Students selecting this option must complete all of the required courses for Fresno City College AA/AS General Education Pattern. This option may not adequately prepare the student for transfer to a 4-year institution.

**CSU/GE:** Students intending to transfer to a CSU should complete this option. Students selecting this option must complete all of the required courses for CSU GE Certification.

**IGETC:** Students who intend to transfer to a UC should complete this option. Students selecting this option must complete all of the required courses for IGETC Certification.

#### AREAS OF EMPHASIS:

Choose one of the following “Area of Emphasis”:

- American Sign Language
- Cultural Studies
- Foreign Languages
- History/Political Science
- Social Sciences
- Sociology

Complete the minimum number of units required in the “Area of Emphasis”.

Electives may be necessary to total 60 degree applicable units required for the associate degree.

### LIBERAL ARTS WITH AN EMPHASIS IN CULTURAL STUDIES – MAJOR #5121

*revised program, Spring 2021*

This program is designed to acquaint students with the diversity of cultures, particularly within American society. The program offers a broad foundation for the study of cultures as well as classes specific to various ethnic cultures within the United States.

#### Associate in Arts

##### Student Learning Outcome:

Upon completion of the Associates in Arts with an Emphasis in Cultural Studies students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to enter the workforce and society with a cultural awareness that facilitates consideration of different cultures and cultural norms.
3. Have an understanding of the rich cultural diversity of the United States.
4. Have developed skills critical thinking.

#### 18 units from any of the following

**(but no more than 6 units from each discipline):**

	<b>Units</b>
AFRAM 1 Introduction to African American Studies.....	3
AFRAM 2 African American Cultural Adaptation.....	3
AFRAM 4 Classical and Pre Colonial Africa .....	3
AFRAM 5 The African Diaspora of the Americas.....	3
AFRAM 6 African Cultures and Languages.....	3
AFRAM/	
WSTS 41 African-American Women's Studies.....	3
AMIND 31 American Indian Culture .....	3
AMIND 32 American Indian History .....	3
AMIND 34 The American Indian in Contemporary Society.....	3
AMST 10 American Pluralism: A Search for Common Ground	
in a Multicultural Society.....	3
ANTHRO 2/2H Cultural Anthropology, or	
Honors Cultural Anthropology.....	3
ANTHRO/	
CLS 28 Ancient Mexico .....	3

ASAMER 1	Indo-Chinese Americans .....	3
ASAMER 10	Hmong Culture.....	3
ASAMER 15	Introduction to Asian-Americans .....	3
ASAMER 25	Asian American Social Issues.....	3
CHDEV 15	Diversity and Culture in Early Childhood Education Programs.....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
CLS 12	Mexican American History.....	3
CLS 13	Politics and the Chicano-Latino Community .....	3
CLS/SOC 14	Sociology of the Mexican American Community .....	3
CLS/WSTS 24	La Chicana and Latina .....	3
CLS/HIST 29	History Of Mexico, Colonial to Contemporary Period .....	3
CLS 30	Migration and the Family: Social and Psychological Perspectives .....	3
GEOG 2	Cultural Geography .....	3
GEOG 4A	World Geography.....	3
GEOG 4B	World Geography.....	3
GEOG 20	Geography of California .....	3
POLSCI 24	International Relations.....	3
SOC 1B	Critical Thinking about Social Problems .....	3
SOC 2	American Minority Groups .....	3
WSTS 10	Changing Roles of Women.....	3
	Total 18	

**LIBERAL ARTS WITH AN EMPHASIS IN HISTORY/POLITICAL SCIENCE – MAJOR #5141**

*revised program, Spring 2021*

This program is designed to acquaint students with the methodologies of history and political science and to increase their awareness of the foundations of social, cultural, and political aspects of modern society.

**Associate in Arts**

**Student Learning Outcome:**

Upon completion of the AA with Emphasis in History/Political Science, students will:

1. Be familiar with and be able to analyze the foundations of modern institutions.
2. Be familiar with and be able to analyze the political process.
3. Be familiar with the cultural diversity of society and be able to gauge its significance in politics and history.

**Select 18 units with 9 units from each discipline:**

	<b>Units</b>	
HIST 1	Western Civilization to 1648 .....	3
HIST 2	Western Civilization Since 1648.....	3
HIST 3	History of Ancient Rome.....	3
HIST 11	History of the United States to 1877.....	3
HIST 12/12H	History of the United States since 1877, <i>or</i> Honors History of the United States since 1877.....	3
HIST 15	History of the British Isles .....	3
HIST 17	History of the Muslim World to 1405 .....	3
HIST 18	History of Ancient Greece.....	3
HIST 20	World History I, to 1600.....	3
HIST 21	United States Civil War .....	3
HIST/WSTS 22	History of American Women .....	3
HIST 23	World History II, since 1500.....	3
HIST 25	History of Religion in the United States .....	3
HIST/CLS 29	History of Mexico, Colonial to Contemporary Period .....	3
HIST 30	California History.....	3
HIST/ AFRAM 34	History of the American Civil Rights Movement .....	3
POLSCI 1	Modern Politics .....	3
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3
POLSCI 3	Introduction to Political Theory and Thought.....	3
POLSCI 5	Comparative Government .....	3
POLSCI 13	Legal and Judicial Reasoning .....	3
POLSCI 24	International Relations.....	3
POLSCI 25	Model United Nations.....	3
	Total 18	

**LIBERAL ARTS WITH AN EMPHASIS IN SOCIAL SCIENCES – MAJOR #5176**

*revised program, Spring 2021*

A program designed to acquaint the students with the diversity of subjects in the Social Sciences. The Social Sciences offer a broad study in human behavior. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors in liberal arts or liberal studies at CSU or UC. Each student should consult with a counselor for specific information regarding intended majors at the specific college/university of his/her choice.

**Associate in Arts**

**Student Learning Outcome:**

Upon completion of the AA with an Emphasis in Social Sciences students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to analyze the influence of culture, economics, family, and society on individual development.
3. Identify the consequences of bias on social interactions.
4. Have developed skills in critical thinking.

**18 units from any of the following courses**

**(but no more than 6 units in one discipline):**

	<b>Units</b>
AFRAM 1 Introduction to African American Studies.....	3
AFRAM 3 African-American Art.....	3
AMIND 31 American Indian Culture.....	3
AMIND 32 American Indian History.....	3
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
ANTHRO 2/2H Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
ANTHRO 3 Archaeology and World Prehistory.....	3
ANTHRO 13 Anthropology of Magic, Witchcraft, and Religion.....	3
ASAMER 1 Indo-Chinese Americans.....	3
ASAMER 15 Introduction to Asian-Americans.....	3
CHDEV/PSY 39 Child Growth and Development.....	3
CLS 11 Introduction to Chicano-Latino Studies.....	3
CLS 12 Mexican American History.....	3
ECON 40/40H Introduction to Microeconomics, <i>or</i> Honors Introduction to Microeconomics.....	3
ECON 50/50H Introduction to Macroeconomics, <i>or</i> Honors Introduction to Macroeconomics.....	3
GEOG 2 Cultural Geography.....	3
GEOG 4A World Geography.....	3
GEOG 4B World Geography.....	3
HIST 1 Western Civilization to 1648.....	3
HIST 2 Western Civilization Since 1648.....	3
HIST 15 History of the British Isles.....	3
HIST 17 History of the Muslim World to 1405.....	3
HIST 18 History of Ancient Greece.....	3
HIST 21 United States Civil War.....	3
HIST 22 History of American Women.....	3
HIST 29 History of Mexico, Colonial to Contemporary Period.....	3
HIST 30 California History.....	3
HIST 34 History of the American Civil Rights Movement.....	3
HS 20 Introduction to Social Welfare.....	3
POLSCI 1 Modern Politics.....	3
POLSCI 5 Comparative Government.....	3
POLSCI 24 International Relations.....	3
PSY 2/2H General Psychology, <i>or</i> Honors General Psychology.....	3
PSY 5 Social Psychology.....	3
PSY 25 Human Sexuality.....	3
PSY 33 Personal and Social Adjustment.....	3
SOC 1A/1AH Introduction to Sociology, <i>or</i> Honors Introduction to Sociology.....	3
SOC 1B Critical Thinking about Social Problems.....	3
SOC 2 American Minority Groups.....	3
SOC 10 Introduction to Aging Studies.....	3
SOC 14 Sociology of the Mexican American Community.....	3
SOC 31 The Child in Society: A Social Problems Approach.....	3

SOC 32	Introduction to Marriage and Family .....	3
WSTS 10	Changing Roles of Women.....	3
	Total	18

## LIBRARY TECHNOLOGY

### LIBRARY TECHNOLOGY – MAJOR #5171

*revised program, Summer 2021*

Program prepares students to work as a paraprofessional in a variety of libraries.

#### Associate in Science and Certificate of Achievement

##### Student Learning Outcome:

1. Apply basic knowledge of library principles and practices to a specific library setting.
2. Perform skills associated with the technical service functions in libraries.
3. Use skills associated with the delivery of public services currently in use in libraries.
4. Analyze the purpose of the paraprofessional in all types of libraries.

Required Courses		Units
LITEC 51	Introduction to Library Service .....	3
LITEC 52A	Organization of Information .....	3
LITEC 52B	Collection Management.....	1
LITEC 55	Library Public Service .....	3
LITEC 56	Information Technology.....	3
LITEC 57	Reference: Print and Online Sources.....	3
LITEC 61	Information and Computer Literacy .....	3

Required Courses		Units
LITEC 54	Literature and Services for Youth.....	3
LITEC 62	Medical Resources and Libraries.....	3
LITEC 63	Legal Resources and Libraries .....	2
	Total 21-22	

## MANUFACTURING MECHANIC CTC

### MANUFACTURING TECHNICIAN – MAJOR #8061

*revised program, Spring 2021*

This curriculum provides training in maintenance mechanic, electrical control systems, and principles of industrial refrigeration (ammonia) systems.

#### Certificate

##### Student Learning Outcome:

1. Demonstrate satisfactory knowledge of pneumatic/hydraulic systems.
2. Demonstrate satisfactory knowledge of oxyacetylene and arc welding processes, and use of common hand tools.
3. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
4. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

Required Courses		Units
EST 50	Introduction to Electronical Systems Technology.....	2
EST 55A	Digital Concepts.....	3
EST 58	Programmable Logic Controllers.....	3
EST 59	Instrumentation Systems.....	3
MMCTC 370	Fundamentals of Welding and Machine Shop .....	0
MMCTC 371	Fundamentals of Hydraulics and Pneumatics.....	0
MMCTC 372	Electrical Fundamentals .....	0
	Total	11

## MEDICAL ASSISTING

### MEDICAL ASSISTANT-CLINICIAN – MAJOR #2120

*corrected program, Spring 2020*

This curriculum is designed for the student who desires employment and advancement in the medical facility assisting the physician with the diagnosis and treatment of the patient. Medical Assisting is an entry level career in the medical field. **ADMISSION POLICY:** Enrollment is limited in the Medical Assistant–Clinician Program. There are no restrictions as to age, race, sex or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions: 1. Graduated from high school or complete the General Educational Development (GED) test with an average score of 45. 2. Completed Math 260D or test score that would qualify the student to place out of or above Math 260D. 3. Completed an Academic Summary Form for the Medical Assistant–Clinician Program and be prepared to furnish transcripts when requested. 4. Have no physical impairment that would preclude the performance of all Medical Assistant-Clinician duties. After selection as a qualified student to the Medical Assistant–Clinician Program, the student must submit evidence of physical examination with no limitations by a licensed physician. 5. Students are enrolled into the program in cohorts per semester. 6. Background checks may be required dependent on clinical placement in MA 19 work experience. A negative result may impact ability to complete program.

#### Associate in Science

##### Student Learning Outcome:

1. Identify common medical conditions and diseases.
2. Perform clinical skills commonly associated in the physician's office.

##### Required Courses

	<b>Units</b>
FN 40 Nutrition.....	3
HIT 10 Medical Terminology.....	3
MA 1 Legal and Ethical Concepts.....	2
MA 2 Pharmacology.....	3
MA 4 Office Laboratory Procedures.....	3
MA 5 Diagnostic & Therapeutic Procedures.....	3
MA 6A Clinical Training.....	3
MA 6B Advanced Training.....	3
MA 19 Work Experience (Cooperative), Occupational.....	3
	<b>Total 26</b>

*\*BT 23, HLTH 2, and HS 24 are recommended electives.*

## MUSIC

### COMMERCIAL MUSIC – MAJOR #5850

*revised program, Spring 2021*

This program satisfies the music course requirements for the associate of science degree in commercial music and satisfies the requirements for the associate of science degree with a major in commercial music or music industry and the lower division course requirements at California state universities.

#### Associate in Science

##### Student Learning Outcome:

1. Utilize current music technology to create, notate and record music.
2. Distinguish the fundamentals of form, theory, history, and performance as it relates to commercial music.
3. Correctly describe the development and current structure of the music industry as it applies to a career in commercial music.

##### Required Core Courses:

	<b>Units</b>
MUS 1A Music Theory I, <i>or</i>	
MUS 1AE Music Theory I-Extra, <i>or</i>	
MUS 3 Music Fundamentals.....	3
MUS 5 Computer Music Production.....	3
MUS 7A Ear Training I.....	1
MUS 8 Audio Engineering.....	3
MUS 17 History of Rock.....	3
MUS 20 Beginning Piano: Level I.....	2
MUS 21 Beginning Piano: Level II.....	2
MUS 24 Beginning Voice: Level I.....	2
MUS 111 The Music Business.....	3
MUS 112 Introduction to Finale.....	2



**For the Large Ensemble requirement select four units from the following:**

	<b>Units</b>
MUS 30	College Choir..... 1-2
MUS 34	Fresno Chorale..... 1-2
MUS 40	Concert Band..... 1-2
MUS 41	Jazz Ensemble..... 1-2
MUS 46	Symphony Orchestra..... 1-2
MUS 47A	Jazz Combo A..... 2
MUS 47B	Jazz Combo B..... 2
MUS 47C	Jazz Combo C..... 2
MUS 47D	Jazz Combo D..... 2
MUS 48	Latin Jazz Ensemble..... 2
MUS 53	Latin Jazz Workshop..... 2
MSU 54	Afro-Latin Ensemble..... 2
MUS 55	Afro-Caribbean Ensemble..... 2
MUS 60	Symphonic Choir..... 1-2
MUS 68	Symphonic Band..... 1-2
MUS 72	Jazz Composer's Orchestra..... 2
MUS 76	College Philharmonic Orchestra..... 1-2
MUS 92	Vocal Jazz Workshop..... 2

**For the Music Electives requirement, Commercial Music majors select from the following:**

	<b>Units</b>
MUS 1A	Music Theory I..... 3
MUS 1B	Music Theory II..... 3
MUS 2A	Music Theory III..... 3
MUS 2B	Music Theory IV..... 3
MUS 3	Music Fundamentals..... 3
MUS 4	Jazz Theory..... 3
MUS 6	Jazz Arranging and Composition..... 3
MUS 7B	Ear Training: Level II..... 1
MUS 9	Composition..... 2
MUS 10A	Beginning Jazz Improvisation..... 2
MUS 10B	Intermediate/Advanced Jazz Improvisation..... 2
MUS 12	Music Appreciation..... 3
MUS 13	History of Music..... 3
MUS 16	Jazz History and Appreciation..... 3
MUS 18	Basic Conducting and Score Reading..... 2
MUS 22	Intermediate/Advanced Piano..... 1-2
MUS 25	Beginning Voice: Level II..... 2
MUS 26	Intermediate/Advanced Voice..... 1-2
MUS 27	Beginning Guitar: Level I..... 2
MUS 28	Beginning Guitar: Level II..... 2
MUS 29	Intermediate/Advanced Guitar..... 1-2
MUS 30	College Choir..... 1-2
MUS 34	Fresno Chorale..... 1-2
MUS 35	City Singers..... 2
MUS 40	Concert Band..... 1-2
MUS 41	Jazz Ensemble..... 1-2
MUS 42A	Intermediate/Advanced Brass (Brass Choir)..... 1-2
MUS 42B	Intermediate/Advanced Woodwinds (Woodwind Choir)..... 1-2
MUS 42C	Intermediate/Advanced Strings (String Orchestra)..... 1-2
MUS 42D	Intermediate/Advanced Percussion (Percussion Ensemble)..... 1-2
MUS 46	Symphony Orchestra..... 1-2
MUS 48	Latin Jazz Ensemble..... 2
MUS 49	Advanced Large Ensembles..... 1
MUS 57	Solo Repertoire Studies I..... 1
MUS 59	Advanced Chamber Ensembles..... 1
MUS 60	Symphonic Choir..... 1-2
MUS 63	Chamber Singers..... 2
MUS 68	Symphonic Band..... 1-2
MUS 72	Jazz Composer's Orchestra..... 2
MUS 76	College Philharmonic Orchestra..... 1-2
MUS 92	Vocal Jazz Workshop..... 2

Total 30-31

**COMMERCIAL MUSIC – MAJOR #5850**

*revised program, Spring 2021*

This program satisfies the requirements for the Certificate of Achievement in Commercial Music and the lower division requirements at California state universities. Music majors must select one of the following areas of specialization: instrumental, vocal, guitar, piano, or commercial music.

**Certificate of Achievement**

**Student Learning Outcome:**

1. Analyze, read, and write music.
2. Perform early intermediate level piano solos, duets and ensembles in an artistic manner using good technique with stylistic and aesthetic considerations.
3. Appropriately work with music industry professionals.
4. Record musicians in a professional manner.
5. Successfully manipulate Midi and Finale software.

<b>Required Core Courses:</b>		<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>	
MUS 1AE	Music Theory I-Extra, <i>or</i>	
MUS 3	Music Fundamentals .....	3
MUS 5	Computer Music Production .....	3
MUS 8	Audio Engineering.....	3
MUS 20	Beginning Piano: Level I.....	2
MUS 111	The Music Business .....	3
MUS 112	Introduction to Finale.....	2
		<b>Total 16</b>

**GUITAR MAJORS – MAJOR #5830**

*revised program, Spring 2021*

This program satisfies the requirements for the associate in arts degree with a major in music and the lower division course requirements at most California state universities. Music majors must select one of the following areas of specialization: instrumental, vocal, guitar, piano, or commercial music. These majors must also take the appropriate Intermediate/Advanced class and participate in a Large Ensemble every semester they are enrolled in the Music Major.

**Associate in Arts**

**Student Learning Outcome:**

1. Perform guitar music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

<b>Required Core Courses:</b>		<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>	
MUS 1AE	Music Theory I-Extra .....	3
MUS 1B	Music Theory II .....	3
MUS 2A	Music Theory III .....	3
MUS 2B	Music Theory IV.....	3
MUS 7A	Ear Training I .....	1
MUS 7B	Ear Training: Level II.....	1
MUS 7C	Ear Training: Level III .....	1
MUS 7D	Ear Training: Level IV.....	1
MUS 13	History of Music .....	3
MUS 18	Basic Conducting and Score Reading.....	2

<b>Eight units of Intermediate/Advanced class requirement:</b>		<b>Units</b>
MUS 29	Intermediate/Advanced Guitar .....	1-2

**For the Large Ensemble requirement, all guitar majors**

<b>select eight units from the following:</b>		<b>Units</b>
MUS 30	College Choir.....	1-2
MUS 34	Fresno Chorale .....	1-2
MUS 39A	Opera Workshop - Baroque/Classical .....	2
MUS 39B	Opera Workshop: Romantic Period.....	2
MUS 39C	Classic Musical Theatre .....	2
MUS 39D	Contemporary Opera and Musical Theatre.....	2
MUS 40	Concert Band.....	1-2
MUS 41	Jazz Ensemble .....	1-2
MUS 46	Symphony Orchestra .....	1-2
MUS 47A	Jazz Combo A .....	2

MUS 47B	Jazz Combo B .....	2
MUS 47C	Jazz Combo C .....	2
MUS 47D	Jazz Combo D .....	2
MUS 48	Latin Jazz Ensemble .....	2
MUS 53	Latin Jazz Workshop .....	2
MSU 54	Afro-Latin Ensemble .....	2
MUS 55	Afro-Caribbean Ensemble .....	2
MUS 60	Symphonic Choir .....	1-2
MUS 68	Symphonic Band .....	1-2
MUS 72	Jazz Composer's Orchestra .....	2
MUS 76	College Philharmonic Orchestra .....	1-2
MUS 92	Vocal Jazz Workshop .....	2
	Total 37	

**GUITAR PERFORMANCE – MAJOR #5831**

*revised program, Spring 2021*

The Guitar Performance Certificate Program ensures that the Guitar Music Major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

**Certificate**

**Student Learning Outcome:**

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

**Required Core Courses:**

	<b>Units</b>	
MUS 1A	Music Theory I, <i>or</i>	
MUS 1AE	Music Theory I-Extra, <i>or</i>	
MUS 3	Music Fundamentals .....	3
MUS 12	Music Appreciation, <i>or</i>	
MUS 13	History of Music .....	3
MUS 29	Intermediate/Advanced Guitar .....	4

**Select four units of Large Ensemble from the following:**

	<b>Units</b>	
MUS 30	College Choir .....	1-2
MUS 34	Fresno Chorale .....	1
MUS 35	City Singers .....	2
MUS 39A	Opera Workshop - Baroque/Classical .....	2
MUS 39B	Opera Workshop: Romantic Period .....	2
MUS 39C	Classic Musical Theatre .....	2
MUS 39D	Contemporary Opera and Musical Theatre .....	2
MUS 40	Concert Band .....	1-2
MUS 41	Jazz Ensemble .....	1-2
MUS 46	Symphony Orchestra .....	1
MUS 47A	Jazz Combo A .....	2
MUS 47B	Jazz Combo B .....	2
MUS 47C	Jazz Combo C .....	2
MUS 47D	Jazz Combo D .....	2
MUS 48	Latin Jazz Ensemble .....	2
MUS 53	Latin Jazz Workshop .....	2
MSU 54	Afro-Latin Ensemble .....	2
MUS 55	Afro-Caribbean Ensemble .....	2
MUS 60	Symphonic Choir .....	1-2
MUS 68	Symphonic Band .....	1-2
MUS 72	Jazz Composer's Orchestra .....	2
MUS 76	College Philharmonic Orchestra .....	1
MUS 92	Vocal Jazz Workshop .....	2
	Total 14	

**INSTRUMENTAL MUSIC – MAJOR #5810**

*revised program, Spring 2021*

This program satisfies the requirements for the associate in arts degree with a major in music and the lower division course requirements at most California state universities. Music majors must select one of the following areas of specialization: instrumental (woodwind, brass, percussion, or strings), vocal, guitar, piano, or commercial music.

**Associate in Arts**

**Student Learning Outcome:**

1. Perform music on the instrument of choice from at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

**Required Core Courses:**

	<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>
MUS 1AE	Music Theory I-Extra ..... 3
MUS 1B	Music Theory II ..... 3
MUS 2A	Music Theory III ..... 3
MUS 2B	Music Theory IV ..... 3
MUS 7A	Ear Training I ..... 1
MUS 7B	Ear Training: Level II ..... 1
MUS 7C	Ear Training: Level III ..... 1
MUS 7D	Ear Training: Level IV ..... 1
MUS 13	History of Music ..... 3
MUS 18	Basic Conducting and Score Reading ..... 2

**Select eight units of Large Ensemble from the following:**

	<b>Units</b>
MUS 40	Concert Band ..... 1-2
MUS 41	Jazz Ensemble ..... 1
MUS 46	Symphony Orchestra ..... 1-2
MUS 68	Symphonic Band ..... 1-2
MUS 72	Jazz Composer's Orchestra ..... 2
MUS 76	College Philharmonic Orchestra ..... 1-2

**Brass, Woodwind, String, and Percussion players****select eight units in your field from the following:**

	<b>Units</b>
MUS 42A	Intermediate/Advanced Brass (Brass Choir) ..... 1-2
MUS 42B	Intermediate/Advanced Woodwinds (Woodwind Choir) ..... 1-2
MUS 42C	Intermediate/Advanced Strings (String Orchestra) ..... 1-2
MUS 42D	Intermediate/Advanced Percussion (Percussion Ensemble) 1-2
	Total 37

**JAZZ PERFORMANCE – MAJOR #5812**

*revised program, Spring 2021*

This program satisfies the music course requirements for the Certificate in Jazz Performance which provides the fundamental skills necessary for the jazz performer.

**Certificate****Student Learning Outcome:**

1. Perform jazz music by reading notated music scores.
2. Distinguish historical jazz styles and its chronological musical development reflecting American society.
3. Distinguish the harmonic, melodic and formal structures of jazz music.
4. Perform improvisations at an intermediate to advanced level.

**Required Core Courses:**

	<b>Units</b>
MUS 10A	Beginning Jazz Improvisation, <i>or</i>
MUS 10B	Intermediate/Advanced Jazz Improvisation ..... 2
MUS 16	Jazz History and Appreciation ..... 3

**Select three units from the following:**

	<b>Units</b>
MUS 1A	Music Theory I ..... 3
MUS 1AE	Music Theory I-Extra ..... 3
MUS 3	Music Fundamentals ..... 3
MUS 4	Jazz Theory ..... 3
MUS 6	Jazz Arranging and Composition ..... 3

**Select four units of Large Ensemble from the following:**

	<b>Units</b>
MUS 41	Jazz Ensemble ..... 1
MUS 47A	Jazz Combo A ..... 2
MUS 47B	Jazz Combo B ..... 2
MUS 47C	Jazz Combo C ..... 2
MUS 47D	Jazz Combo D ..... 2
MUS 48	Latin Jazz Ensemble ..... 2
MUS 53	Latin Jazz Workshop ..... 2
MSU 54	Afro-Latin Ensemble ..... 2
MUS 55	Afro-Caribbean Ensemble ..... 2
MUS 72	Jazz Composer's Orchestra ..... 2

MUS 92	Vocal Jazz Workshop.....	2
		Total 12

**MUSIC FOR TRANSFER – MAJOR #5805**

*revised program, Spring 2021*

The Associate in Arts in Music for Transfer degree is intended for students who plan to complete a Bachelor’s degree in music studies at a CSU campus. Students completing the transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transferring to earn a bachelor’s degree. The Associate in Arts in Music for Transfer degree may not be the best option for students intending to transfer to a particular CSU campus or a university that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

**Associate in Arts**

**Student Learning Outcome:**

1. Audiate, analyze, read, and write music.
2. Perform music of at least three different time periods.
3. Perform in solo and ensemble settings.

**Required Core Courses:**

	<b>Units</b>
MUS 1A	Music Theory, <i>or</i>
MUS 1AE	Music Theory I-Extra ..... 3
MUS 1B	Music Theory II ..... 3
MUS 2A	Music Theory III ..... 3
MUS 2B	Music Theory IV ..... 3
MUS 7A	Ear Training I ..... 1
MUS 7B	Ear Training: Level II ..... 1
MUS 7C	Ear Training: Level III ..... 1
MUS 7D	Ear Training: Level IV ..... 1

**Two units of Intermediate/Advanced class requirement to be selected from the following:**

	<b>Units</b>
MUS 22	Intermediate/Advanced Piano ..... 1
MUS 26	Intermediate/Advanced Voice ..... 1
MUS 29	Intermediate/Advanced Guitar ..... 1
MUS 42A	Intermediate/Advanced Brass (Brass Choir)..... 1
MUS 42B	Intermediate/Advanced Woodwinds (Woodwind Choir)..... 1
MUS 42C	Intermediate/Advanced Strings (String Orchestra)..... 1
MUS 42D	Intermediate/Advanced Percussion (Percussion Ensemble) ... 1

**For the Large Ensemble requirement, all music majors select four units from the following:**

	<b>Units</b>
MUS 30	College Choir ..... 1
MUS 34	Fresno Chorale ..... 1
MUS 40	Concert Band ..... 1
MUS 41	Jazz Ensemble ..... 1
MUS 46	Symphony Orchestra ..... 1
MUS 60	Symphonic Choir ..... 1
MUS 68	Symphonic Band ..... 1
MUS 72	Jazz Composer's Orchestra ..... 2
MUS 76	College Philharmonic Orchestra ..... 1
	Total 22

**PIANO MAJORS – MAJOR #5840**

*revised program, Spring 2021*

This program satisfies the requirements for the associate in arts degree with a major in music and the lower division course requirement at most California state universities. Music majors must select one of the following areas of specialization: instrumental, vocal, guitar, piano, or commercial music. These majors must also take the appropriate Intermediate/Advanced classes and participate in a Large Ensemble every semester they are enrolled in the Music Major.

**Associate in Arts**

**Student Learning Outcome:**

1. Perform piano music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

<b>Required Core Courses:</b>		<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>	
MUS 1AE	Music Theory I-Extra .....	3
MUS 1B	Music Theory II .....	3
MUS 2A	Music Theory III .....	3
MUS 2B	Music Theory IV .....	3
MUS 7A	Ear Training I .....	1
MUS 7B	Ear Training: Level II .....	1
MUS 7C	Ear Training: Level III .....	1
MUS 7D	Ear Training: Level IV .....	1
MUS 13	History of Music .....	3
MUS 18	Basic Conducting and Score Reading .....	2

<b>Eight units of Intermediate/Advanced class requirement:</b>		<b>Units</b>
MUS 22	Intermediate/Advanced Piano .....	1-2

**For the Large Ensemble requirement, all piano majors select eight units from the following:**

		<b>Units</b>
MUS 30	College Choir .....	1-2
MUS 34	Fresno Chorale .....	1-2
MUS 39A	Opera Workshop - Baroque/Classical .....	2
MUS 39B	Opera Workshop: Romantic Period .....	2
MUS 39C	Classic Musical Theatre .....	2
MUS 39D	Contemporary Opera and Musical Theatre .....	2
MUS 40	Concert Band .....	1-2
MUS 41	Jazz Ensemble .....	1-2
MUS 46	Symphony Orchestra .....	1-2
MUS 47A	Jazz Combo A .....	2
MUS 47B	Jazz Combo B .....	2
MUS 47C	Jazz Combo C .....	2
MUS 47D	Jazz Combo D .....	2
MUS 48	Latin Jazz Ensemble .....	2
MUS 53	Latin Jazz Workshop .....	2
MUS 54	Afro-Latin Ensemble .....	2
MUS 55	Afro-Caribbean Ensemble .....	2
MUS 60	Symphonic Choir .....	1-2
MUS 68	Symphonic Band .....	1-2
MUS 72	Jazz Composer's Orchestra .....	2
MUS 76	College Philharmonic Orchestra .....	1-2
MUS 92	Vocal Jazz Workshop .....	2
		<b>Total 37</b>

**PIANO PERFORMANCE – MAJOR #5841**

*revised program, Spring 2021*

The Piano Performance Certificate Program ensures that the Piano Music Major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

**Certificate**

**Student Learning Outcome:**

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

<b>Required Core Courses:</b>		<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>	
MUS 1AE	Music Theory I-Extra, <i>or</i>	
MUS 3	Music Fundamentals .....	3
MUS 12	Music Appreciation, <i>or</i>	
MUS 13	History of Music .....	3
MUS 22	Intermediate/Advanced Piano .....	4

**Select four units of Large Ensemble from the following:**

		<b>Units</b>
MUS 30	College Choir .....	1-2
MUS 34	Fresno Chorale .....	1
MUS 39A	Opera Workshop - Baroque/Classical .....	2
MUS 39B	Opera Workshop: Romantic Period .....	2
MUS 39C	Classic Musical Theatre .....	2
MUS 39D	Contemporary Opera and Musical Theatre .....	2
MUS 40	Concert Band .....	1-2

MUS 41	Jazz Ensemble .....	1-2
MUS 47A	Jazz Combo A .....	2
MUS 47B	Jazz Combo B .....	2
MUS 47C	Jazz Combo C .....	2
MUS 47D	Jazz Combo D .....	2
MUS 48	Latin Jazz Ensemble .....	2
MUS 53	Latin Jazz Workshop .....	2
MSU 54	Afro-Latin Ensemble .....	2
MUS 55	Afro-Caribbean Ensemble .....	2
MUS 60	Symphonic Choir .....	1-2
MUS 68	Symphonic Band .....	1-2
MUS 72	Jazz Composer's Orchestra .....	2
MUS 92	Vocal Jazz Workshop .....	2
	Total	14

**VOCAL PERFORMANCE – MAJOR #5821**

*revised program, Spring 2021*

The Vocal Performance Certificate Program ensures that the vocal music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

**Certificate**

**Student Learning Outcome:**

1. Sing solo pieces of intermediate level.
2. Sing in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

**Required Core Courses:**

	<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>
MUS 1AE	Music Theory I-Extra, <i>or</i>
MUS 3	Music Fundamentals .....
	3
MUS 12	Music Appreciation, <i>or</i>
MUS 13	History of Music .....
	3
MUS 26	Intermediate/Advanced Voice .....
	4

**Select four units of Large Ensemble from the following:**

	<b>Units</b>
MUS 30	College Choir .....
	1
MUS 34	Fresno Chorale .....
	1
MUS 35	City Singers .....
	2
MUS 39A	Opera Workshop - Baroque/Classical .....
	2
MUS 39B	Opera Workshop: Romantic Period .....
	2
MUS 39C	Classic Musical Theatre .....
	2
MUS 39D	Contemporary Opera and Musical Theatre .....
	2
MUS 60	Symphonic Choir .....
	1
MUS 92	Vocal Jazz Workshop .....
	2
	Total
	14

**WOODWIND PERFORMANCE – MAJOR #5815**

*revised program, Spring 2021*

The Woodwind Performance Certificate Program ensures that the Instrumental Music Major (Woodwinds) has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

**Certificate**

**Student Learning Outcome:**

1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

**Required Core Courses:**

	<b>Units</b>
MUS 1A	Music Theory I, <i>or</i>
MUS 1AE	Music Theory I-Extra, <i>or</i>
MUS 3	Music Fundamentals .....
	3
MUS 12	Music Appreciation, <i>or</i>
MUS 13	History of Music .....
	3

**Select four units of Intermediate/Advanced from the following:**

	<b>Units</b>
MUS 42B	Intermediate/Advanced Woodwinds(Woodwind Choir).....
	1-2

<b>Select four units of Large Ensemble from the following:</b>		<b>Units</b>
MUS 40	Concert Band.....	2
MUS 46	Symphony Orchestra .....	2
MUS 68	Symphonic Band.....	2
MUS 76	College Philharmonic Orchestra .....	2
		Total 14

## PHILOSOPHY

### PHILOSOPHY FOR TRANSFER – MAJOR #5341

*revised program, Spring 2021*

An Associate in Arts in Philosophy for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Philosophy for Transfer is a great way to develop critical and creative reasoning skills, enhance an ability to read complex materials with comprehension, and improve communication skills. These assets will be valuable as a transfer student to a four-year institution, whether you major in philosophy or some other field, and will enhance your preparation for a wide range of career opportunities. To earn the Associate in Arts in Philosophy for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

#### Associate in Arts

##### Student Learning Outcome:

1. Demonstrate independent and critical thinking regarding important topics in philosophy.
2. Analyze and evaluate arguments, both philosophical and non-philosophical, in accordance with the standards taught in our philosophy courses.

<b>Required Core Courses</b>		<b>Units</b>
PHIL 1A/1AH	Theories of Knowledge and Reality, <i>or</i> Honors Theories of Knowledge and Reality.....	3
PHIL 1C/1CH	Ethics, <i>or</i> Honors Ethics .....	3
PHIL 6	Introduction to Logic.....	3
<b>Select three of the following courses (min. two Phil)</b>		<b>Units</b>
HIST 1	Western Civilization to 1648 .....	3
HIST 2	Western Civilization Since 1648.....	3
HUMAN 10	Classical Humanities.....	3
HUMAN 11	Modern Humanities.....	3
PHIL 1B	Social and Political Philosophy .....	3
PHIL 1D	World Religions.....	3
PHIL 2/2H	Critical Reasoning and Analytic Writing, <i>or</i> Honors Critical Reasoning and Analytic Writing.....	3
PHIL 3A	Ancient Philosophy .....	3
PHIL 3B	Modern Philosophy .....	3
PHIL 5	Philosophy of Religion.....	3
		Total 18



## PHOTOGRAPHY

### DIGITAL PHOTOGRAPHY – MAJOR #5223

*revised program, Spring 2021*

Students taking these classes will learn the various methods and processes of digital photography emphasizing professional quality on all levels. From digital capture to high end output printing, students will learn control of a variety of digital systems.

#### Certificate of Achievement

##### Student Learning Outcome:

1. Organize effective color management of images from input to output on high end digital printing devices.

##### Required Core Courses

	<b>Units</b>
PHOTO 6      Digital Imaging Fundamentals .....	3
PHOTO 12     Beginning Photoshop .....	3
PHOTO 23     Advanced Photoshop .....	3
PHOTO 52     Adobe Lightroom .....	3
PHOTO 57     Applied Color and Alternative Photographic Media .....	3
	<b>Total 15</b>

### FINE ART PHOTOGRAPHY – MAJOR #5224

*revised program, Spring 2021*

Students taking these classes will concentrate on the fine art of photography using various methods and processes with historical techniques as well as new forms. Both film and digital technologies are used to develop the creative process and personal expression.

#### Certificate of Achievement

##### Student Learning Outcome:

1. Utilize photography as a visual communication tool.

##### Required Core Courses

	<b>Units</b>
PHOTO 6      Digital Imaging Fundamentals .....	3
PHOTO 12     Beginning Photoshop .....	3
PHOTO 15     Photography and Visual Literacy .....	3
PHOTO 18     Advanced Black and White Photography .....	3
PHOTO 23     Advanced Photoshop .....	3
PHOTO 57     Applied Color and Alternative Photographic Media .....	3
	<b>Total 18</b>

### PHOTOJOURNALISM – MAJOR #5225

*revised program, Spring 2021*

Students will learn the art of story telling through images and the power in conveying another person's story through their own eyes. Digital composition and editing of story telling images will be explored and utilized.

#### Certificate of Achievement

##### Student Learning Outcome:

1. Produce story telling photographs and video for contemporary internet media.

##### Required Core Courses

	<b>Units</b>
BA 52          Introduction to Entrepreneurship .....	3
PHOTO 6      Digital Imaging Fundamentals .....	3
PHOTO 49     Multimedia Photojournalism.....	3
PHOTO 52     Adobe Lightroom .....	3
	<b>Total 12</b>

### PROFESSIONAL PHOTOGRAPHY – FORMERLY PHOTOGRAPHY – MAJOR #5221

*revised program, Spring 2021*

Students in this curriculum are trained in the major areas of professional photography. Positions for which graduates may qualify, depending upon their interest, abilities, and achievement, include portrait, commercial, editorial, digital, and retail fields. Some equipment and supplies provided.

#### Associate in Science

##### Student Learning Outcome:

1. Produce professional quality photographs in various contemporary formats.

<b>First Year – First Semester</b>		<b>Units</b>
PHOTO 6	Digital Imaging Fundamentals .....	3
PHOTO 12	Beginning Photoshop .....	3
PHOTO 15	Photography and Visual Literacy .....	3
<b>First Year – Second Semester</b>		<b>Units</b>
PHOTO 23	Advanced Photoshop .....	3
PHOTO 32	Commercial Portraiture .....	3
<b>Second Year – First Semester</b>		<b>Units</b>
PHOTO 18	Advanced Black and White Photography .....	3
PHOTO 26	Lighting Principles .....	3
PHOTO 57	Applied Color and Alternative Photographic Media .....	3
<b>Second Year – Second Semester</b>		<b>Units</b>
PHOTO 45	Advanced Projects .....	3
		Total 27

**PROFESSIONAL PHOTOGRAPHY – FORMERLY PHOTOGRAPHY – MAJOR #5221**

*revised program, Spring 2021*

Students in this curriculum are trained in the major areas of professional photography. Positions for which graduates may qualify, depending upon their interest, abilities, and achievement, include portrait, commercial, editorial, digital, and retail fields. Some equipment and supplies provided.

**Certificate of Achievement**

**Student Learning Outcome:**

1. Produce professional quality photographs in various contemporary formats.

<b>First Year – First Semester</b>		<b>Units</b>
PHOTO 6	Digital Imaging Fundamentals .....	3
PHOTO 12	Beginning Photoshop .....	3
<b>First Year – Second Semester</b>		<b>Units</b>
PHOTO 15	Photography and Visual Literacy .....	3
PHOTO 23	Advanced Photoshop .....	3
PHOTO 32	Commercial Portraiture .....	3
<b>Second – First Semester</b>		<b>Units</b>
PHOTO 26	Lighting Principles .....	3
PHOTO 45	Advanced Projects .....	3
PHOTO 57	Applied Color and Alternative Photographic Media .....	3
		Total 24

**SOCIAL MEDIA IMAGING**

*new program, Spring 2021*

Course work for the non-photographer in image creation and publishing in the Internet environment. Concepts of image making, copyright, branding, and visual engagement specifically for online usage.

**Certificate**

**Student Learning Outcome:**

1. Produce correctly formatted still images and video media in a creative manner for social media publishing.

<b>Required Core Courses</b>		<b>Units</b>
PHOTO 5	Introduction to Photography .....	3
PHOTO 14	Photography for Social Media .....	3
PHOTO 52	Adobe Lightroom .....	3
		Total 9

## PSYCHOLOGY

### PSYCHOLOGY – MAJOR #7501

*revised program, Spring 2021*

The Psychology AA Program is designed to provide a strong academic foundation for students planning to major in Psychology at a four-year institution. Psychology is the scientific study of human behavior and mental processes. Two of the field's key features reflect the highly valuable approach psychology takes to gain knowledge about human behavior. First, psychology emphasizes the use of critical thinking and the scientific method to ask questions, acquire and evaluate information, and solve problems. Second, the field recognizes the complexity of human behavior, and is guided by the idea that a complete understanding of human behaviors, emotions, and thoughts must include an analysis of factors as diverse as biological, interpersonal, and sociocultural influences. Thus, psychology represents a method of inquiry that can be a useful tool for students with a variety of interests and career goals. Earning an Associates in Arts degree in Psychology may be beneficial for individuals whose vocational plans include working in human or social services (e.g., law enforcement, education, sales, social welfare, and nursing). Students are encouraged to follow the CSU General Education-Breadth or IGETC pattern with the assistance of a counselor.

#### Associate in Arts

##### Student Learning Outcome:

1. Students will apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.
2. Students will recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.
3. When presented with information and claims about human behavior and mental processes, students critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

##### Required Core Courses

		Units
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology .....	3
PSY 36	Biological Psychology .....	3
PSY 42	Statistics for the Behavioral Sciences .....	4

##### Depth: Choose two of the following:

		Units
PSY 5	Social Psychology .....	3
PSY 12	Child Abuse .....	3
PSY 16	Abnormal Psychology .....	3
PSY 18	The Psychology of Criminal Behavior.....	3

##### Lifespan: Choose one of the following:

		Units
PSY 25	Human Sexuality.....	3
PSY 33	Personal and Social Adjustment .....	3
PSY 38	Lifespan Development.....	3
PSY 39	Child Growth and Development.....	3

##### Diversity: Choose one of the following:

		Units
AFRAM 1	Introduction to African American Studies.....	3
AMIND 31	American Indian Culture .....	3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society .....	3
ANTHRO 2	Cultural Anthropology.....	3
ASAMER 15	Introduction to Asian-Americans .....	3
CLS 11	Introduction to Chicano-Latino Studies.....	3
SOC 2	American Minority Groups .....	3
WSTS 10	Changing Roles of Women.....	3

Total 22

### PSYCHOLOGY FOR TRANSFER – MAJOR #7550

*revised program, Spring 2021*

Psychology is a useful major for students with a variety of interests and career goals due to its emphasis on critical thinking, the scientific method of inquiry, and the interactive role that biological, psychological, developmental, and sociocultural factors play in affecting human behavior and mental processes. The Associate in Arts in Psychology for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in Psychology for Transfer degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 19-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

**Associate in Arts**

**Student Learning Outcome:**

1. Apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.
2. Recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.
3. When presented with information and claims about human behavior and mental processes, critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

<b>Required Core Courses</b>		<b>Units</b>
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology .....	3
PSY 36	Biological Psychology .....	3
PSY/MATH 42	Statistics for the Behavioral Sciences, <i>or</i> MATH 11/11H Elementary Statistics, <i>or</i> Honors Elementary Statistics .....	4
PSY 45	Introduction to Research Methods in Psychology .....	3

<b>Select one of the following courses:</b>		<b>Units</b>
BIOL 5	Human Biology .....	4
PSY 5	Social Psychology .....	3

**Choose one of the following courses. NOTE: Psychology 5 can be taken in this section only if it was not taken as part of the previous section:**

		<b>Units</b>
PSY 5	Social Psychology .....	3
PSY 16	Abnormal Psychology .....	3
PSY 25	Human Sexuality .....	3
PSY 33	Personal and Social Adjustment .....	3
		Total 19-20

**SPANISH**

**SPANISH FOR TRANSFER – MAJOR #5550**

*corrected program, Fall 2020*

The Associate in Arts in Spanish for Transfer is designed to prepare students for further study in Spanish at the university level. A degree in Spanish is a great way to prepare students for entry into a variety of career options requiring intermediate or better levels of fluency. The Associate in Arts in Spanish major also acquaints students with the cultures of Spanish speaking countries. The Associate in Spanish for Transfer is specifically designed for students who plan to complete a bachelor's degree in Spanish at a CSU campus. To earn the Associate in Spanish for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breadth or IGETC requirements and 21-24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

Notes: 1. Students entering the Spanish program at Spanish 2 or higher are required to complete the specified unit requirements of the degree. Students must consult with the Foreign Language Department Chair for approval of course substitutions. 2. Some of the above courses may have prerequisite. See the catalog or schedule of classes. 3. The Associate Degree requires completion of the major (21-24 units) with a "C" or better in each course plus the completion of the General Education (either CSU-GE Breadth or IGETC) for a total of 60 semester units with a 2.0 or better GPA. 4. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

**Associate in Arts**

**Student Learning Outcomes:**

1. Engage in conversation using the Spanish in daily life situations.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literary excerpts written in Spanish.
3. Write at the advanced level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.

<b>Required Core Courses</b>		<b>Units</b>
SPAN 1	Beginning Spanish .....	5
SPAN 2	High-Beginning Spanish .....	5
SPAN 3	Intermediate Spanish, <i>or</i>	

SPAN 3NS	Intermediate Spanish for Spanish Speakers.....	5
SPAN 4	High-Intermediate Spanish, <i>or</i>	
SPAN 4NS	High-Intermediate Spanish for Spanish Speakers.....	5

**Group A: Select a minimum of four (4) additional units from the following list:**

		<b>Units</b>
SPAN 5	The Short Story: Mexico, Spain, and the U.S. ....	4
SPAN 6	The Short Story: Latin America.....	4
SPAN 7	Advanced Spanish: Composition and Grammar .....	4
SPAN 8	Advanced Spanish Conversation.....	4
SPAN 9	Spanish Business and Culture.....	4
SPAN 41	Introduction to Poetry in Spanish .....	4
SPAN 42	Hispanic American Culture .....	4
	<b>Total</b>	<b>24</b>

## WOMEN’S STUDIES

### WOMEN’S STUDIES – MAJOR #7610

*revised program, Spring 2021*

This is a transfer program designed to inform students of the historical and contemporary issues affecting women’s lives. Women’s Studies offers a broad interdisciplinary approach to the study of women in society including their contrasting roles circumscribed by their culture and social institutions, their opportunities for self expression, achievement and self actualization, their relationships with parents, peers, intimates and children, and their concern for survival in a violent-prone society. Because Women’s Studies is interdisciplinary, it also provides an academic background helpful to those planning careers in law, business, education and medicine.

#### Associate in Arts

#### Student Learning Outcomes:

1. Evaluate the role of women and gender relationships in various cross- and inter-cultural contexts.
2. Analyze the study of the intersections and complications of class, race, age, ethnicity, nationality, health/disability, and sexual identity as fundamental categories of social and cultural analysis.
3. Engage in in-depth examination of one aspect of women's experience learned through (for example) a literary genre, a time period, a geographic region, or focus on a very narrow topic.
4. Connect ideas and concepts from various fields about oppression and patriarchy as these affect women to common themes or topics.
5. Evaluate the roles of women in society from a historical and sociological perspective.

#### Required Core Courses

		<b>Units</b>
WSTS 10	Changing Roles of Women.....	3
WSTS/HS 25	Assertiveness Training.....	2

#### Course Options: Select a minimum of 15 units

		<b>Units</b>
AFRAM/		
WSTS 41	African-American Women's Studies.....	3
AMST 10	American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
CLS/WSTS 24	La Chicana and Latina .....	3
ENGL/		
WSTS 36	Women's Literature .....	3
FN/WSTS 43	Women's Nutrition.....	2
HIST/WSTS 22	History of American Women .....	3
SOC/WSTS 5	Sociology of Rape.....	3
SOC/WSTS 7	Domestic Violence: Abuse Within the Family.....	3
WSTS 44	Women in Management .....	3
WSTS 47	Introduction to Lesbian and Gay Studies.....	3
	<b>Total</b>	<b>20</b>

# COURSE DESCRIPTIONS

Changes to Pages 263-465

## Course Classification System

### Credit, Non-degree Applicable

#### Change: add

Administration of Justice 233Z, Regular Basic Course Module I

effective Spring 2021

#### Change: delete

Administration of Justice 220, Radar Operator

effective Spring 2021

Administration of Justice 223, Basic Tactical Communication

effective Spring 2021

Administration of Justice 268, Pre-Police Academy Course

effective Spring 2021

Administration of Justice 280, Adult Correctional Officer Core

effective Spring 2021

Counseling 267, Financial Aid Money Management

effective Spring 2021

English for Multi-Lingual Students 263R, Low Academic Intermediate Reading and Vocabulary

effective Spring 2021

English for Multi-Lingual Students 263W, Low Academic Intermediate Writing and Grammar

effective Spring 2021

Fire Technology 200, Advanced Company/Chief Officer

effective Spring 2021

Fire Technology 201, Advanced Apparatus Driver/Operator

effective Spring 2021

Fire Technology 202, Advanced Firefighter

effective Spring 2021

Fire Technology 203, Advanced Emergency Medical Technician-Paramedic

effective Spring 2021

Fire Technology 204, Advanced Technical Rescue

effective Spring 2021

Fire Technology 205, Advanced Fire Prevention/Fire Investigation

effective Spring 2021

Fire Technology 240A, Fire Inspector 1A

effective Spring 2021

Fire Technology 240B, Fire Inspector 1B

effective Spring 2021

Fire Technology 240C, Fire Inspector 1C

effective Spring 2021

Fire Technology 240D, Fire Inspector 1D

effective Spring 2021

Fire Technology 269, Advanced Firefighter Topics

effective Spring 2021

Nursing, Registered 203, RN Refresher Course

effective Spring 2021

Photography 267, Intro to Aerial Multimedia

effective Spring 2021

Photography 277, Aerial Multimedia II

effective Spring 2021

### Noncredit

#### Change: add

Business & Technology 379, Introduction to Microsoft Office Applications

effective Spring 2021

Graphic Communications 338, Video Post Production

effective Spring 2021

#### Change: delete

Administration of Justice 369A, Advanced Officer Topics

effective Spring 2021

Graphic Communications 352, Adobe Lightroom

effective Spring 2021

Photography 323, Advanced Photoshop

effective Spring 2021

## Courses

### Administration of Justice (AJ)

#### Course deleted

220 Radar Operator 1, 1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)

effective Spring 2021

#### Course deleted

223 Basic Tactical Communication, 0.4 unit, 8.4 lecture hours, (1 week), (Pass/No Pass)

effective Spring 2021

#### New course

233Z Regular Basic Course Module I, 7 units, 22.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

effective Spring 2021

**Prerequisite:** Administration of Justice 273. Current (within the last 3 years) in PC 832 Arrest and Firearms training requirements. Passage of the POST - Constructed Comprehensive Module II End-of-Course Proficiency Test within the preceding 12 months. Successful completion of the POST Standardized Reading Comprehension and Writing Skills Test and the POST Physical Agility Test. Proof of Department of Justice criminal history clearance to possess a firearm (PC 13511.5). Physical exam, including an electrocardiogram (EKG) printout. Or, be sponsored by a law enforcement agency. Valid Class C California Drivers License.

Satisfies training requirements mandatory for every full-time peace officer under Penal Code section 830.6(a)(1) and 832.6(a)(1). Completion of all three modules satisfies the Regular Basic Course training requirement.

*Course deleted* *effective Spring 2021*  
 268 Pre-Police Academy Course, 1 unit, 4.2 lecture hours, (6 weeks), (Pass/No Pass)

*Course deleted* *effective Spring 2021*  
 280 Adult Correctional Officer Core, 10 units, 33.6 lecture hours, 8.4 lab hours, (5 weeks), (Pass/No Pass),  
 (Formerly Administration of Justice 74 and 80)

*Course deleted* *effective Spring 2021*  
 369A Advanced Officer Topics, 0-1.17 lecture hours, 0-1.17 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

## Allied Health (AHLTH)

*New course* *effective Spring 2021*

3 Public Health and Infectious Disease Tracing, 1 unit, 1 lecture hour

**Prerequisite:** None.

Introductory course that will provide an overview of coronavirus disease 2019 (COVID-19), including incubation, infectious period, symptoms, and how to prevent it. The clinical presentation of COVID-19, and the evidence for how COVID-19 is transmitted from person-to-person and why contact tracing has traditionally been such an effective public health intervention. Students will learn how contact tracing is done, including how to build rapport with cases, identify their contacts, and learn how supporting both cases and their contact can effectively break the chain of disease transmission. The course will also cover several important ethical considerations around contact tracing, isolation, and self-quarantine. The course will identify some of the most common barriers to contact tracing efforts, along with strategies to overcome them. Case investigation and contact tracing are well-honed skills that adapt easily to new public health demands and are effective tools to slow the spread of infectious diseases in a community. (A, CSU)

## American Indian Studies (AMIND)

*Course deleted* *effective Spring 2021*  
 20 Native Peoples of California, 3 units, 3 lecture hours, (Formerly Anthropology 20)

## Anthropology (ANTHRO)

*Change: advisory* *effective Spring 2021*

1 Biological Anthropology, 3 units, 3 lecture hours

**Advisory:** English 1A.

*Change: advisory* *effective Spring 2021*

1L Biological Anthropology Laboratory, 1 unit, 3.5 lecture hours

**Advisory:** English 1A and Mathematics 201.

*Change: advisory* *effective Spring 2021*

2 Cultural Anthropology, 3 units, 3 lecture hours

**Advisory:** English 1A.

*Change: advisory* *effective Spring 2021*

2H Honors Cultural Anthropology, 3 units, 3 lecture hours

**Advisory:** Meet the qualifications for consideration for acceptance into the Honors Program. See Honors Program listing in the college catalog.

*Change: advisory* *effective Spring 2021*

3 Archaeology and World Prehistory, 3 units, 3 lecture hours

**Advisory:** English 1A.

*Change: advisory* *effective Spring 2021*

4 Introduction to Archaeology, 3 units, 3 lecture hours

**Advisory:** English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.

*Change: advisory* *effective Spring 2021*

8 Language and Culture, 3 units, 3 lecture hours

**Advisory:** English 1A.

- Change: advisory** **effective Spring 2021**  
**12 Visual Anthropology: Introduction to Ethnographic Film, 3 units, 3 lecture hours**  
**Advisory:** English 1A.
- Change: advisory** **effective Spring 2021**  
**13 Anthropology of Magic, Witchcraft, and Religion, 3 units, 3 lecture hours**  
**Advisory:** English 1A.
- Change: prerequisite, advisory** **effective Spring 2021**  
**15 Laboratory Methods in Archaeology, 4 units, 3 lecture hours, 3 lab hours**  
**Prerequisite:** Anthropology 4. **Advisory:** English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.
- Change: corequisite, prerequisite, advisory** **effective Spring 2021**  
**16A Field Archaeology I, 2 units, 1 lecture hour, 3 lab hours, (Formerly Anthropology 6)**  
**Corequisite:** None. **Prerequisite:** Anthropology 4. **Advisory:** English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.
- Change: advisory** **effective Spring 2021**  
**16B Field Archaeology II, 2 units, 1 lecture hour, 3 lab hours**  
**Prerequisite:** Anthropology 4 and 16A. **Advisory:** English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.
- Change: advisory** **effective Spring 2021**  
**24 Doing Archaeology: Hands-On!, 1.5 units, 1 lecture hour, 2 lab hours**  
**Corequisite:** Anthropology 4. **Advisory:** English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.
- Change: advisory** **effective Spring 2021**  
**28 Ancient Mexico, 3 units, 3 lecture hours, (See also Chicano Latino Studies 28)**  
**Advisory:** English 1A.
- Change: advisory** **effective Spring 2021**  
**30 Topics in Anthropology, 1-4 units, 1-3 lecture hours, 0-9 lab hours**  
**Advisory:** English 1A.

## Applied Technology (AT)

- Change: advisory, description** **effective Spring 2021**  
**10 Technical Computer Applications, 3 units, 3 lecture hours, 1 lab hour, (Formerly Industrial Education 23)**  
**Advisory:** None.  
 An introduction to computers, elements of computer hardware and software and how they are used in the workplace, and the social impact of computers. Hands-on introduction and development of general computer skills for technical programs such as word processing, spreadsheet, presentation applications, and email. (A, CSU, UC)
- Course deleted** **effective Spring 2021**  
**11 Basic Electricity, 3 units, 3 lecture hours, (Formerly Industrial Education 11)**
- Change: advisory** **effective Spring 2021**  
**19 Work Experience (Cooperative), Occupational, 1-8 units**  
**Corequisite:** Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. **Advisory:** None.
- Change: advisory** **effective Spring 2021**  
**21 Occupational Safety and Health, 2 units, 2 lecture hours, 0.5 lab hour, (Formerly Industrial Education 36)**  
**Advisory:** Applied Technology 10.
- Change: advisory** **effective Spring 2021**  
**40 Preparing for Employment Opportunities, 3 units, 3 lecture hours, (Formerly Industrial Education 37)**  
**Advisory:** Applied Technology 10.
- Course deleted** **effective Spring 2021**  
**120 Industrial Science, 3 units, 3 lecture hours, 1 lab hour, (Formerly Industrial Education 51)**



<i>Change: prerequisite, advisory</i>		<i>effective Spring 2021</i>
130	Industrial Mathematics, 3 units, 3 lecture hours, (Formerly Industrial Education 60) Prerequisite: None. Advisory: None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
140	Introduction to Machine Shop, 3 units, 2 lecture hours, 3 lab hours Advisory: None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
150	Pneumatic & Hydraulic Systems, 3 units, 2 lecture hours, 3 lab hours Advisory: None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
160	Mechanical Power Drive Systems, 3 units, 3 lecture hours, 1 lab hour Advisory: None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
340	Introduction to Machine Shop, 2 lecture hours, 3 lab hours, (Pass/No Pass) Advisory: None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
350	Pneumatic & Hydraulic Systems, 2 lecture hours, 3 lab hours, (Pass/No Pass) Advisory: None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
360	Mechanical Power Drive Systems, 3 lecture hours, 1 lab hour, (Pass/No Pass) Advisory: None.	

## Asian American Studies (ASAMER)

<i>Course deleted</i>		<i>effective Spring 2021</i>
20	Asian American Literature, 3 units, 3 lecture hours, (See also English 20)	
<i>Course deleted</i>		<i>effective Spring 2021</i>
30	Asian American Women, 3 units, 3 lecture hours, (See also Women's Studies 30)	

## Automotive Technology (AUTOT)

<i>New course</i>		<i>effective Spring 2021</i>
173	Maintenance and Light Repair – Chassis Systems, 10 units, 4 lecture hours, 16 lab hours Prerequisite: None. Basic skills and training in Maintenance and Light Repair for Chassis Systems needed to earn an entry-level position at an automotive maintenance repair facility. Prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test. (A)	
<i>New course</i>		<i>effective Spring 2021</i>
174	Maintenance and Light Repair – Powertrain Systems, 10 units, 4 lecture hours, 16 lab hours Prerequisite: None. Basic skills and training in Maintenance and Light Repair for Powertrain Systems needed to earn an entry-level position at an automotive maintenance repair facility. Prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test. (A)	

## Biology (BIOL)

<i>Course deleted</i>		<i>effective Spring 2021</i>
11AH	Honors Biology for Science Majors I, 5 units, 4 lecture hours, 3 lab hours	

## Business Administration (BA)

<i>Course deleted</i>		<i>effective Spring 2021</i>
10H	Honors Introduction to Business, 3 units, 3 lecture hours	

<i>Course deleted</i>	<i>effective Spring 2021</i>
44 Women in Management, 3 units, 3 lecture hours, (See also Women's Studies 44)	
<i>Course deleted</i>	<i>effective Spring 2021</i>
48 e-Business, 3 units, 3 lecture hours, (Formerly eCommerce 1)	
<i>Course deleted</i>	<i>effective Spring 2021</i>
58 Business Morality and Ethics, 1.5 units, 1.5 lecture hours	

## Business & Technology (BT)

<i>New course</i>	<i>effective Spring 2021</i>
379 Introduction to Microsoft Office Applications, 1 lecture hour, 1.5 lab hours, (Repeats = 5), (Pass/No Pass)	
Prerequisite: None.	
Hands-on overview of essential Microsoft Office applications including Outlook, Word, Excel, Access, and PowerPoint.	

## Chemistry (CHEM)

<i>New course</i>	<i>effective Spring 2021</i>
99 Scientific Communication, 2 units, 2 lecture hours	
Advisory: Biology 11A, Chemistry 1A, or Physics 4A.	
Designed for students who have taken CHEM 1A, PHYS 4A, or BIOL 11A and wish to transfer for a science degree or pursue a career in the sciences. Focus on scientific communication. Techniques covered will include reading and evaluating literature, scientific writing, and presentations. (A, CSU)	
<i>Change: corequisite, advisory</i>	<i>effective Spring 2021</i>
100I Chemical Laboratory Internship, 2-6 units, 6-18 lab hours	
Corequisite: Chemistry 18L or 20. Advisory: None.	

## Chicano Latino Studies (CLS)

<i>Change: advisory</i>	<i>effective Spring 2021</i>
28 Ancient Mexico, 3 units, 3 lecture hours, (See also Anthropology 28)	
Advisory: English 1A.	

## Computer Information Technology (CIT)

<i>Course deleted</i>	<i>effective Spring 2021</i>
17 Windows, 2 units, 3 lecture hours, 1 lab hour, (9 weeks), (Formerly Computer Information Systems 14 and Information Systems 14)	
<i>Course deleted</i>	<i>effective Spring 2021</i>
20 Microsoft Office, 3 units, 3 lecture hours, 1 lab hour, (See also Business & Technology 25), (Formerly Information Systems 25)	
<i>Course deleted</i>	<i>effective Spring 2021</i>
24 Advanced Spreadsheets, 2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 20)	
<i>Course deleted</i>	<i>effective Spring 2021</i>
26 Database Fundamentals, 2 units, 4 lecture hours, 1 lab hour, (9 weeks), (See also Business & Technology 26), (Formerly Information Systems 6 and 26)	
<i>Course deleted</i>	<i>effective Spring 2021</i>
81 World Wide Web Research, 2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 8 and 41)	

## Counseling (COUN)

### *Course deleted*

*effective Spring 2021*

267 Financial Aid Money Management, 1 unit, 1 lecture hour, (Formerly Guidance Studies 167 and Counseling 167)

## Criminology (CRIM)

### *Change: advisory*

*effective Spring 2021*

1 Introduction to Criminology, 3 units, 3 lecture hours, (Formerly Administration of Justice 1)  
Advisory: None.

### *Change: advisory*

*effective Spring 2021*

7 Concepts of Enforcement Services, 3 units, 3 lecture hours, (Formerly Administration of Justice 7)  
Advisory: None.

### *Change: advisory*

*effective Spring 2021*

8 Criminal Investigation, 4 units, 3 lecture hours, 3 lab hours, (Formerly Administration of Justice 8)  
Advisory: None.

### *Change: advisory*

*effective Spring 2021*

15 Introduction to Police Ethics, 3 units, 3 lecture hours, (Formerly Administration of Justice 15)  
Advisory: None.

### *Change: title, advisory, description*

*effective Spring 2021*

18 The Psychology of Criminal Behavior, 3 units, 3 lecture hours, (See also Psychology 18)  
Advisory: English 1A.

Focus on the biological, psychological, developmental, social and cultural factors that influence the development of criminal behavior. Understand the relationship between psychological disorders outlined in the current Diagnostic and Statistical Manual of Mental Disorders, as well as psychopathy and sociopathy, and their influence on the development of criminal behavior. Explore the relationship between social inequities and the criminal justice system. Discuss the extent to which therapy and/or rehabilitation affects recidivism rates. (A, CSU)

## Dance (DANCE)

### *New Course*

*effective Spring 2021*

8B Intermediate Hip Hop Technique, 1 unit, 3 lab hours

**Prerequisite:** Dance 8 or demonstrated experience and skills at the beginning level as determined by instructor.

Intermediate technique and style of Hip Hop dance both historical and current emphasizing musicality, rhythms, and the movement required to develop intermediate Hip Hop skills. (A, CSU)

## Dental Assisting (DA)

### *New Course*

*effective Spring 2021*

1 Practice Management, 2 units, 2 lecture hours

**Prerequisite:** None.

Dental office management procedures, oral and written communication, purchasing, inventory and cost control of supplies, accounts payable and receiving, insurance billing, HIPAA, treatment planning and case presentation, electronic health records, scheduling of appointments, resume and interviewing skills. Legal parameters regarding state regulations and functions of dental auxiliaries. (A, CSU)

### *New Course*

*effective Spring 2021*

2 Infection Control for the Dental Setting, 2 units, 2 lecture hours, 1 lab hour

**Prerequisite:** None.

Principles of human anatomy, histology, and physiology as it relates to the head, neck and body systems in dentistry. Microbiology as it relates to the control of infection and disease, as well as bloodborne pathogen standards including sterilization and disinfection within the dental environment. Instruction on Dental Board of California (DBC), Occupational Health and Safety Administration (OSHA) regulations, and Center for Disease Control (CDC) and American Dental Association (ADA) recommendations. (A, CSU)

**New Course****effective Spring 2021****3 Dental Radiology, 3 units, 2 lecture hours, 3 lab hours****Prerequisite:** None.

Principles of radiology including history and current concepts relating to the production and projection of film and digital dental radiographs. Physics of radiation, biologic effects, and principles of radiology safety and standard precautions associated with radiation exposure, including bitewing, bisection and paralleling techniques. Laboratory portion of study, students expose, process mount and evaluate dental radiographs for diagnostic purposes. Upon successful completion of this course and DA 3A, the student will receive their radiographic proficiency state certificate and be eligible to sit for the national radiographic proficiency examination. (A, CSU)

**New Course****effective Spring 2021****3A Clinical Dental Radiology, 1 unit, 1 lecture hour, 0.5 lab hour****Corequisite:** Dental Assisting 3.

Instruction in methods of exposure and evaluation of clinical diagnostic quality dental x-rays on patients. (A, CSU)

**New Course****effective Spring 2021****19 Work Experience (Cooperative), Occupational, 1-8 units**

**Corequisite:** Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to the student's major. Collaborative learning objectives established specific to the particular occupational field. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

**Developmental Services (DEVSER)****Change: prerequisite****effective Spring 2021****284 Reading Comprehension 2, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 78 and English 278)**

**Prerequisite:** Developmental Services 283. **Advisory:** Not recommended for students learning English as a second language. Counselor placement.

**Change: prerequisite****effective Spring 2021****286 Essay Development and College Writing, 2.5 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Formerly English 82 and English 282)**

**Prerequisite:** Developmental Services 285. **Advisory:** Counselor placement. Prior to entering this course, it is recommended that students be able to compose a short, organized essay. Not recommended for students learning English as a second language.

**Electrical Systems Technology (EST)****Course deleted****effective Spring 2021****19 Work Experience (Cooperative), Occupational, 1-8 units, (Formerly Electronic Technology 19)****Change: title, units, hours, advisory****effective Spring 2021****50 Introduction to Electrical Systems Technology, 2 units, 2 lecture hours, (Formerly Electronic Technology 50)****Advisory:** None.**Change: advisory****effective Spring 2021****51 Direct Current Fundamentals of Electronics, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 51)****Advisory:** Electrical Systems Technology 53.**Change: advisory****effective Spring 2021****52 Alternating Current Fundamentals, 3 units, 3 lecture hours, 1 lab hour****Advisory:** Applied Technology 10 and Electrical Systems Technology 51.**Change: advisory****effective Spring 2021****53 Lab Safety Practices, 2 units, 2 lecture hours, 1 lab hour, (Formerly Electronic Technology 57)****Advisory:** None.**Change: advisory****effective Spring 2021****54 Integrated Devices, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 52)****Advisory:** Electrical Systems Technology 52.

- Change: advisory** **effective Spring 2021**  
**55A Digital Concepts, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 53)**  
**Advisory:** Electrical Systems Technology 51.
- Change: advisory** **effective Spring 2021**  
**55B Facility Automation, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 50.
- Change: units, hours, advisory, description** **effective Spring 2021**  
**55C SCADA Systems, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 56B.  
 SCADA software and HMI hardware applications. (A, CSU)
- Change: advisory** **effective Spring 2021**  
**56A Wiring Methods, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 54.
- Change: advisory** **effective Spring 2021**  
**56B Motor Controls, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 54.
- Change: title, advisory** **effective Spring 2021**  
**56C Variable Frequency Drives & Motion Control, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 54, 56B, and 58.
- Change: advisory** **effective Spring 2021**  
**57A Analog Communications, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 54 and 55A.
- Change: advisory** **effective Spring 2021**  
**57B Digital Communications, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 57A.
- Change: advisory** **effective Spring 2021**  
**57C Voice and Data Cabling, 3 units, 3 lecture hours, 1 lab hour**  
**Advisory:** Electrical Systems Technology 54.
- Change: advisory** **effective Spring 2021**  
**58 Programmable Logic Controllers, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 58)**  
**Advisory:** Electrical Systems Technology 56B.
- Change: advisory** **effective Spring 2021**  
**59 Instrumentation Systems, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 60)**  
**Advisory:** Electrical Systems Technology 50.
- Change: advisory** **effective Spring 2021**  
**60 A+ PC Maintenance and Repair, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 61)**  
**Advisory:** Electrical Systems Technology 51.
- Change: advisory, description** **effective Spring 2021**  
**61 Networking Fundamentals, 3 units, 3 lecture hours, 1 lab hour, (Formerly Electronic Technology 59)**  
**Advisory:** Electrical Systems Technology 55A and 60.  
 Principles and structure of network addressing including applications and equipment operation. (A, CSU)
- Change: title, prerequisite, advisory, description** **effective Spring 2021**  
**62 Commercial & Industrial Networking, 3 units, 3 lecture hours, 1 lab hour**  
**Prerequisite:** None. **Advisory:** Electrical Systems Technology 61.  
 Applications of the architecture, components, protocols, routers, and switches used in commercial and industrial networking environments. (A, CSU)
- Course deleted** **effective Spring 2021**  
**63 Scaling Networks, 3 units, 3 lecture hours, 1 lab hour**
- Course deleted** **effective Spring 2021**  
**64 Advanced Networking and Management, 3 units, 3 lecture hours, 1 lab hour**

<i>Change: advisory</i>		<i>effective Spring 2021</i>
80	<b>Industrial Photovoltaics, 3 units, 3 lecture hours, 1 lab hour</b> Advisory: Electrical Systems Technology 54.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
81	<b>Photovoltaic Systems, 3 units, 3 lecture hours, 1 lab hour</b> Advisory: Electrical Systems Technology 54 and 56A.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
82A	<b>Introduction to Robotics, 3.5 units, 3 lecture hours, 2 lab hours</b> Advisory: Electrical Systems Technology 51.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
82B	<b>Robotic Applications, 3.5 units, 3 lecture hours, 2 lab hours</b> Prerequisite: Electrical Systems Technology 82A. <b>Advisory:</b> None.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
83A	<b>Robotics, Industrial - Introduction, 3 units, 3 lecture hours, 1 lab hour</b> Advisory: Electrical Systems Technology 54.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
83B	<b>Robotics, Industrial – Advanced Application, 3 units, 3 lecture hours, 1 lab hour</b> Advisory: Electrical Systems Technology 83A.	
<i>Change: hours, advisory</i>		<i>effective Spring 2021</i>
84A	<b>Introduction to Biomedical Electronics, 3 units, 3 lecture hours, 1 lab hour</b> Advisory: Electrical Systems Technology 51 and 52.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
96A	<b>National Electrical Code Part 1, 3 units, 3 lecture hours</b> Advisory: Electrical Systems Technology 55B, 56A, and 56B.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
96B	<b>National Electrical Code Part 2, 3 units, 3 lecture hours</b> Advisory: Electrical Systems Technology 55B, 56A, and 56B.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
96C	<b>National Electrical Code Part 3, 3 units, 3 lecture hours</b> Advisory: Electrical Systems Technology 55B, 56A, and 56B.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
96D	<b>National Electrical Code-Electrical Safety, 3 units, 3 lecture hours</b> Advisory: Electrical Systems Technology 55B, 56A, and 56B.	

## English for Multi-Lingual Students (EMLS)

<i>Course deleted</i>		<i>effective Spring 2021</i>
263R	<b>Low Academic Intermediate Reading and Vocabulary, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English as a Second Language 63R and 263R)</b>	
<i>Course deleted</i>		<i>effective Spring 2021</i>
263W	<b>Low Academic Intermediate Writing and Grammar, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54A and English as a Second Language 63, 63W and 263W)</b>	

## Film (FILM)

<i>Change: advisory</i>		<i>effective Spring 2021</i>
1	<b>Introduction to Film Studies, 3 units, 3 lecture hours</b> Advisory: English 1A.	
<i>Change: advisory</i>		<i>effective Spring 2021</i>
2A	<b>History of Cinema 1895-1960, 3 units, 3 lecture hours, (Formerly Film 1A)</b> Advisory: English 1A.	

*Change: advisory* *effective Spring 2021*  
 2B History of Cinema 1960-Present, 3 units, 3 lecture hours, (Formerly Film 1B)  
 Advisory: English 1A.

*Change: advisory* *effective Spring 2021*  
 3 Film and Culture, 3 units, 3 lecture hours  
 Advisory: English 1A.

*Change: advisory* *effective Spring 2021*  
 5 Digital Filmmaking, 3 units, 3 lecture hours  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 6 Film Genres, 3 units, 3 lecture hours  
 Advisory: English 1A.

*Change: advisory* *effective Spring 2021*  
 7 Introduction to Screenwriting, 3 units, 3 lecture hours  
 Advisory: English 1A.

## Fire Technology (FIRET)

*Change: advisory* *effective Spring 2021*  
 1 Fire Protection Organization, 3 units, 3.27 lecture hours, (Formerly Fire Science 1)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 2 Fire Prevention Technology, 3 units, 8.4 lecture hours, (7 weeks), (Formerly Fire Science 6)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 3 Fire Protection Equipment and Systems, 3 units, 8.4 lecture hours, (7 weeks), (Formerly Fire Science 7)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 4 Building Construction for Fire Protection, 3 units, 3.27 lecture hours, (Formerly Fire Science 5)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 5 Fire Behavior and Combustion, 3 units, 3.27 lecture hours, (Formerly Fire Science 3)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 8 Fire Hydraulics, 3 units, 8.4 lecture hours, (7 weeks), (Formerly Fire Science 8)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 9 Fire Fighting Practices, 3 units, 8.4 lecture hours, (7 weeks), (Formerly Fire Science 9)  
 Advisory: None.

*Change: advisory* *effective Spring 2021*  
 14 Principles of Fire & Emergency Services Safety & Survival, 3 units, 8.4 lecture hours, (7 weeks)  
 Advisory: None.

*New Course* *effective Spring 2021*  
 19 Work Experience (Cooperative), Occupational, 1-8 units

**Corequisite:** Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to fire technology. Collaborative learning objectives established specific to the particular occupational field. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

- Change: description** **effective Spring 2021**  
**23 Company Officer 2A: Human Resource Management for Company Officers, 2 units, 2.34 lecture hours, (Formerly Fire Technology 223)**  
**Prerequisite:** Completion of the Fire Fighter II course or equivalent.  
Topics include the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene. (A, CSU)
- Change: prerequisite, description** **effective Summer 2021**  
**23 Company Officer 2A: Human Resource Management for Company Officers, 2 units, 2.34 lecture hours, (Formerly Fire Technology 223)**  
**Prerequisite:** None.  
Topics include the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene. Must meet state fire training prerequisites. (A, CSU)
- Change: description** **effective Spring 2021**  
**24 Company Officer 2B: General Administrative Functions for Company Officers, 1 unit, 1.12 lecture hours, (Formerly Fire Technology 224)**  
**Prerequisite:** Completion of the Fire Fighter II course or equivalent.  
Topics include general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. (A, CSU)
- Change: prerequisite, description** **effective Summer 2021**  
**24 Company Officer 2B: General Administrative Functions for Company Officers, 1 unit, 1.12 lecture hours, (Formerly Fire Technology 224)**  
**Prerequisite:** None.  
Topics include general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. Must meet state fire training prerequisites. (A, CSU)
- Change: description** **effective Spring 2021**  
**25 Company Officer 2C: Fire Inspections and Investigations for Company Officers, 2 units, 2.23 lecture hours, (Formerly Fire Technology 225)**  
**Prerequisite:** Completion of the Fire Fighter II course or equivalent.  
Topics include conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. (A, CSU)
- Change: prerequisite, description** **effective Summer 2021**  
**25 Company Officer 2C: Fire Inspections and Investigations for Company Officers, 2 units, 2.23 lecture hours, (Formerly Fire Technology 225)**  
**Prerequisite:** None.  
Topics include conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. Must meet state fire training prerequisites. (A, CSU)
- Change: description** **effective Spring 2021**  
**26 Company Officer 2D: All-Risk Command Operations for Company Officers, 2 units, 2.23 lecture hours, (Formerly Fire Technology 226)**  
**Prerequisite:** Completion of the Fire Fighter II course or equivalent.  
Topics include conducting incident size-up, developing and implementing an initial plan of action involving single and multiunit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis. (A, CSU)
- Change: prerequisite, description** **effective Summer 2021**  
**26 Company Officer 2D: All-Risk Command Operations for Company Officers, 2 units, 2.23 lecture hours, (Formerly Fire Technology 226)**  
**Prerequisite:** None.  
Topics include conducting incident size-up, developing and implementing an initial plan of action involving single and multiunit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis. Must meet state fire training prerequisites. (A, CSU)



- Change: description** **effective Spring 2021**  
**27 Company Officer 2E: Wildland Incident Operations for Company Officers, 2 units, 2.23 lecture hours, (Formerly Fire Technology 227)**  
**Prerequisite:** Completion of the Fire Fighter II course or equivalent. All Risk Command Operations for Company Officers S-290 Intermediate Fire Behavior (classroom delivery only).  
Topics include information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. (A, CSU)
- Change: prerequisite, description** **effective Summer 2021**  
**27 Company Officer 2E: Wildland Incident Operations for Company Officers, 2 units, 2.23 lecture hours, (Formerly Fire Technology 227)**  
**Prerequisite:** None.  
Topics include information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. Must meet state fire training prerequisites. (A, CSU)
- Change: description** **effective Spring 2021**  
**29 Intermediate Wildland Fire Behavior, 2 units, 2.25 lecture hours**  
**Prerequisite:** Completion of CalFire or NWCG S-190.  
Topics include preparing the prospective supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary, and the instructor should stress local conditions. (A, CSU)
- Change: prerequisite, description** **effective Summer 2021**  
**29 Intermediate Wildland Fire Behavior, 2 units, 2.25 lecture hours**  
**Prerequisite:** None.  
Topics include preparing the prospective supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary, and the instructor should stress local conditions. Must meet state fire training prerequisites. (A, CSU)
- Change: advisory** **effective Spring 2021**  
**50L Instructor I Instructional Methodology, 2 units, 2.25 lecture hours, (Formerly Fire Technology 150L)**  
**Advisory:** None.
- New Course** **effective Spring 2021**  
**51A Basic Fire Investigations, 1.5 units, 1.5 lecture hours, 0.7 lab hour**  
**Prerequisite:** None  
Topics include information on securing the fire scene and determining the origin and cause of the fire. Topics include responsibilities of a fire investigator, securing the fire ground, conducting an exterior and interior survey, analyzing fire patterns, interpreting individual fire patterns, discriminating the effects of explosions, examining and removing fire debris, reconstructing the area of origin, inspecting the performance of building systems. Must meet state fire training course prerequisites. (A, CSU)
- New Course** **effective Spring 2021**  
**51B Evidence and Documentation, 1 unit, 1.17 lecture hours, 0.7 lab hour**  
**Prerequisite:** None  
Topics include information on scene documentation and evidence collection/preservation. Topics include photographing the scene, diagramming the scene, constructing investigative notes, processing evidence and establishing chain of custody, processing victims and fatalities, selecting evidence for analysis, maintaining a chain of custody, preparing a fire investigation report, and disposing of evidence. Must meet state fire training course prerequisites. (A, CSU)
- New Course** **effective Spring 2021**  
**51C Preparation for Legal Proceedings, 1 unit, 1 lecture hour, 1.23 lab hours**  
**Prerequisite:** None  
Topics include information on legal considerations for a court proceeding. Topics include coordinating expert resources, formulating an opinion, presenting investigative findings, and testifying during legal proceedings. You must meet state fire training prerequisites. (A, CSU)

**Change: description****effective Spring 2021****130B Basic Fire Academy - Part 2, 14.5 units, 8.42 lecture hours, 19.5 lab hours****Prerequisite:** Fire Technology 130A.

Topics include skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The seven overarching themes of the California State Fire Fighter I curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD. An intensive physical fitness training program is also part of this course; course is offered on an intensive daytime format or an extended evening and weekend format. (A)

**Change: advisory****effective Spring 2021****131 Emergency Medical Technician I, 9.5 units, 8 lecture hours, 5.33 lab hours, (Formerly Fire Science and Fire Technology 31)****Prerequisite:** Possession of a valid CPR card that proves training equivalent to the American Heart Associations' Guideline 2000 for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Health Provider Level.**Advisory:** None.**Change: prerequisite, advisory****effective Spring 2021****133 Emergency Medical Technician-Paramedic-Didactic, 21.5 units, 12.5 lecture hours, 11.5 lab hours, (24 weeks)****Prerequisite:** None. **Advisory:** None.**Change: prerequisite****effective Spring 2021****136 Emergency Medical Technician-Paramedic Clinical and Field Work, 13 units, 1.5 lecture hours, 43.8 lab hours, (15 weeks)****Prerequisite:** None.**Course deleted****effective Spring 2021****150C Fire Management 1, 2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50C)****Course deleted****effective Spring 2021****150D Fire Command 1A, 2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50D)****Course deleted****effective Spring 2021****150F Fire Investigation 1A, 2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50F)****Course deleted****effective Spring 2021****150G Fire Prevention 1A, 2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50G)****Course deleted****effective Spring 2021****150H Fire Prevention 1B, 2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50H)****Course deleted****effective Spring 2021****150J Fire Investigation 1B, 2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Technology 50J)****Change: description****effective Spring 2021****150N Instructor II Instructional Development, 2 units, 8.4 lecture hours, (5 weeks)****Prerequisite:** Fire Technology 50L.

Topics include intermediate level professional instructor to perform his or her duties safely, effectively, and competently. At the end of this course, candidates for Instructor II certification will be able to develop lesson plans and evaluation instruments, teach and deliver instruction, and evaluate and coach other instructors. The Instructor II will also be able to analyze resources and formulate a program budget. (A)

**Change: prerequisite****effective Summer 2021****150N Instructor II Instructional Development, 2 units, 8.4 lecture hours, (5 weeks)****Prerequisite:** None.**Change: description****effective Spring 2021****160A Confined Space Rescue Technician, 1 unit, 0.56 lecture hour, 1.67 lab hours, (Pass/No Pass)****Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include identifying confined spaces and permit-required confined spaces, the hazards associated with permit required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team. (A)

**Change: prerequisite, description****effective Summer 2021****160A Confined Space Rescue Technician, 1 unit, 0.56 lecture hour, 1.67 lab hours, (Pass/No Pass)****Prerequisite:** None.

Topics include identifying confined spaces and permit-required confined spaces, the hazards associated with permit required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team. Must meet state fire training prerequisites. (A)

**New Course****effective Spring 2021****160C Rescue Systems 2, 0.5 unit, 0.22 lecture hour, 2.01 lab hours, (Pass/No Pass)****Prerequisite:** None

Provides advanced heavy rescue system techniques. Key topics include: Structural building types, wood and mechanical shores, crib capacities, floor weight calculations, building search, confined space considerations, damaged structure hazard assessment, use of power tools, air bags, and USAR ICS. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160D Rescue Systems 3, 0.5 unit, 0.22 lecture hour, 2.01 lab hours, (Pass/No Pass)****Prerequisite:** None

Bridges the training gap between the California State Fire Training Rescue Systems 2 Advanced Rescue Skills course and the Federal Emergency Management Agency Structural Collapse Technician course. Key topics include: powder actuated tools, pneumatic shores, additional tools and techniques for breaking and breaching, cutting a tensioned cable, the "O" course, rigging, and crane operations. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160E Open Water Rescue, 0.5 unit, 0.44 lecture hour, 0.9 lab hour, (Pass/No Pass)****Prerequisite:** None

Topics include improving an individual's level of comfort and confidence for safely and proficiently performing contact rescues in static and surf water conditions. Safety is strongly emphasized throughout the class. Risk management is reinforced during every skill to establish your level of comfort in the water and to identify and overcome your limitations. The emphasis on risk management helps you determine if your actions meet your agencies SOPS/SOGS in the determination of a rescue being a "offensive" or "defensive" operation. Swimming, stroke technique and body positioning in the water are covered. "In water" skills for students include how to read and understand water flow, reading and understanding surf, contact rescues using rescue buoy devices and boards, dealing with combatant victims, performing self-rescues, and rescues of multiple victims both conscious and unconscious. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160F Personal Watercraft Rescue Operations, 0.5 unit, 0.33 lecture hour, 0.56 lab hour, (Pass/No Pass)****Prerequisite:** None

Recognize regulations governing the operation of personal watercraft on all waterways. Demonstrate a working knowledge of personal watercraft safety. Identify the procedure of report filing for any personal watercraft incident. Understand the operations of a personal watercraft jet drive system. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160G Rapid Intervention Crew (RIC) Operations, 0.4 unit, 0.11 lecture hour, 1.01 lab hours, (Pass/No Pass)****Prerequisite:** None

Topics include rescuing a downed firefighter in an immediately dangerous to life and health (IDLH) environment in the continuing effort to reduce the number of firefighter injuries and deaths that occur regularly. Tragedies suffered by fellow firefighters from departments across the country are the basis for the training evolutions and scenarios. We will show you how to use these LODD studies as training and prevention tools throughout your career. Recognize regulations governing the operation of personal watercraft on all waterways. Demonstrate a working knowledge of personal watercraft safety. Identify the procedure of report filing for any personal watercraft incident. Understand the operations of a personal watercraft jet drive system. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160H Rescue Boat Operations, 0.5 unit, 0.45 lecture hour, 0.89 lab hour, (Pass/No Pass)****Prerequisite:** None

Introduce emergency service personnel to the codes and regulations that impact rescue boat operations. Provide emergency service personnel with a thorough knowledge of rescue boat operations. Prepare emergency service personnel with a strong working knowledge of rescue boat operations in both static and dynamic water. Provide emergency service personnel an opportunity to apply their knowledge through demonstrations. Provide emergency service personnel with knowledge for maintaining and performing inspections on rescue boats. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160I Rope Rescue Technician, 0.5 unit, 0.22 lecture hour, 2.01 lab hours, (Pass/No Pass)****Prerequisite:** None

Students will undergo competency testing for high angle rescue. The scope of the program is to familiarize participants with the high angle environment and experience; and for them to safely participate in the engineering and operation of simple to complex rescue systems. Must meet State fire training course prerequisites. (A)

**New Course****effective Spring 2021****160J Trench Rescue Technician, 0.4 unit, 0.24 lecture hour, 0.62 lab hour, (Pass/No Pass)****Prerequisite:** None

Topics include working safely and efficiently in a trench rescue environment. This hands-on training program will cover topics that include: Trench and Excavation Regulations, Understanding Soil, Trench Configurations, Trench Hazards, Rescue Team Preparation, Incident Response, Initial On Scene and Pre-Entry Operations, Shoring Systems and Components, Installation of Shoring Systems, Victim Rescue and Recovery and Incident Termination. Must meet State fire training course prerequisites. (A)

**Course deleted****effective Spring 2021****200 Advanced Company/Chief Officer, 0.3-2.5 units, 1-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)****Course deleted****effective Spring 2021****201 Advanced Apparatus Driver/Operator, 0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)****Course deleted****effective Spring 2021****202 Advanced Firefighter, 0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)****Course deleted****effective Spring 2021****203 Advanced Emergency Medical Technician-Paramedic, 0.5-2 units, 2-6 lab hours, (Pass/No Pass), (Open Entry/Open Exit)****Course deleted****effective Spring 2021****204 Advanced Technical Rescue, 0.5-2 units, 2-6 lab hours, (Pass/No Pass), (Open Entry/Open Exit)****Course deleted****effective Spring 2021****205 Advanced Fire Prevention/Fire Investigation, 0.5-2.5 units, 2-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)****Change: description****effective Spring 2021****230A Fire Apparatus Driver Operator 1A, 1 unit, 0.88 lecture hour, 1.35 lab hours, (Pass/No Pass)**

**Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, back, maneuver, and turn a fire apparatus in a variety of conditions; and operate all fixed systems and equipment on a fire apparatus.

**Change: prerequisite, description****effective Summer 2021****230A Fire Apparatus Driver Operator 1A, 1 unit, 0.88 lecture hour, 1.35 lab hours, (Pass/No Pass)****Prerequisite:** None.

Topics include fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, back, maneuver, and turn a fire apparatus in a variety of conditions; and operate all fixed systems and equipment on a fire apparatus. Must meet state fire training prerequisites.

**Change: description****effective Spring 2021****230B Fire Apparatus Driver Operator 1B, 1 unit, 0.89 lecture hour, 1.34 lab hours, (Pass/No Pass)**

**Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include routine tests, inspections, and servicing functions; producing hand, master, and foam fire streams, relay pump operations; and supplying water to fire sprinkler and standpipe systems.

**Change: prerequisite, description****effective Summer 2021****230B Fire Apparatus Driver Operator 1B, 1 unit, 0.89 lecture hour, 1.34 lab hours, (Pass/No Pass)****Prerequisite:** None.

Topics include routine tests, inspections, and servicing functions; producing hand, master, and foam fire streams, relay pump operations; and supplying water to fire sprinkler and standpipe systems. Must meet state fire training prerequisites.

**Change: description****effective Spring 2021****230C Fire Apparatus Driver/Operator – Aerial Apparatus, 1.5 units, 1.13 lecture hours, 1.1 lab hours, (Pass/No Pass)**

**Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include routine tests, inspections, and servicing functions on the systems and components unique to an aerial apparatus; maneuvering, positioning, and stabilizing an aerial apparatus; maneuvering, positioning, and lowering the aerial device; and deploying and operating an elevated master stream.

**Change: prerequisite, description****effective Summer 2021****230C Fire Apparatus Driver/Operator – Aerial Apparatus, 1.5 units, 1.13 lecture hours, 1.1 lab hours, (Pass/No Pass)****Prerequisite:** None.

Topics include routine tests, inspections, and servicing functions on the systems and components unique to an aerial apparatus; maneuvering, positioning, and stabilizing an aerial apparatus; maneuvering, positioning, and lowering the aerial device; and deploying and operating an elevated master stream. Must meet state fire training prerequisites.

**Change: description****effective Spring 2021****230D Fire Apparatus Driver/Operator – Water Tender, 0.5 unit, 0.36 lecture hour, 1.42 lab hours, (Pass/No Pass)**

**Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include routine tests, inspections, and servicing functions unique to a water tender; maneuvering and positioning a water tender at a water shuttle fill site; and establishing, maneuvering, and positioning at a water shuttle dumpsite.

**Change: prerequisite, description****effective Summer 2021****230D Fire Apparatus Driver/Operator – Water Tender, 0.5 unit, 0.36 lecture hour, 1.42 lab hours, (Pass/No Pass)****Prerequisite:** None.

Topics include routine tests, inspections, and servicing functions unique to a water tender; maneuvering and positioning a water tender at a water shuttle fill site; and establishing, maneuvering, and positioning at a water shuttle dumpsite. Must meet state fire training prerequisites.

**Change: description****effective Spring 2021****230E Fire Apparatus Driver/Operator – Wildland Fire Apparatus, 0.5 unit, 0.25 lecture hour, 1.09 lab hours, (Pass/No Pass)**

**Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus, and operating a wildland fire apparatus and producing an effective fire stream.

**Change: prerequisite, description****effective Summer 2021****230E Fire Apparatus Driver/Operator – Wildland Fire Apparatus, 0.5 unit, 0.25 lecture hour, 1.09 lab hours, (Pass/No Pass)****Prerequisite:** None.

Topics include routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus, and operating a wildland fire apparatus and producing an effective fire stream. Must meet State Fire Training course prerequisites.

**Course deleted****effective Spring 2021****240A Fire Inspector 1A, 1 unit, 0.93 lecture hour, 0.41 lab hour, (Pass/No Pass)****Course deleted****effective Spring 2021****240B Fire Inspector 1B, 1 unit, 1.2 lecture hours, 0.14 lab hour, (Pass/No Pass)****Course deleted****effective Spring 2021****240C Fire Inspector 1C, 1 unit, 1.34 lecture hours, (Pass/No Pass)****Course deleted****effective Spring 2021****240D Fire Inspector 1D, 0.5 unit, 0.89 lecture hour, (Pass/No Pass)**

**Change: prerequisite, description****effective Spring 2021****260A Chief Fire Officer 3A, 1 unit, 0.85 lecture hour, 0.6 lab hour, (Pass/No Pass)**

**Prerequisite:** Fire Technology 23, 24, 25, 26, 27, and 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program.

**Change: prerequisite, description****effective Summer 2021****260A Chief Fire Officer 3A, 1 unit, 0.85 lecture hour, 0.6 lab hour, (Pass/No Pass)****Prerequisite:** None.

Topics include knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program. Must meet state fire training prerequisites.

**Change: prerequisite, description****effective Spring 2021****260B Chief Fire Officer 3B, 0.5 unit, 0.5 lecture hour, 0.5 lab hour, (Pass/No Pass)**

**Prerequisite:** Fire Technology 23, 24, 25, 26, 27, and 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding.

**Change: prerequisite, description****effective Summer 2021****260B Chief Fire Officer 3B, 0.5 unit, 0.5 lecture hour, 0.5 lab hour, (Pass/No Pass)****Prerequisite:** None.

Topics include knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding. Must meet state fire training prerequisites.

**Change: prerequisite, description****effective Spring 2021****260C Chief Fire Officer 3C, 1 unit, 0.84 lecture hour, 0.5 lab hour, (Pass/No Pass)**

**Prerequisite:** Fire Technology 23, 24, 25, 26, 27, and 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ.

**Change: prerequisite, description****effective Summer 2021****260C Chief Fire Officer 3C, 1 unit, 0.84 lecture hour, 0.5 lab hour, (Pass/No Pass)****Prerequisite:** None.

Topics include knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ. Must meet state fire training prerequisites.

**Change: description****effective Spring 2021****260D Chief Fire Officer 3D, 0.5 unit, 0.82 lecture hour, 0.52 lab hour, (Pass/No Pass)**

**Prerequisite:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Topics include knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records.

**Change: prerequisite, description** **effective Summer 2021**

**260D Chief Fire Officer 3D, 0.5 unit, 0.82 lecture hour, 0.52 lab hour, (Pass/No Pass)**

**Prerequisite:** None.

Topics include knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records. Must meet state fire training prerequisites.

**Change: prerequisite, description** **effective Summer 2021**

**265 I-300, Intermediate ICS, 1 unit, 1.34 lecture hours, (Pass/No Pass)**

**Prerequisite:** None.

ICS fundamentals review; incident/event assessment and agency guidance in establishing incident objectives; unified command; incident resource management; the planning process; demobilization; transfer of command; close out. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. Must meet state fire training prerequisites.

**Course deleted** **effective Spring 2021**

**269 Advanced Firefighter Topics, 0.1-2 units, 1-40 lecture hours, 1-60 lab hours, (1-18 weeks), (Pass/No Pass), (Open Entry/Open Exit)**

## Graphic Communications (GRC)

**Change: title, advisory, description** **effective Spring 2021**

**15 Web Design, 4 units, 3 lecture hours, 3 lab hours**

**Advisory:** None.

Adobe Brackets or comparable HTML editor, CSS, and components of Adobe Design Suite with emphasis on graphic design principles and digital photography included in exercises and project work. Skill development in recognition of artwork appropriate for web site design. Students capture images, design, create, and post working web sites using Adobe Creative Cloud. (A, CSU, UC)

**Change: advisory, description** **effective Spring 2021**

**17 Adobe Illustrator, 3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 17)**

**Advisory:** None.

Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction. (A, CSU)

**Change: advisory, description** **effective Spring 2021**

**20A Intro to Applied Graphics - Adobe Tools, 3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 20 and Printing Technology 20)**

**Advisory:** None.

Overview of graphic communication processes as related to the graphics industry. Terminology, input/output considerations, current trends, and hands-on projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign for production operations. (A, CSU)

**Change: advisory, description** **effective Spring 2021**

**20B Intro to Applied Graphics - Media, 3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 18)**

**Advisory:** None.

Introductory production methods of graphic communication systems incorporating print media, web design, video production, and prototyping. Project work explores considerations and limitations of software for output. Units include professional development for the workplace. (A, CSU)

**Change: advisory, description** **effective Spring 2021**

**22 Digital Media, 3 units, 2 lecture hours, 3 lab hours**

**Advisory:** None.

Introduction to digital media. Project work using an assortment of current software. Combine images, audio and video into cross-platform productions. Digital slide shows, image capture, and short video. (A, CSU)

**Change: advisory, description** **effective Spring 2021**

**23 Video Editing - Adobe Premiere Pro, 3 units, 2 lecture hours, 3 lab hours**

**Advisory:** Graphic Communications 20B, 27, 32, 320B, 327, or 332.

Digital video editing techniques using Adobe Premiere Pro. (A, CSU)

**Change: advisory, description****effective Spring 2021****24A Intro 2-D Animation with Adobe Animate, 3 units, 2 lecture hours, 3 lab hours****Advisory:** None.

Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects. (A, CSU, UC)

**Change: advisory, description****effective Spring 2021****27 Digital Video Production, 3 units, 2 lecture hours, 3 lab hours****Advisory:** None.

Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, and working with professional editing software. Students complete short exercises and create video projects. (A, CSU, UC)

**Change: advisory, description****effective Spring 2021****28 Independent Study - Graphics, 1-3 units, 3-9 lab hours****Advisory:** Graphic Communications 15, 17, 20A, 22, 27, 30.

Individual graphic projects designed to allow the student to expand on a specific area of previous study. The production of a pre-employment portfolio with field trips to professional studios, shops, television stations, newspapers or galleries. (A, CSU)

**Change: advisory, description****effective Spring 2021****30 Adobe InDesign/Professional Publishing, 3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 30)****Advisory:** None.

Adobe InDesign page layout software. Emphasis on production for print, e-book, and emerging technologies. Components from Adobe Photoshop and Adobe Illustrator programs. (A, CSU)

**Change: advisory, description****effective Spring 2021****31 Intermediate Photoshop, 3 units, 2 lecture hours, 3 lab hours****Advisory:** None.

Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications. (A, CSU, UC)

**Change: title, advisory, description****effective Spring 2021****32 Cinematography, 3 units, 2 lecture hours, 3 lab hours****Advisory:** None.

Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction. (A, CSU, UC)

**Change: advisory, description****effective Spring 2021****34 Introduction to 3-D Animation, 3 units, 2 lecture hours, 3 lab hours****Advisory:** None.

Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering. (A, CSU, UC)

**New course****effective Spring 2021****38 Video Post Production, 2 units, 2 lecture hours****Advisory:** Graphic Communications 23 or 323.

This course provides necessary skill development for adjusting video projects during the editing process. It will become part of the new Video degree/certificate program. (A, CSU)

**Change: corequisite, advisory, description****effective Spring 2021****39A Introduction to Graphic Design, 3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 39 and Graphic Communications 39)****Corequisite:** Graphic Communications 20A or 320A. **Advisory:** None.

Principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between formal elements and symbolic content. (A, CSU, UC)

**Change: advisory, description****effective Spring 2021****40A Intermediate Graphic Design, 3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 40 and Graphic Communications 40)****Prerequisite:** Graphic Communications 39A. **Advisory:** None.

Advanced principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content. (A, CSU, UC)



- Change: advisory, description** **effective Spring 2021**
- 41 Visual Communications, 3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 41)**  
**Advisory:** None.  
 Survey of the significant techniques and examples of visual communication as employed by the mass media, including newspapers, magazines, television, and advertising. Discussion and demonstration of the tools used in analyzing visual communication. Creation and analysis of images for print, web, and video. (A, CSU, UC)
- Change: title, advisory** **effective Spring 2021**
- 47 Introduction to Media Appreciation, 3 units, 3 lecture hours**  
**Advisory:** None.
- Change: advisory** **effective Spring 2021**
- 51 Storyboarding, 1 unit, 2 lecture hours, (9 weeks)**  
**Advisory:** None.
- Change: advisory, description** **effective Spring 2021**
- 53 Adobe After Effects, 3 units, 2 lecture hours, 3 lab hours**  
**Advisory:** None.  
 Introduction to motion graphics and video post-processing using Adobe After Effects. Projects incorporate a series of techniques used to create video special effects. (A, CSU)
- Change: repeats, advisory** **effective Spring 2021**
- 300A Adobe ACA Certification, 0.5-3 lab hours, (Pass/No Pass), (Repeats = 99), (Open Entry/Open Exit)**  
**Advisory:** None.
- Change: title, open entry/open exit status, advisory** **effective Spring 2021**
- 315 Web Design, 3 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 317 Adobe Illustrator, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 320A Intro to Applied Graphics - Adobe Tools, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: open entry/open exit status, advisory, description** **effective Spring 2021**
- 320B Intro to Applied Graphics – Media, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.  
 Introductory production methods of graphic communication systems incorporating print media, web design, video production, and prototyping. Project work explores considerations and limitations of software for output. Units include professional development for the workplace.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 322 Digital Media, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: repeats, open entry/open exit status, advisory** **effective Spring 2021**
- 323 Video Editing - Adobe Premiere Pro, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** Graphic Communications 27, 32, 320B, 327, or 332.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 324A Intro 2-D Animation with Adobe Animate, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 327 Digital Video Production, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 330 Adobe Indesign/Professional Publishing, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.
- Change: open entry/open exit status, advisory** **effective Spring 2021**
- 331 Intermediate Photoshop, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.

**Change: title, open entry/open exit status, advisory** **effective Spring 2021**  
**332 Cinematography, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.

**Change: open entry/open exit status, advisory** **effective Spring 2021**  
**334 Introduction to 3-D Animation, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.

**New course** **effective Spring 2021**  
**338 Video Post Production, 2 lecture hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** Graphic Communications 23 or 323.  
 This course provides necessary skill development for adjusting video projects during the editing process. It will become part of the new Non-Credit Video certificate program.

**Change: open entry/open exit status, corequisite, advisory** **effective Spring 2021**  
**339A Introduction to Graphic Design, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Corequisite:** Graphic Communications 20A or 320A. **Advisory:** None.

**Change: open entry/open exit status, prerequisite, advisory** **effective Spring 2021**  
**340A Intermediate Graphic Design, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Prerequisite:** Graphic Communications 39A. **Advisory:** None.

**Change: open entry/open exit status, advisory** **effective Spring 2021**  
**341 Visual Communication, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.

**Change: title, open entry/open exit status, advisory** **effective Spring 2021**  
**347 Introduction to Media Appreciation, 3 lecture hours, (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.

**Change: open entry/open exit status, advisory** **effective Spring 2021**  
**351 Storyboarding, 2 lecture hours, (9 weeks), (Pass/No Pass), (Repeats = 99)**  
**Advisory:** None.

**Course deleted** **effective Spring 2021**  
**352 Adobe Lightroom, 2 lecture hours, 3 lab hours, (Pass/No Pass)**

**Change: open entry/open exit status, advisory** **effective Spring 2021**  
**353 Adobe After Effects, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 99), (Open Entry/Open Exit)**  
**Advisory:** None.

## Heating, Ventilation, and Air Conditioning (HVAC)

**Change: title, advisory** **effective Spring 2021**  
**50 Principles of HVAC, 2 units, 2 lecture hours, 1 lab hour, (Formerly Air Conditioning 50)**  
**Advisory:** English 1A and Applied Technology 10 and 130.

**Change: title, advisory, description** **effective Spring 2021**  
**51 Electricity for HVAC, 6.5 units, 5 lecture hours, 5 lab hours, (Formerly Air Conditioning 51)**  
**Advisory:** Heating, Ventilation, and Air Conditioning 50 and 53. Applied Technology 10 and 130.  
 In Electricity for HVAC, students focus on the electrical components and controls that comprise an HVAC system. Students build their inventory of HVAC electrical skillsets. Students learn the theory and application of HVAC technology and learn electrical measurement techniques in the laboratory. (A, CSU)

**Change: title, advisory, description** **effective Spring 2021**  
**52 Heating Systems, 6.5 units, 5 lecture hours, 5 lab hours, (Formerly Air Conditioning 52)**  
**Advisory:** Heating, Ventilation, and Air Conditioning 50 and 54, Applied Technology 10 and 130, and English 1A.  
 In HVAC Heating Systems, students examine various heating technologies and learn how to differentiate between furnace types using component inspection methods. Fuel gas properties are explored and matched to appropriate ignition systems. Furnace venting requirements are described. Students also assemble an inventory of practical skillsets including combustible gas and refrigerant leak detection methods, in addition to ignition sequence charting and wiring diagramming. Heat pump technologies are examined with emphasis on the special design features of these reverse cycle refrigeration systems. (A, CSU)

**Change: title, advisory, description** **effective Spring 2021**

**53 System Analysis and Regulations, 6.5 units, 5 lecture hours, 5 lab hours, (Formerly Air Conditioning 53)**

**Advisory:** Heating, Ventilation, and Air Conditioning 50. Applied Technology 10 and 130.

In HVAC System Analysis and customer relations. Students also practice skills as they build Regulation, students evaluate operating HVAC systems while learning EPA section 608 refrigerant handling techniques. Regulations are examined in preparation for the EPA section 608 test. (A, CSU)

**Change: title, advisory, description** **effective Spring 2021**

**54 Brazing and Motor Technology, 6.5 units, 5 lecture hours, 5 lab hours, (Formerly Air Conditioning 54)**

**Advisory:** Heating, Ventilation, and Air Conditioning 50. Applied Technology 10 and 130.

Students describe the uses of electric motors in the HVAC trade, identify the parts of electric motors, identify distinguishing features of the standard motor types, calculate operational speeds, and identify horsepower requirements. Students draw motor circuit diagrams and troubleshoot common motor faults. Students describe the function of an air-side economizer, braze copper connections, and evacuate a refrigerant circuit to specified micron levels. (A, CSU)

## History (HIST)

**Course deleted** **effective Spring 2021**

**1H Honors Western Civilization to 1648, 3 units, 3 lecture hours, (Formerly Honors 1H)**

**Course deleted** **effective Spring 2021**

**2H Honors Western Civilization Since 1648, 3 units, 3 lecture hours, (Formerly Honors 2H)**

## Human Services (HS)

**Change: advisory, description** **effective Spring 2021**

**10 Introduction to Aging Studies, 3 units, 3 lecture hours, (See also Sociology 10)**

**Advisory:** English 1A.

Overview of social, economic, biological and psychological aspects of aging. Exploration of challenges and strengths of the aging people with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

**Change: corequisite, advisory** **effective Spring 2021**

**11 Elder Care Human Services, 3 units, 3 lecture hours**

**Corequisite:** Human Services 10. **Advisory:** English 1A.

Overview of social, economic, biological and psychological aspects of aging. Exploration of challenges and strengths of the aging people with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU)

**Change: advisory, description** **effective Spring 2021**

**18 Alcohol and Drug Abuse Counseling: Professional and Personal Growth, 2 units, 2 lecture hours**

**Advisory:** English 1A.

Provides techniques to establish optimal performance and the well-being of the Alcohol and Drug Abuse helping professional. (A, CSU)

**Change: advisory** **effective Spring 2021**

**19A Work Experience (Cooperative), Occupational, 1-8 units**

**Prerequisite:** Human Services 20. **Corequisite:** Human Services 24. Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. **Advisory:** English 1A.

**Change: advisory** **effective Spring 2021**

**20 Introduction to Social Welfare, 3 units, 3 lecture hours**

**Advisory:** English 1A.

**Change: advisory** **effective Spring 2021**

**24 Fundamentals of Interviewing and Counseling, 3 units, 3 lecture hours**

**Advisory:** English 1A.

**Change: advisory** **effective Spring 2021**

**25 Assertiveness Training, 2 units, 2 lecture hours, (See also Women's Studies 25)**

**Advisory:** English 1A.

- Change: advisory, description* *effective Spring 2021*  
**30 Group and Community Social Services, 3 units, 3 lecture hours**  
**Corequisite:** Human Services 20. **Advisory:** English 1A.  
 Methods of human services and social work intervention through organizational, community, and social policy change action, including analysis of challenges and strengths for client empowerment. (A, CSU)
- Change: advisory* *effective Spring 2021*  
**40 Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, Outreach and Referral, 3 units, 3 lecture hours**  
**Advisory:** English 1A.
- Change: advisory* *effective Spring 2021*  
**42 Introduction to Alcohol and Drug Counseling, 3 units, 3 lecture hours**  
**Advisory:** English 1A.
- Change: advisory* *effective Spring 2021*  
**43 Alcohol and Drug Abuse Counseling: Case Management, 3 units, 3 lecture hours**  
**Prerequisite:** Human Services 42. **Advisory:** English 1A.
- Change: advisory* *effective Spring 2021*  
**44 Drug Use: Physical and Psychological Effects, 3 units, 3 lecture hours**  
**Advisory:** English 1A.

## Humanities (HUMAN)

- Course deleted* *effective Spring 2021*  
**10H Honors Classical Humanities, 3 units, 3 lecture hours**
- Course deleted* *effective Spring 2021*  
**11H Honors Modern Humanities, 3 units, 3 lecture hours**

## Library Technology (LITEC)

- Change: units, hours* *effective Summer 2021*  
**62 Medical Resources and Libraries, 3 units, 3 lecture hours**

## Mathematics (MATH)

- Change: prerequisite, advisory* *effective Spring 2021*  
**10B Structure and Concepts in Mathematics II, 3 units, 3 lecture hours**  
**Prerequisite:** Mathematics 10A. **Advisory:** Mathematics 102.

## Music (MUS)

- Change: title, advisory, description* *effective Spring 2021*  
**92 Vocal Jazz Workshop, 2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)**  
**Advisory:** Advanced high school vocal experience, or equivalent performance skills recommended.  
 Rehearsal and performance of vocal jazz literature. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

## Nursing Registered (RN)

- Course deleted* *effective Spring 2021*  
**33I Transcultural Healthcare, International, 1 unit, 1 lecture hour**
- Course deleted* *effective Spring 2021*  
**203 RN Refresher Course, 3 units, 3.5 lecture hours, 13.5 lab hours, (9 weeks), (Pass/No Pass)**

## Photography (PHOTO)

- Change: advisory** **effective Spring 2021**
- 5 Introduction to Photography, 3 units, 3 lecture hours**  
**Advisory:** None.
- Change: advisory** **effective Spring 2021**
- 6 Digital Imaging Fundamentals, 3 units, 2 lecture hours, 3 lab hours**  
**Advisory:** None.
- Change: advisory** **effective Spring 2021**
- 12 Beginning Photoshop, 3 units, 2 lecture hours, 3 lab hours**  
**Advisory:** Basic computer skills recommended.
- New course** **effective Spring 2021**
- 14 Photography for Social Media, 3 units, 2 lecture hours, 3 lab hours**  
**Prerequisite:** None.  
 Photographic principals of creating images specifically intended for Social media publishing and use. Creation of creative visuals to meet specific client needs and online platform criteria. This course will also explore cultural and ethical implications for contemporary online publishing. (A, CSU)
- Change: advisory** **effective Spring 2021**
- 15 Photography and Visual Literacy, 3 units, 3 lecture hours**  
**Advisory:** None.
- Change: advisory** **effective Spring 2021**
- 17 Classic Black and White Photography, 3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 10)**  
**Advisory:** Photography 5.
- Change: title, description** **effective Spring 2021**
- 18 Advanced Black and White Photography, 3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 20)**  
**Prerequisite:** Photography 12. **Advisory:** Photography 17.  
 Interpreting reality through the many pathways to film and digital Black and White photography. Adobe Photoshop and other software applications are used on a variety of projects. The course emphasizes the vision, language, and technique of the black and white print. (A, CSU, UC)
- Course deleted** **effective Spring 2021**
- 30 Editorial Photography, 3 units, 2 lecture hours, 3 lab hours**
- Course deleted** **effective Spring 2021**
- 40 Professional Photography Practices, 3 units, 2 lecture hours, 3 lab hours**
- Change: prerequisite** **effective Spring 2021**
- 45 Advanced Projects, 3 units, 2 lecture hours, 3 lab hours**  
**Prerequisite:** Photography 18, 23, 26, or 32.
- Change: subject, course number, advisory, description** **effective Spring 2021**
- 52 Adobe Lightroom, 3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 52)**  
**Advisory:** None.  
 Digital image enhancement and management with Adobe Lightroom. Focus will be on non destructive photographic workflow and improvement to tonal quality. (A, CSU)
- Change: course number, prerequisite** **effective Spring 2021**
- 67 Intro to Aerial Multimedia, 0.5 unit, 1 lecture hour, 2 lab hours, (9 weeks), (Formerly Photography 267)**  
**Prerequisite:** Must have ability to use both hands on controller and be able to keep visual line of sight with drone.  
**Advisory:** Photography 6.
- Change: course number, prerequisite** **effective Spring 2021**
- 77 Aerial Multimedia II, 3 units, 2 lecture hours, 3 lab hours, (Formerly Photography 277)**  
**Prerequisite:** Photography 67. Students must be able use both hands to operate and read data on the controller. Students must be able to visually see in flight drone as needed.
- Course deleted** **effective Spring 2021**
- 323 Advanced Photoshop, 2 lecture hours, 3 lab hours, (Pass/No Pass), (Repeats = 4), (Open Entry/Open Exit)**

## Physical Education (PE)

### *Course deleted*

*effective Spring 2021*

**23 Lifeguard Training, 3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education PRE 31A)**

## Psychology (PSY)

### *Change: advisory, description*

*effective Spring 2021*

**2 General Psychology, 3 units, 3 lecture hours, (Formerly Psychology 7)**

**Advisory:** English 1A.

Scientific study of behavior and mental processes. Topics include the history of psychology, research methods, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, mental illness and therapy, stress and health, social psychology, and the social and cultural influences that affect behavior. (C-ID PSY 110) (A, CSU-GE, UC, I)

### *Change: description*

*effective Spring 2021*

**2H Honors General Psychology, 3 units, 3 lecture hours, (Formerly Honors 7P and Psychology 7H)**

**Advisory:** Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

Scientific study of behavior and mental processes. Topics include the history of psychology, research methods, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, mental illness and therapy, stress and health, social psychology, and the social and cultural influences that affect behavior. The Honors section of this course places a greater emphasis on understanding the human being as an integrated physiological, social, and psychological organism and further enriches that perspective with data and theories from related disciplines. (C-ID PSY 110) (A, CSU-GE, UC, I)

### *Change: advisory, description*

*effective Spring 2021*

**5 Social Psychology, 3 units, 3 lecture hours**

**Advisory:** Psychology 2 and English 1A.

Systematic analysis of the social factors that influence human behavior and mental processes, including culture and gender. Focus on the mutual influence between the individual and the social environment. Emphasized topics include research methods and ethical principles, the self, social perception, social cognition, attitudes, persuasion, conformity and obedience, attraction and relationships, prosocial behavior, aggression, prejudice and discrimination, group phenomena, norms, and social neuroscience. (C-ID PSY 170) (A, CSU, UC)

### *Change: advisory*

*effective Spring 2021*

**16 Abnormal Psychology, 3 units, 3 lecture hours**

**Advisory:** Psychology 2 and English 1A.

### *Change: title, advisory, description*

*effective Spring 2021*

**18 The Psychology of Criminal Behavior, 3 units, 3 lecture hours, (See also Criminology 18)**

**Advisory:** English 1A.

Focus on the biological, psychological, developmental, social and cultural factors that influence the development of criminal behavior. Understand the relationship between psychological disorders outlined in the current Diagnostic and Statistical Manual of Mental Disorders, as well as psychopathy and sociopathy, and their influence on the development of criminal behavior. Explore the relationship between social inequities and the criminal justice system. Discuss the extent to which therapy and/or rehabilitation affects recidivism rates. (A, CSU)

### *Change: advisory, description*

*effective Spring 2021*

**25 Human Sexuality, 3 units, 3 lecture hours**

**Advisory:** English 1A.

Explores human sexual behaviors and values in contemporary society from a biological, psychological, social, cultural, historical and lifespan perspective. Topics include research methods, sexual anatomy and physiology of males and females, gender development and socialization, contraception and abortion, conception and prenatal development, sexual orientation, love, communication and relationships, sexual patterns and techniques, sexual dysfunctions, sexually transmitted infections, the causes and consequences of sexual victimization, atypical sexual behavior and the commercialization of sex presented in an explicit and scientific manner. (C-ID PSY 130) (A, CSU-GE, UC)

### *Change: advisory, description*

*effective Spring 2021*

**33 Personal and Social Adjustment, 3 units, 3 lecture hours**

**Advisory:** English 1A.

Provides a foundation of knowledge about psychological principles and concepts important to personal and social adjustment. Topics include personality, lifespan development, psychological factors that affect physical health and illness, the effects of stress, stress management, gender roles, interpersonal relationships, sexuality, work and leisure, psychological disorders, and therapy. Topics are explored with an emphasis on both theory and practical application in everyday life. (C-ID PSY 115) (A, CSU-GE, UC)

**Change: advisory, description****effective Spring 2021****36 Biological Psychology, 3 units, 3 lecture hours****Prerequisite:** Psychology 2. **Advisory:** Biology 3, Biology 5, and English 1A.

Biological mechanisms central to fundamental concepts and issues of psychology. Topics include basic neuroanatomy, neurophysiology, and genetics; research methods in biological psychology; the physiological mechanisms underlying sensation, perception, consciousness, sleep, emotion, stress, sexual behavior, hunger, eating, language, learning, memory, neurological disorders, psychopharmacology, and psychological disorders; and the influence of environmental and psychological factors on biology. (C-ID PSY 150) (A, CSU, UC)

**Change: prerequisite, advisory, description****effective Spring 2021****45 Introduction to Research Methods in Psychology, 3 units, 3 lecture hours****Prerequisite:** Psychology 2. Psychology 42, Mathematics 42, or Mathematics 11. **Advisory:** English 1A.

Survey of psychological research methods. Emphasis placed on research design, descriptive techniques, experimental procedures, and the characteristics of valid assessment tools. Research design and methodology will be examined through a review of research in a variety of the subdisciplines of psychology. Focus on the collection, analysis, interpretation, and reporting of research data. Cultural considerations and the ethics of research with humans and animals included. Designed for psychology majors and others who require familiarity with such research techniques. (C-ID PSY 200) (A, CSU, UC)

## Sociology (SOC)

**Change: advisory, description****effective Spring 2021****10 Introduction to Aging Studies, 3 units, 3 lecture hours, (See also Human Services 10)****Advisory:** English 1A.

Overview of social, economic, biological and psychological aspects of aging. Exploration of challenges and strengths of the aging people with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

## Women's Studies (WSTS)

**Change: advisory****effective Spring 2021****25 Assertiveness Training, 2 units, 2 lecture hours, (See also Human Services 25)****Advisory:** English 1A.**Course deleted****effective Spring 2021****30 Asian American Women, 3 units, 3 lecture hours, (See also Asian-American Studies 30)**