

Fresno City College
2019-2020
Catalog Addendum
April 2020

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CERTIFICATE AND DEGREE REQUIREMENTS

Changes to Pages 35-39

Requirements for AA and AS Degrees

Change: add

ART 40	Area C: Humanities
ART 70	Area C: Humanities
ENGR 5	Computer Familiarity
PHIL 3A	Area C: Humanities
PHIL 3B	Area C: Humanities

effective Fall 2019

ACADEMIC REGULATIONS

Changes to Pages 20-34

Grading System

EW, Excused Withdrawal

An “EW” symbol is recorded upon approval of a Petition to Withdraw Under Extenuating Circumstances.

For the spring 2020 semester only, withdrawals due to extenuating circumstances that are due to COVID-19 do not require a petition or additional documentation. Students can drop in WebAdvisor until May 15, 2020.

P/NP, Pass/No Pass

Due to COVID-19, the request for Pass/No Pass has been extended to May 8, 2020. **Before requesting this option, please contact your counselor and/or financial aid to determine impacts to your aid or transfer.**

Most college courses allow students the option of a final course grade of P, Pass, or NP, No Pass, instead of traditional letter grades (A, B, C, D, or F). Some courses are graded only on a Pass/No Pass basis. In courses graded only on the Pass/No Pass basis or when a student elects this grading option, the grade of P, Pass, will be assigned if the student has passed the course with a grade equivalent of A, B, or C, and credit will be awarded for the unit value of the course. The grade of NP, No Pass, will be assigned if the student earns the grade equivalent of D or F, and no units of credit will be awarded for the course. Neither the P, Pass, grade nor the NP, No Pass grade is included in the calculation of the grade point average at this institution.

A maximum of 15 units of credit may be earned on a Pass/ No Pass grading basis in degree-applicable or transferable courses. The Pass/No Pass option is not recommended for any course in a student’s major. Not all courses graded on a Pass/No Pass basis are accepted for transfer by other institutions. Students planning to transfer to another college or university should be aware of the policy of that institution regarding Pass/No Pass grades.

Students may elect the Pass/No Pass grading option in courses in which it is available by notifying the college Office of Admissions and Records, using the appropriate online form, available at <http://onlineforms.sccd.edu/passnopass.aspx>, no later than the end of the fifth week of a full-term course or within the first 30 percent of a shorter-term course. Students who have elected the Pass/No Pass grading option may reverse this decision only within these same deadlines.

Deadlines for selecting (or reversing) the Pass/No Pass grading option:

For a regular 18-week class	By end of fifth week
For all short-term classes (including summer)	By 30% of total class meeting dates (this will vary class by class)

Due to COVID-19, the request for Pass/No Pass has been extended to May 8, 2020. **Before requesting this option, please contact your counselor and/or financial aid to determine impacts to your aid or transfer.**

Political Science 6	<i>effective Spring 2020</i>
Radiation Technology 6	<i>effective Spring 2020</i>
Welding 5A	<i>effective Spring 2020</i>
Welding 5B	<i>effective Spring 2020</i>
Welding 6A	<i>effective Spring 2020</i>
Welding 6B	<i>effective Spring 2020</i>
Welding 6C	<i>effective Spring 2020</i>
Welding 83A	<i>effective Spring 2020</i>

Change: deleted

Aerospace Studies 5	<i>effective Spring 2020</i>
Business & Technology 13	<i>effective Spring 2020</i>
Business & Technology 32	<i>effective Spring 2020</i>
Dance 28	<i>effective Spring 2020</i>
Geology 7	<i>effective Spring 2020</i>
Geology 8	<i>effective Spring 2020</i>
Heating, Ventilation, and Air Conditioning 56	<i>effective Spring 2020</i>
Heating, Ventilation, and Air Conditioning 57	<i>effective Spring 2020</i>
Physical Science 42	<i>effective Spring 2020</i>

SPECIAL AREAS OF STUDY

Changes to Pages 78-84

Veterans Services

Veterans Services, located in Building A, provides assistance to veterans and their dependents. Open from 8 a.m. to 5 p.m. Monday through Friday, the staff will assist veterans and dependents in applying for educational benefits. Counseling and academic advising are available in the Counseling Center.

Educational Benefits for Veterans and Dependents

The following students may be eligible for veterans' educational benefits:

1. Veterans who were separated from active duty with the armed forces within the past 10 years.
2. Spouses or children (under 26 years of age) of veterans who were either killed while serving in the armed forces or were totally and permanently disabled while on active duty.
3. Widows or children of veterans who were residents of California at the time of entering the service and have a 50 percent disability may qualify for Cal Vet benefits.
4. Persons in one of the armed forces reserve programs who meet the minimum requirements of a special benefit program may be entitled to receive some educational and/or financial assistance.
5. Post 9-11 benefits will pay eligible individuals:
 - Tuition and fees directly to the school, not to exceed the maximum in-state tuition and fees at a public Institution of Higher Learning.
 - A monthly housing allowance based on the Basic Allowance for Housing for an E-5 with dependents at the location of the school.
 - An annual books and supplies stipend of \$1,000 paid proportionately based on enrollment.

Veterans are required to go on-line to learn more about this program in order to make an informed choice.

Further information may be obtained from Veterans Services, Building A, or from any Veterans Administration office.

Progress and Attendance Policies

Veterans and eligible dependents are required to show satisfactory progress. Minimum standards, established by the college, require that all students comply with satisfactory progress policies.

The Veterans Administration will be notified of any veteran who has been dismissed for not making satisfactory progress. For further information, contact Veterans Services, Building A.

A veteran is entitled to receive pay up to the last day of attendance for a class for which a "W" entry grade has been assigned. The VA will require that the money be paid back for such classes if paid after the last day of attendance.

A veteran must state a declared major for the VA in order to maintain eligibility for veterans' benefits.

Veterans who have completed 45 units at Fresno City College and/or elsewhere must obtain a degree evaluation from the Admissions and Records Office. Applications for degree evaluations are to be completed online through WebAdvisor or in the Admissions and Records Office.

Veterans and eligible dependents have the responsibility to notify the Veterans Office whenever a change in program, address or dependents is made. All veterans/dependents are urged to contact the Veterans Office regularly in order to be aware of the various changes in VA rules and regulations which may occur during the school year.

Academic Limitations

Veterans/dependents attending Fresno City College who have earned a degree and/or have attempted sixty (60) or more units can only be certified for those courses which are either required to complete their degree objective at Fresno City College or meet a prerequisite for that requirement. Except in those cases where vocational work experience is required for the degree being pursued by the veteran, veterans with 60 or more units may not be certified for it. Veterans enrolled in occupational work experience must be engaged in work which is directly related to the veteran's major as declared with the VA. General work experience is not payable under any circumstances. Apprenticeship courses are payable under certain conditions. Also, veterans must enroll in and complete at least six units during the regular semester or two units during the summer session in order to be eligible for VA educational payments. Finally, a veteran may be certified to repeat a class for which a grade of "D" or better has been assigned only if the better grade is required as a prerequisite for the approved program.

Pending VA Payment Compliance

In accordance with Title 38 US Code 3679 (e) Fresno City College adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post-9/11 G.I.Bill® or Vocational Rehabilitation & Employment (Ch. 31) benefits, while payment to the institution is pending from VA. Fresno City College will not:

1. Prevent the student's enrollment;
2. Assess a late penalty fee to the student;

3. Require the student to secure alternative or additional funding;
4. Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

1. Produce the VA Certificate of Eligibility (COE);
2. Submit completed certification request packet;
3. Provide additional information needed to properly certify the enrollment as determined by School Certifying Official.

Veteran Exceptions to Out-of-State Tuition

If you are an active duty member of the United States Military stationed in California, or are their dependent and can show the required documentation, you may qualify for a tuition exemption even if you do not otherwise qualify for California Resident status,

OR

AB13 and VACA Act: You may qualify for a tuition exemption from non-resident fees even if you do not otherwise qualify for California Resident status if:

1. You are a discharged member of the United States Military eligible for benefits under the Montgomery GI Bill or Post-9/11 GI Bill;
 - a. Or their spouse or child;
 - b. Or the spouse or child of a deceased member of the United States Military using benefits under the Marine Gunnery Sergeant John David Fry Scholarship;
2. And the service member's last active duty period lasted 90 days or longer;
3. And it is within three years of the service member's last day of active duty;
4. And you live in California.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>

ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

Changes to Pages 111-246

ART

ART – MAJOR #5205

program correction, Fall 2019

The art degree signifies the completion of a comprehensive course of study in the visual arts. It provides a platform from which to build a career in the visual arts and further advancement towards a baccalaureate degree. An Associate in Arts in Art is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills.

Associate in Arts

Student Learning Outcomes:

1. Apply knowledge of art fundamentals in order to identify, formulate and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally and in writing.
4. Understand the impact of art making in a global and societal context.

Required Core Courses

		Units
ART 3	Two-Dimensional Design.....	3
ART 4	Three-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, <i>or</i>	
ART 8	Beginning Figure Drawing and Anatomy	3

Select a Minimum of 12 Units (May take ART 7 or 8 if not taken in the core):

		Units
ART 7	Beginning Drawing.....	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 12A	Craft Workshop: Living Traditions	3
ART 12B	Intermediate Craft Workshop: Living Traditions	3
ART 13	Beginning Watercolor Painting.....	3
ART 14	Beginning Printmaking	3
ART 15	Ceramic Sculpture	3
ART 16	Life Painting.....	3
ART 17	Intermediate Drawing	3
ART 18	Intermediate Figure Drawing and Anatomy	3
ART 19	Intermediate Painting: Oil/Acrylic	3
ART 20	Intermediate Ceramics	3
ART 21	Intermediate Sculpture	3
ART 22B	Craft Workshop: Concepts in Fibers	3
ART 23	Intermediate Watercolor Painting.....	3
ART 24A	Intaglio Printmaking.....	3
ART 24B	Lithograph Printmaking	3
ART 24C	Relief Printmaking.....	3
ART 24D	Screenprinting	3
ART 25	Mural Painting.....	3
ART 25A	Intermediate Mural Painting.....	3
ART 28	Advanced Figure Drawing and Anatomy	3
ART 29	Advanced Painting: Oil/Acrylic	3
ART 31	Advanced Sculpture.....	3
ART 32A	Beginning Jewelry and Metalsmithing	3
ART 32B	Intermediate Jewelry and Metalsmithing	3
ART 36A	Intermediate Wheel Throwing.....	3

Indicates items also included in November Addendum packet.

ART 38A	Intermediate Hand-Building	3
ART 52	Introduction to Digital Art/New Media	3
ART 55	Introduction to Asian Art	3
ART 60	Art of the Ancient Americas	3
	Total 27	

ART HISTORY FOR TRANSFER – MAJOR #5206

new program, Fall 2019

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.

Required Core Courses

		Units
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

List A – Select one of the following:

		Units
ART 55	Introduction to Asian Art	3
ART 60	Art of the Ancient Americas	3

List B – Select one of the following:

		Units
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

List B not already taken:

		Units
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

Indicates items also included in November Addendum packet.

HUMAN 10/10H	Classical Humanities, <i>or</i> Honors Classical Humanities	3
HUMAN 11/11H	Modern Humanities, <i>or</i> Honors 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		

STUDIO ART – MAJOR #5210

program correction, Fall 2019

Offers the student a fundamental understanding of art and studio practices by completing 18 art units. Students will build a comprehensive portfolio that reflects their media of choice.

Certificate of Achievement

Student Learning Outcomes:

1. Apply knowledge of art fundamentals in order to identify, formulate, and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally, or in writing.

Required Core Courses

	Units
ART 3	Two-Dimensional Design..... 3
ART 4	Three-Dimensional Design..... 3
ART 7	Beginning Drawing..... 3

List A (9 Units):

	Units
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 12A	Craft Workshop: Living Traditions..... 3
ART 12B	Intermediate Craft Workshop: Living Traditions 3
ART 13	Beginning Watercolor Painting..... 3
ART 14	Beginning Printmaking 3
ART 15	Ceramic Sculpture 3
ART 16	Life Painting..... 3
ART 17	Intermediate Drawing..... 3
ART 18	Intermediate Figure Drawing and Anatomy 3
ART 19	Intermediate Painting: Oil/Acrylic..... 3
ART 20	Intermediate Ceramics..... 3
ART 21	Intermediate Sculpture..... 3
ART 22B	Craft Workshop: Concepts in Fibers 3
ART 23	Intermediate Watercolor Painting..... 3
ART 24A	Intaglio Printmaking..... 3
ART 24B	Lithograph Printmaking 3
ART 24C	Relief Printmaking..... 3
ART 24D	Screenprinting..... 3
ART 25	Mural Painting..... 3
ART 25A	Intermediate Mural Painting..... 3
ART 27	Advanced Drawing..... 3
ART 28	Advanced Figure Drawing and Anatomy 3
ART 29	Advanced Painting: Oil/Acrylic..... 3
ART 31	Advanced Sculpture..... 3
ART 32A	Beginning Jewelry and Metalsmithing..... 3
ART 32B	Intermediate Jewelry and Metalsmithing 3
ART 36A	Intermediate Wheel Throwing..... 3
ART 38A	Intermediate Hand-Building..... 3
ART 40	Photography as Art..... 3
ART 52	Introduction to Digital Art/New Media..... 3
Total 18	

*ART 3, ART 4, and ART 7 should be taken before other courses in the major.

Indicates items also included in November Addendum packet.

AUTOMOTIVE TECHNOLOGY

DIESEL TECHNOLOGY – MAJOR #8059

new program, Fall 2019

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the diesel technology service and repair industry. Students will perform actual service and repair procedures in the diesel technology laboratory. This curriculum has been certified by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

Associate in Science and Certificate of Achievement

Student Learning Outcomes:

1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Student will demonstrate the appropriate repair procedure for a given system to industry standards.

Required Core Courses		Units
AT 10	Technical Computer Applications.....	3
AUTOT 10	Introduction to Diesel Technology.....	3
AUTOT 19	Work Experience (Cooperative), Occupational	12
AUTOT 61	Diesel Engines.....	4
AUTOT 62	Electrical/Electronics for Diesel Technology	4
AUTOT 63	Diesel Fuel and Emission Systems	4
AUTOT 64	MD/HD Suspension, Steering, and Alignment	4
AUTOT 65	MD/HD Powertrain Systems.....	6
AUTOT 66	MD/HD Brakes and Preventative Maintenance Inspection (PMI)	4
AUTOT 67	MD/HD Heating, Ventilation, Air Conditioning and Advanced Electronics.....	4
WELD 1	Exploring Welding/Metals.....	3

Elective Courses		Units
AUTOT 68	Individualized Skills Training (IST) Truck & Bus Chassis System I Laboratory	1
AUTOT 68A	Individualized Skills Training (IST) Truck & Bus Chassis System II Laboratory	1
AUTOT 68B	Individualized Skills Training (IST) Truck & Bus Engine/Propulsion Systems.....	1
AUTOT 68C	Individualized Skills Training (IST) Truck & Bus Power Train Systems Laboratory	1
		Total 55

RECOMMENDED SEQUENCE

First Year – Fall Semester		Units
AT 10	Technical Computer Applications.....	3
AUTOT 10	Introduction to Diesel Technology.....	3
AUTOT 62	Electrical/Electronics for Diesel Technology	4
AUTOT 63	Diesel Fuel and Emission Systems	4

First Year – Spring Semester		Units
AUTOT 65	MD/HD Powertrain Systems.....	6
AUTOT 67	MD/HD Heating, Ventilation, Air Conditioning and Advanced Electronics.....	4
WELD 1	Exploring Welding/Metals.....	3

First Year – Summer Semester		Units
AUTOT 61	Diesel Engines.....	4

Second Year – Fall Semester		Units
AUTOT 64	MD/HD Suspension, Steering, and Alignment	4
AUTOT 66	MD/HD Brakes and Preventative Maintenance Inspection (PMI)	4
AUTOT 19	Work Experience (Cooperative), Occupational	4

Second Year – Spring Semester		Units
AUTOT 19	Work Experience (Cooperative), Occupational	8

BUSINESS & TECHNOLOGY

BOOKKEEPING FUNDAMENTALS – MAJOR #2015

new program, Spring 2020

Skills for spreadsheet management, bookkeeping, and accounting tasks, applicable to both the workplace and to more advanced courses in the subject matter.

Certificate

Student Learning Outcomes:

1. Create a worksheet in Excel using correct formatting, formulas, and functions, with the ability to create graphs.
2. Journalize and post a variety of typical business transactions, including payroll records and banking documents.

Required Courses

	Units
BT 24 Beginning Excel.....	1
BT 131 Applied Accounting	3.5
	Total 4.5

BUSINESS OFFICE ENGLISH – MAJOR #2372

revised program, Spring 2020

This certificate is designed to improve English grammar, speaking, writing, and presentation skills needed in the office.

Certificate

Student Learning Outcomes:

1. Use correct English grammar to communicate effectively when speaking, writing, and presenting in business settings.
2. Identify problems and revise business communication to improve meaning, tone, and clarity.

Required Core Courses

	Units
BT 5 Workplace Communication.....	3
BT 112 Business English	3
	Total 6

FOUNDATIONS FOR THE OFFICE PROFESSIONAL – MAJOR #2326

Certificate

deleted program, Spring 2020

MEDICAL OFFICE ASSISTANT – FORMERLY MEDICAL BILLING ASSISTANT – MAJOR #2243

revised program, Spring 2020

This certificate option is designed to meet the training needs for qualified entry level employment in a medical office setting. Students are required to earn grades of “C” or better in all courses.

Certificate of Achievement

Student Learning Outcomes:

1. Perform basic administrative duties in a medical office using appropriate technology.
2. Support billing and collections by applying knowledge of coding procedures and insurance programs.
3. Communicate effectively and according to legal guidelines in a professional health care setting.

Required Courses

	Units
BT 120 Resume/Interview	1
BT 143 Medical Office Vocabulary.....	1
BT 144 Medical Administrative Assistant.....	2.5
BT 147 Medical Management Software	2
BT 148 Medical Insurance & Billing Concepts	2.5
	Total 9

OFFICE PROFESSIONAL I – MAJOR #2062

Associate in Science and Certificate of Achievement

deleted programs, Spring 2020

OFFICE PROFESSIONAL – LEGAL OFFICE EMPHASIS – FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS AND LEGAL OFFICE PROFESSIONAL – MAJOR #2104

revised program, Spring 2020

Training is designed to prepare students for employment in a legal office environment. Additional general education units are required for the AS degree. Students may earn more than one certificate along with the Associate in Science degree and are required to earn grades of "C" or better in all courses.

Indicates items also included in November Addendum packet.

Associate in Science

Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
3. Achieve a satisfactory evaluation in a work experience setting.

Required Core Courses		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 19	Work Experience (Cooperation), Occupational	2
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English	3

Required Emphasis Courses		Units
BT 140/		
PLEGAL 156	Legal Document Processing.....	3
PLEGAL 7	Law Offices Practices.....	3
PLEGAL 14	Law Office Computing.....	3
		Total 24

RECOMMENDED SEQUENCE

First Semester		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 112	Business English	3

Second Semester		Units
BT 19	Work Experience (Cooperation), Occupational	2
BT 23	Job Search and Workplace Skills.....	3
BT 140/		
PLEGAL 156	Legal Document Processing.....	3
PLEGAL 7	Law Offices Practices.....	3
PLEGAL 14	Law Office Computing.....	3

OFFICE PROFESSIONAL – LEGAL OFFICE EMPHASIS – FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS AND LEGAL OFFICE PROFESSIONAL – MAJOR #2104

revised program, Spring 2020

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate and are required to earn grades of "C" all courses.

Certificate of Achievement

Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
3. Achieve a satisfactory evaluation in a work experience setting.

Required Core Courses		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 19	Work Experience (Cooperation), Occupational	2
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English	3
BT 115	Refresher Math.....	3

Required Emphasis Courses		Units
BT 140/		
PLEGAL 156	Legal Document Processing.....	3
PLEGAL 7	Law Offices Practices.....	3
PLEGAL 14	Law Office Computing.....	3
		Total 27

Indicates items also included in November Addendum packet.

RECOMMENDED SEQUENCE

First Semester		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 112	Business English	3
BT 115	Refresher Math.....	3

Second Semester		Units
BT 19	Work Experience (Cooperation), Occupational.....	2
BT 23	Job Search and Workplace Skills.....	3
BT 140/ PLEGAL 156	Legal Document Processing.....	3
PLEGAL 7	Law Offices Practices.....	3
PLEGAL 14	Law Office Computing.....	3

OFFICE PROFESSIONAL – MEDICAL OFFICE EMPHASIS – FORMERLY MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2383

revised program, Spring 2020

Training is designed to prepare students for employment in a medical office environment. Additional general education units are required for AS degree. Students may earn more than one certificate in addition to the Associate in Science degree and are required to earn grades of "C" or better in the Office Professional I and emphasis courses.

Associate in Science

Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Achieve a satisfactory evaluation in a work experience setting.
3. Perform medical administrative duties.

Required Core Courses		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 19	Work Experience (Cooperation), Occupational.....	2
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English	3

Required Emphasis Courses		Units
BT 143	Medical Office Vocabulary.....	1
BT 144	Medical Administrative Assistant.....	2.5
BT 147	Medical Management Software	2
BT 148	Medical Insurance & Billing Concepts	2.5
		Total 23

RECOMMENDED SEQUENCE

First Semester		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 143	Medical Office Vocabulary.....	1
BT 144	Medical Administrative Assistant.....	2.5
BT 148	Medical Insurance & Billing Concepts	2.5

Second Semester		Units
BT 19	Work Experience (Cooperation), Occupational.....	2
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English	3
BT 147	Medical Management Software	2

OFFICE PROFESSIONAL – MEDICAL OFFICE EMPHASIS – FORMERLY MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS AND MEDICAL OFFICE PROFESSIONAL – MAJOR #2383

revised program, Spring 2020

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate and are required to earn grades of "C" or better in all courses.

Certificate of Achievement

Indicates items also included in November Addendum packet.

Student Learning Outcomes:

1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Achieve a satisfactory evaluation in a work experience setting.
3. Perform medical administrative duties.

Required Core Courses		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 19	Work Experience (Cooperation), Occupational	2
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English	3
BT 115	Refresher Math.....	3

Required Emphasis Courses		Units
BT 143	Medical Office Vocabulary.....	1
BT 144	Medical Administrative Assistant.....	2.5
BT 147	Medical Management Software	2
BT 148	Medical Insurance & Billing Concepts	2.5
		Total 26

RECOMMENDED SEQUENCE

First Semester		Units
BT 1	Computer Document Processing I	3
BT 9	Computer Applications I	4
BT 143	Medical Office Vocabulary.....	1
BT 144	Medical Administrative Assistant.....	2.5
BT 148	Medical Insurance & Billing Concepts	2.5

Second Semester		Units
BT 19	Work Experience (Cooperation), Occupational	2
BT 23	Job Search and Workplace Skills.....	3
BT 112	Business English	3
BT 115	Refresher Math.....	3
BT 147	Medical Management Software	2

ONE-PERSON OFFICE – MAJOR #2063

revised program, Spring 2020

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate and are required to earn grades of "C" all courses.

Certificate of Achievement

Student Learning Outcomes:

1. Demonstrate key skills in order to effectively meet customer needs and provide outstanding customer service.
2. Journalize and post a variety of typical business transactions.
3. Apply emerging technologies to business and administrative processes to maximize efficiency and effectiveness.

Required Core Courses		Units
BT 5	Workplace Communication.....	3
BT 31	21st Century Workforce Skills.....	1.5
BT 33	Social Media and Emerging Technologies in the Workplace ...	3
BT 131	Applied Accounting	3.5
BT 132	Customer Service in the One-Person Office.....	3
		Total 14

CHICANO-LATINO STUDIES

SOCIAL JUSTICE STUDIES, CHICANO STUDIES FOR TRANSFER – MAJOR #7662

new program, Fall 2019

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 in Chicano Studies 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 Studies, Chicana and Chicano or Mexican American Studies, and Comparative Ethnic Studies. To earn the Associate in Arts in Social Justice for Transfer students must complete at least 60

Indicates items also included in November Addendum packet.

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.
4. Students will demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
5. Students will acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
6. Students will demonstrate a commitment to active citizenship, and develop leadership skills and an understanding of social justice principles and their application in order to promote positive social change in the Chicano-Latino community and the broader society.

Required Core Courses

	Units
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society.....	3
CLS 12 Mexican American History.....	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

	Units
CLS 29 History of Mexico, Colonial to Contemporary Period.....	3

Area 2: Arts and Humanities

	Units
CLS 20 Chicano Art.....	3
CLS 21 Chicano Literature.....	3

Area 3: Social Science

	Units
CLS 11 Introduction to Chicano-Latino Studies.....	3
CLS 30 Migration and the Family: Social and Psychological Perspectives.....	3

Area 4: Major Preparation

	Units
CLS 13 Politics and the Chicano-Latino Community.....	3
CLS 14 Sociology of the Mexican American Community.....	3
	Total 18

COMMUNICATION

COMMUNICATION STUDIES FOR TRANSFER – FORMERLY SPEECH – MAJOR #5432

Associate in Arts

program correction, Spring 2017

COMPUTER INFORMATION TECHNOLOGY

ANDROID APPLICATION DEVELOPER – MAJOR #2730

program revised, Spring 2020

Designed to assist students who would like to develop mobile applications for Android devices.

Certificate

Student Learning Outcomes:

1. Given a business programming scenario, create an interactive mobile application as a solution to the scenario. Students will use Android programming software to design, code, debug and deploy an object-oriented program.

Indicates items also included in November Addendum packet.

Required Courses		Units
CIT 63	Beginning Java Programming.....	4
CIT 65	Android Programming Applications.....	4
		Total 8

COMPUTER INFORMATION SYSTEMS – MAJOR #2701

program revised, Spring 2020

This program provides a strong academic preparation in Information Systems and Computer Science. The courses give students the fundamentals in operating systems, information security, networking, current programming languages and development platforms. This major will prepare students for transfer as an Information Systems major to universities as well as entry-level employment.

Associate in Science

Student Learning Outcomes:

1. Design and develop a software business solution using a programming language. Projects and assignments.
2. Create and maintain a server-client computer network to meet the needs of an organization. Projects, exams, and assignments.

Required Courses		Units
CIT 15	Computer Concepts	3
CIT 45	Data Communications.....	3
CIT 48B	A+ and Security Principles.....	4
DS 23	Business Statistics	3

Select One of the Following:

		Units
CIT 60	Beginning Visual Basic.....	4
CIT 63	Beginning Java Programming.....	4
CIT 66	Beginning C++ Programming	4
CIT 70	Beginning Swift Programming.....	4
CIT 93	JavaScript.....	4

Select Two of the Following:

		Units
BA 28	E-Law and Ethics.....	3
CIT 28	Client/Server Databases.....	3
CIT 40	Computer Operating Systems.....	4
CIT 50	Fundamentals of Networking	4
CIT 58C	Security+ Fundamentals.....	3
CIT 58F	Ethical Hacking.....	3
CIT 65	Android Programming Applications	4
CIT 69	iOS Programming Applications	4
		Total 23-25

CYBER TECHNICIAN SPECIALIST – MAJOR #2751

program revised, Spring 2020

This option is designed to meet the training needs for qualified entry-level hardware/software and basic security personnel.

Certificate

Student Learning Outcomes:

1. Prepare students for an entry level position in the IT/Cybersecurity field.

Required Courses		Units
CIT 48A	IT+ Fundamentals.....	3
CIT 48B	A+ and Security Principles.....	4
		Total 7

CYBERSECURITY – MAJOR #2750

program revised, Spring 2020

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

Indicates items also included in November Addendum packet.

Student Learning Outcomes:

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

Required Courses	Units
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 Routing & Switching Essentials.....	3
	Total 25

SYSTEM SUPPORT SPECIALIST – MAJOR #2723

program correction, Fall 2019

This option is designed to meet the training needs for qualified entry-level systems support personnel.

Certificate

Student Learning Outcomes:

1. Given a software or hardware problem, configure, troubleshoot, and repair the computer.

Fall Semester	Units
CIT 40 Computer Operating Systems.....	4
CIT 45 Data Communications.....	3
Spring Semester	Units
CIT 48B A+ and Security Principles.....	3
EST 60 A+ PC Maintenance and Repair.....	3
	Total 13

SYSTEM SUPPORT SPECIALIST – MAJOR #2723

program revised, Spring 2020

This option is designed to meet the training needs for qualified entry-level systems support personnel.

Certificate

Student Learning Outcomes:

1. Given a software or hardware problem, configure, troubleshoot, and repair the computer.

Fall Semester	Units
CIT 40 Computer Operating Systems.....	4
CIT 45 Data Communications.....	3
Spring Semester	Units
CIT 48B A+ and Security Principles.....	4
EST 60 A+ PC Maintenance and Repair.....	3
	Total 14

WEB DEVELOPER – MAJOR #2742

program correction, Fall 2019

This option is designed to prepare students for work in the computer industry as Web Developers. 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.

Associate in Science

Student Learning Outcomes:

1. Given a business scenario create an interactive client-side and/or server-side, data-driven website using appropriate tools to create a solution addressing the scenario.

Required Courses		Units
CIT 82	Introduction to Web Development.....	3
CIT 85	HTML and CSS.....	3
CIT 90	Beginning Go Language Programming	4
CIT 93	JavaScript.....	4

Select Two of the Following Courses:		Units
CIT 28	Client/Server Databases.....	3
CIT 63	Beginning Java Programming.....	4
CIT 84	Web Development Frameworks.....	4
CIT 94	Node.js.....	4
CIT 97	Web Development with The Go Programming Language.....	4
CIT 99	Introduction to Machine Learning.....	4
		Total 21-22

CRIMINOLOGY

ADMINISTRATION OF JUSTICE FOR TRANSFER – MAJOR #7750

program correction, Spring 2016

Administration of justice is the study of the causes, consequences, and control of crime. The program leading to the Associate in Science in the Administration of Justice for Transfer [AS-T] is designed to acquaint students with the principles and practices of criminal justice systems in America. The curriculum allows for the development of depth in one of the subject's subsystems (law enforcement, juvenile, courts, or corrections), and also gain familiarity with the basics of all areas. It is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. It provides the information necessary for employment with a related agency and/or transfer to a college or university. Those completing the AS-T in Administration of Justice will be able to transfer to the California State University System, and be prepared to study in Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Upon completion students will be prepared to pursue a BA/BS in Criminal Justice. To earn the 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 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. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Associate in Science

Student Learning Outcomes:

1. Reflect critically on developments in criminal justice policy and the relationship of those policies to the wider political and social environment.
2. Compare and evaluate diverse and competing arguments in disciplinary (justice system) and interdisciplinary contexts.
3. Demonstrate knowledge of the history, structure and processes of law enforcement, the judicial system, the correctional system, and the juvenile justice system.
4. Define and utilize key terms, concepts, and theories in the criminal justice system.
5. Interpret, assess, and compare competing types of evidence and data.
6. Effectively communicate orally and in writing the results of their analysis and conclusions.

Required Courses		Units
CRIM 1	Introduction to Criminology.....	3
CRIM 6	Concepts of Criminal Law.....	3

Select two courses from the following:		Units
CRIM 3	Legal Aspects of Evidence	3
CRIM 4	Principles & Procedures of the Justice System.....	3
CRIM 5	Community Relations.....	3
CRIM 8	Criminal Investigation.....	4
CRIM 9	Crime Scene Forensic Evidence.....	3
CRIM 11	Juvenile Delinquency	3
CRIM 20	Introduction to Corrections	3

Select two courses from the following:		Units
CRIM 13	The Constitution and Your Individual Rights.....	3
MATH 11	Elementary Statistics, <i>or</i>	
MATH/PSY 42	Statistics for the Behavioral Sciences.....	4
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
		Total 18-20

CULTURAL STUDIES

SOCIAL JUSTICE STUDIES, GENERAL FOR TRANSFER – MAJOR #7663

new program, Fall 2019

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		Units
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		Units
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		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
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

Indicates items also included in November Addendum packet.

Area 3: Social Science		Units
AMIND 20	Native Peoples of California	3
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

Area 4: Major Preparation		Units
AFRAM 2	African American Cultural Adaptation.....	3
ASAMER 20	Asian American Literature	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

DANCE

DANCE – MAJOR #5390

revised program, Spring 2020

The associate degree in dance provides a base of training in dance technique and practical experience in concert performance and production work as well as theoretical background in dance composition. Possible careers include choreographer+, dance director, dance historian+, dancer, dance teacher+, dance therapist+, fitness/aerobic instructor, movement notator, performer, reconstructor, and recreation leader. Students considering transferring to a four-year institute as a dance major should contact that target institution for dance audition requirements. +Bachelor degree or higher required.

Associate in Arts

Student Learning Outcomes:

1. Perform dance in a public setting.
2. Describe characteristic elements and form of various dance and choreographic styles.

Required Courses		Units
DANCE 10B	Pre-Intermediate Modern Dance Technique, <i>or</i>	
DANCE 28A	Intermediate Modern Dance Technique	1-1.5
DANCE 12B	Beginning Ballet Part 2, <i>or</i>	
DANCE 13A	Intermediate Ballet Technique	1-1.5
DANCE 20A	Beginning Modern Dance Composition	3
DANCE 30	Dance Appreciation.....	3

Select Two of the Following Courses:		Units
DANCE 21	Fall Dance Concert 1	2-4
DANCE 22	Spring Dance Concert 1	2-4
DANCE 31	Fall Dance Concert 2	2-4
DANCE 32	Spring Dance Concert 2	2-4

Select At Least Six Units from the Following (courses used to satisfy the Required Core cannot be used to satisfy this block):

		Units
DANCE 9	Dance Conditioning.....	1
DANCE 13A	Intermediate Ballet Technique	1.5
DANCE 13B	Pre-Advanced Ballet Technique.....	1.5
DANCE 14	Beginning Jazz Dance Technique.....	1
DANCE 15	Intermediate Jazz Dance Technique	1
DANCE 16	Beginning Tap Dance.....	0.5
DANCE 17B	Beginning Intermediate Mexican Folk Dance.....	3.5
DANCE 18	Intermediate Tap Dance	0.5
DANCE 20B	Intermediate Modern Dance Composition	3
DANCE 27A	Intermediate Mexican Folk Dance.....	3.5
DANCE 28A	Intermediate Modern Dance Technique	1.5
TA 27B	Introduction to Lighting Design	3
TA 41	Beginning Acting.....	3
TA 42	Beginning Acting for Theatre Majors	3
Total		18-23

Indicates items also included in November Addendum packet.

DENTAL HYGIENE

DENTAL HYGIENE – MAJOR #4580

program revised, Spring 2020

The Registered Dental Hygienist (RDH) provides dental health education, promotes and encourages the preventive aspects of dental care, administers local anesthesia, delivers nitrous oxide/oxygen analgesia, exposes and processes dental x-rays, performs oral cancer screenings, removes deposits and stains from teeth, performs gingival soft tissue management (curettage), and generally assumes responsibilities for dental hygiene patient care in the dental office.

Completion of the Dental Hygiene Program leads to an Associate in Science degree. After completing the program and passing the National Board examination, graduates are eligible to apply for and take the California State Board and/or other clinical examinations for licensing Registered Dental Hygienists.

Dental hygiene students will be required, as part of the total dental hygiene program, to participate in service learning activities. These activities could include community dental health projects, hospital clinical practice, and other field excursions of educational value.

Application Requirements

Enrollment is limited in the dental hygiene program. Minimum qualifications for selection must be met. There are no restrictions as to age, race, gender, or marital status. Minimum prerequisite requirements for application to the program are the following:

1. Have graduated from high school or have an average score of 45 on the General Educational Development (GED) test.
2. Have a minimum cumulative college grade point average (GPA) of 2.70.
3. Have completed Biology 20, Human Anatomy, and Biology 22, Human Physiology (or equivalent), or Biology 21A and 21B (or equivalent), with a grade of “C” or better.
4. Have completed English 1A, Reading and Composition; Mathematics 103, Intermediate Algebra, or another more advanced math course; Chemistry 3A, Introductory General Chemistry; Chemistry 3B, Organic and Biological Chemistry; Biology 31, Microbiology; Food and Nutrition 40, Nutrition; Communication 1 or 2, Introduction to Public Speaking or Interpersonal Communication; Psychology 2, General Psychology; and Sociology 1A, Introduction to Sociology; (or equivalents to these courses) with grades of “C” or better.
5. Have completed an Academic Summary Form for the Dental Hygiene Program.
6. Have no physical impairment that would preclude the performance of all dental hygiene duties.
7. Be in good physical and mental health.

Academic Requirements

All program entry requirement courses listed above must be completed with a grade of “C” or better. In order to be eligible to take the California State Dental Hygiene Board examination, all other courses leading to the associate degree must also be completed with a grade of “C” or better.

Students in the dental hygiene program must earn a “C” grade or better (or a “Credit” grade when applicable) in all dental hygiene courses. Less than a “C” or a “Credit” grade in any dental hygiene course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily, based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

Background Check

Upon entry into the program, students may be required to obtain a background check.

Change of Name, Address, and/or Telephone Number

Applicants and dental hygiene students must keep the Dental Hygiene Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Dental Hygiene Office of this vital information may result in loss of entry into the program. Dental hygiene students must have working e-mail addresses.

Associate in Science

Student Learning Outcomes:

1. Complete the National Board Dental Hygiene Examination with a score of 75th percentile or better.
2. Pass clinical licensing examinations.

First Year – First Semester

	Units
DH 1A Oral Biology.....	2
DH 3A Pre-Clinical Dental Hygiene Techniques	4
DH 4 Oral Radiography.....	4
DH 10 Head and Neck Anatomy.....	2

First Year – Second Semester		Units
DH 1B	General and Oral Pathology	3
DH 2	Dental Materials.....	2
DH 5A	Clinical Dental Hygiene I	2.5
DH 6A	Medical Emergencies in the Dental Office	1
DH 8A	Patient Management.....	2
DH 11	Pain Management.....	4
DH 12	Clinical Seminar Topics I.....	1

Second Year – First Semester		Units
DH 1C	Periodontology.....	2
DH 5B	Clinical Dental Hygiene II	5
DH 6B	Pharmacology.....	2
DH 7A	Community Dental Health I.....	2
DH 13	Clinical Seminar Topics II.....	1

Second Year – Second Semester		Units
DH 1D	Applied Specialties.....	1.5
DH 3B	Dental Specialties	1
DH 5C	Clinical Dental Hygiene III	5
DH 7B	Community Dental Health II.....	2
DH 8B	Practice and Financial Management	2
DH 9	Nutrition in Dentistry.....	1
DH 14	Clinical Seminar Topics III	1
		Total 53

DEVELOPMENTAL SERVICES

ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS – MAJOR #1060

program correction, Fall 2011

The adaptive ornamental horticulture skills program is designed to provide students with disabilities both educational and vocational opportunities. A certificate will not only validate participation in the program, but it will also enhance the opportunities to secure gainful employment.

Certificate

Student Learning Outcomes:

1. Discuss potential employment opportunities based on their educational and horticultural skills.

First Year – First Semester		Units
DEVSER 262	Group Interaction for Students with Disabilities.....	2
DEVSER 275	Horticulture Skills I	2

First Year – Second Semester		Units
DEVSER 262	Group Interaction for Students with Disabilities.....	2
DEVSER 276	Horticulture Skills II	2

Second Year – First Semester		Units
DEVSER 282	Greenhouse Workforce Prep	3

Second Year – Second Semester		Units
DEVSER 282	Greenhouse Workforce Prep	3
		Total 14

CAREER READINESS – MAJOR #7010

new program, Spring 2020

The Career Readiness Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage job awareness. This certificate will prepare students to enter the workforce through career exploration and planning, interview preparation, and communication and workplace skills development. This certificate will enhance employment awareness of each student.

Certificate

Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic skills and strategies needed to plan for a potential career, develop job search skills.
3. Demonstrate time management and organizational skills.

Required Courses	Units
DEVSER 250 Career Awareness	4
DEVSER 252B Communication Skills and Strategies 2	4
DEVSER 260 Job Search, Employment Portfolio, and Interview Development	3

Electives – Select 1 Course	Units
DEVSER 252A Communication Skills and Strategies 1	4
DEVSER 262 Group Interaction	3
DEVSER 277 Beginning Computer Literacy	4
DEVSER 278 Basic Word Processing for Work	3
DEVSER 279 Basic Modified Computer Applications	3
DEVSER 285 Paragraphs to Essays	2.5
DEVSER 286 Essay Development and College Writing	2.5
Total 13.5-15	

EFFECTIVE COMMUNICATIONS – MAJOR #5434

new program, Spring 2020

The Communication Skills Certificate Program offers an overview of the methods of communicating. It also trains students to use their communication skills effectively in various situations. This program is designed to enable students to achieve recognition of development in such areas as presentational speaking, problem solving and decision-making, and interpersonal communication. Students will have the knowledge and key skills to communicate effectively using simple, concise and direct language in order to achieve results in their communications with others. This certificate program allows individuals to develop the confidence and clarity in communication to support their career and educational growth.

Certificate

Student Learning Outcomes:

1. Demonstrate the ability to handle difficult situations with a flexible, genuine and self-confident approach.
2. Demonstrate key skills to communicate effectively using simple, concise, and direct language.
3. Demonstrate increased proficiency with the basics of appropriate communication skills.
4. Identify appropriate conflict-resolution skills.

Required Courses	Units
DEVSER 252A Communication Skills and Strategies 1	4
DEVSER 252B Communication Skills and Strategies 2	4
DEVSER 262 Group Interaction	3

Electives – Select 1 Course	Units
DEVSER 278 Basic Word Processing for Work	3
DEVSER 284 Reading Comprehension 2.....	4
DEVSER 286 Essay Development and College Writing	2.5
Total 13.5-15	

HIGH TECH ADAPTIVE PROGRAM – MAJOR #7006

revised program, Spring 2020

High Tech Computer Certificate Program is designed to provide students with the educational and vocational opportunities and will also enhance prospects for gainful employment by developing computer skills using Adaptive Technology.

Certificate

Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic Adaptive Computer Concepts.

Required Courses	Units
DEVSER 262 Group Interaction	3
DEVSER 277 Beginning Computer Literacy	4
DEVSER 278 Basic Word Processing for Work	3
DEVSER 279 Basic Modified Computer Applications	3
Total 13	

Indicates items also included in November Addendum packet.

ORNAMENTAL HORTICULTURE SKILLS – FORMERLY ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS – MAJOR #1061

revised program, Spring 2020

The Ornamental Horticulture Skills Certificate Program is designed to provide students with disabilities both educational and vocational opportunities. A certificate will not only validate participation in the program, but it will also enhance the opportunities to secure gainful employment.

Certificate

Student Learning Outcomes:

1. Discuss potential employment opportunities based on their educational and horticultural skills.

First Year – First Semester	Units
DEVSER 262 Group Interaction	3
DEVSER 275 Horticulture Skills I	2

First Year – Second Semester	Units
DEVSER 276 Horticulture Skills II	2

Second Year – First Semester	Units
DEVSER 282 Greenhouse Workforce Prep	3

Second Year – Second Semester	Units
DEVSER 282 Greenhouse Workforce Prep	3
Total 13	

SCHOOL TO WORK, CLERICAL – MAJOR #7004

program revised, Spring 2020

The School to Work Clerical Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage awareness in the clerical workforce as well as prepare students for mainstream computer classes. This certificate will validate the students' participation in the School to Work objectives of Fresno City College and enhances computer/clerical awareness of each student.

Certificate

Student Learning Outcomes:

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic computer literacy skills.

Select 4 Courses:	Units
DEVSER 262 Group Interaction	3
DEVSER 277 Beginning Computer Literacy	4
DEVSER 278 Basic Word Processing for Work	3
DEVSER 279 Basic Modified Computer Applications	3
DEVSER 283 Reading Comprehension 1	4
DEVSER 284 Reading Comprehension 2	4
DEVSER 285 Paragraphs to Essays	2.5
DEVSER 286 Essay Development and College Writing	2.5
DEVSER 291 Strategies for Academic Success	2
Total 10-15	

SCHOOL TO WORK, WORKABILITY – MAJOR #7005

Certificate

deleted program, Spring 2020

ELECTRICAL SYSTEMS TECHNOLOGY

ADVANCED PHOTOVOLTAIC TECHNICIAN – MAJOR #8186

program revised, Spring 2020

The courses in the advanced photovoltaic technician 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

Indicates items also included in November Addendum packet.

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.

Required Courses

	Units
EST 55A Digital Concepts.....	3
EST 57C Voice and Data Cabling.....	3
EST 61 Networking Fundamentals.....	3
EST 81 Photovoltaic Systems.....	3
	Total 12

BIOMEDICAL EQUIPMENT TECHNICIAN – FORMERLY BIOMEDICAL TECH – MAJOR #6086

program revised, Spring 2020

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 electro-surgical unit.

Required Courses

	Units
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 61 Networking Fundamentals.....	3
EST 83A Industrial Robotics- Introduction.....	3
EST 84A Introduction to Biomedical Electronics.....	3
	Total 28

ELECTRICAL SYSTEMS TECHNOLOGY – MAJOR #8171

program revised, Spring 2020

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.

Required Courses

	Units
AT 10 Technical Computer Applications.....	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 96D National Electrical Code-Electrical Safety.....	3

Indicates items also included in November Addendum packet.

Select a minimum of thirty-eight (38) additional units from the following list:

	Units
EST 50	Introduction to Electronics 3
EST 55A	Digital Concepts..... 3
EST 55B	Facility Automation..... 3
EST 55C	SCADA Systems..... 2
EST 56A	Wiring Methods..... 3
EST 56B	Motor Controls..... 3
EST 56C	Industrial Electronics..... 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 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
	Total 55

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

program revised, Spring 2020

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.

Required Courses

	Units
EST 55A	Digital Concepts..... 3
EST 55B	Facility Automation..... 3
EST 57C	Voice and Data Cabling..... 3
EST 59	Instrumentation Systems..... 3
	Total 12

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

program revised, Spring 2020

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. Contrast the different parts of a Supervisory Control and Data Acquisition System (SCADA).
3. Understand the purpose, functions, and operations of a PLC.
4. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

Required Courses

	Units
EST 55C	SCADA Systems..... 2
EST 56B	Motor Controls..... 3
EST 57C	Voice and Data Cabling..... 3
EST 58	Programmable Logic Controllers..... 3
EST 59	Instrumentation Systems..... 3
	Total 14

Indicates items also included in November Addendum packet.

INDUSTRIAL MAINTENANCE TECHNICIAN – MAJOR #8190

new program, Summer 2019

An industrial maintenance technician performs installation, repair and maintenance of commercial or industrial machinery in buildings, plants or factory setting, to ensure the machines' proper functionality.

Certificate of Achievement

Student Learning Outcomes:

1. Perform basic setups on the drill press, milling machines or engine lathes in a safe manner and to industry practices.
2. Demonstrate the ability to inspect fluid and pneumatic system components for proper operation and identify problems and the means to correct.
3. Given a SMAW and GMAW power source, students will be able to properly set up and adjust the machine to make a successful weld.

Required Courses

	Units
AT 19 Work Experience (Cooperative), Occupational	3
AT 140 Introduction to Machine Shop	3
AT 150 Pneumatic & Hydraulic Systems	3
AT 160 Mechanical Power Drive Systems.....	3
EST 51 Direct Current Fundamentals of Electronics	3
EST 53 Lab Safety Practices	2
EST 56B Motor Controls.....	3
EST 58 Programmable Logic Controllers.....	3
WELD 2A Introduction to Welding Technology	6
	Total 29

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

program revised, Spring 2020

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.

Required Courses

	Units
EST 57A Analog Communications.....	3
EST 57B Digital Communications.....	3
EST 57C Voice and Data Cabling.....	3
EST 61 Networking Fundamentals.....	3
	Total 12

FIRE TECHNOLOGY

BASIC FIRE ACADEMY – MAJOR #883B

program revised, Spring 2020

The Basic Fire Academy program offers curriculum to prepare students with the knowledge and skills necessary to become a State of California Certified Firefighter 1. Employment opportunities are found in various branches of government and the private sector. The academy is offered in two different formats; an intensive 40 hours per week program or an extended 24 hours per week night program. PROGRAM REQUIREMENTS To qualify for the program, applicants must: Be 18 years of age or have a high school diploma or G.E.D. Applicant with prior college work must be on good academic and progress standing on all college work attempted. Have successfully completed minimum of Public Safety First Aid and CPR (CA Health and Safety Code 1797.182) Possess a valid California driver's license. Provide proof of a clear physical examination including an electrocardiogram printout (EKG). Contact the Fire Academy Coordinator.

Certificate of Achievement

Student Learning Outcomes:

1. Demonstrate specific skills, knowledge and abilities in routine and emergency firefighting operations.
2. Manipulate, inspect, and maintain firefighting and rescue equipment.
3. Display the personal and professional attitude and discipline necessary for employment in the firefighting profession.

Indicates items also included in November Addendum packet.

Required Courses		Units
FIRET 130A	Basic Fire Academy - Part 1	14.5
FIRET 130B	Basic Fire Academy - Part 2	14.5
		Total 29

FIRE TECHNOLOGY – MAJOR #883A

program revised, Spring 2020

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.

Associate in Science

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		Units
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

		Units
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
FIRET 135	Emergency Medical Technician-Paramedic-Field Internship ...	9
		Total 23-36.5

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.

FIRET 135 is the final course of three required to successfully complete the paramedic program.

FIRE TECHNOLOGY – MAJOR #883A

program correction, Fall 2018

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		Units
AT 10	Technical Computer Applications.....	3
AT 130	Industrial Mathematics, or	
MATH 103	Foundations of Algebra	3-5
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
PHYS 11	Introductory Physical Science.....	3

Indicates items also included in November Addendum packet.

Course Options: Select 12 Units		Units
FIRET 8	Fire Hydraulics.....	3
FIRET 9	Fire Fighting Practices.....	3
FIRET 130A	Basic Fire Academy - Part 1	6
	Emergency Medical Technician I	9.5
FIRET 135	Emergency Medical Technician-Paramedic-Field Internship	8.5
	Total	39-41

FIRET 130A carries a value of up to 13 units; however, only 6 units can be applied to the associate in science degree and certificate of achievement.

FIRET 135 is the final course of three required to successfully complete the paramedic program.

FIREFIGHTER II – MAJOR #8835

program revised, Spring 2020

Provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001

Standard for Fire Fighter Professional Qualifications. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.

Certificate

Student Learning Outcomes:

1. Identify proper equipment necessary to mitigate incident presented during a scenario simulation.
2. Initiate proper communication process during routine and emergency situations.
3. Perform proper rescue techniques removing victims in emergency simulations.

Required Courses		Units
FIRET 22A	Firefighter II Part A.....	2
FIRET 22B	Firefighter II Part B.....	3
	Total	5

FOOD AND NUTRITION

NUTRITION AND DIETETICS FOR TRANSFER – MAJOR #5683

program correction, Fall 2019

The Associate in Science in Nutrition and Dietetics for Transfer is designed for students who plan to transfer to a CSU campus to complete a bachelor's degree in nutrition and dietetics. To earn the Associates in Science in Nutrition and Dietetics for Transfer degree, students must complete 60 units that are eligible for transfer to the California State University, including both of the following: the Intersegmental General Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements and a minimum of 18 semester units in a major or an area of emphasis, as determined by the community college district. Obtainment of a minimum grade point average of 2.0. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. For more information on CSU admission and transfer requirements consult with a counselor. Upon completion of the Associates in Science in Nutrition and Dietetics for Transfer the students will be able to demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease. Students will demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients. Students will recognize and separate scientifically supported information from misinformation. Students will identify ways in which social factors influence food related choices, practices, and beliefs.

Associate in Science

Student Learning Outcomes:

1. Demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease.
2. Demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients.
3. Recognize and separate scientifically supported information from misinformation.
4. Identify ways in which social factors influence food related choices, practices and beliefs.

Required Courses		Units
BIOL 31	Microbiology	5
CHEM 1A	General Chemistry	5
CHEM 1B	General Chemistry and Qualitative Analysis.....	5
FN 40	Nutrition.....	3
PSY 2	General Psychology	3

Indicates items also included in November Addendum packet.

List A: Select at least one course from the list below:		Units
BIOL 20	Human Anatomy	4
BIOL 21A	Human Anatomy & Physiology I, <i>and</i>	
BIOL 21B	Human Anatomy & Physiology II.....	9
BIOL 22	Human Physiology	5
CHEM 28A	Organic Chemistry I, <i>and</i>	
CHEM 29A	Organic Chemistry Laboratory I	5
DS 23	Business Statistics, <i>or</i>	
MATH 11	Elementary Statistics, <i>or</i>	
MATH/PSY 42	Statistics for the Behavioral Sciences.....	3-4

List B: Select one course:		Units
FN 1	Principles of Food Preparation.....	3
		Total 27-33

HEALTH INFORMATION TECHNOLOGY

HEALTH INFORMATION TECHNOLOGY: REVENUE MANAGEMENT – FORMERLY HEALTH INFORMATION TECHNOLOGY AND MEDICAL RECORD TECHNOLOGY – MAJOR #4622

revised program, Spring 2020

The Health Information Technology (HIT) Program prepares students for a career working in health information management in a variety of healthcare settings. HIT professionals perform the essential functions of acquiring, analyzing, reporting, and protecting digital and traditional medical information. Through the use of technology and expertise in data integrity, confidentiality, and security, their work contributes to quality patient care. The curriculum provides a specialized emphasis in revenue management for a career in coding, auditing, and clinical documentation improvement, while also providing foundational knowledge in general health information management for job responsibilities that may include data collection, documentation analysis, quality improvement, release of information, or supervision. The HIT Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Successful completion of the Health Information Technology Program qualifies the graduate for an associate in science degree and eligibility to take the Registered Health Information Technician (RHIT) exam administered by the American Health Information Management Association (AHIMA).

Notes:

1. The associate degree requires the completion of the program requirements with a 2.0 or higher GPA.
2. Biology 20 and 22, Biology 21A and 21B, or 24 may be substituted for Biology 5.
3. In addition to the courses listed above, all requirements for the Associate Degree in Science must be met. Refer to the Fresno City College Catalog section on certificate and degree and meet with a counselor for advisement.
4. Academic credit earned in accredited institutions of higher education or AHIMA approved schools of Health Information Technology for comparable courses will be accepted for transfer. Equivalency will be determined on the basis of catalog description, course outline, course comparison, and hour distribution. Credit by examination, when acceptable, may be required when equivalency cannot be determined.

Associate in Science

Student Learning Outcomes:

1. Apply the knowledge and skills for health information management according to the entry-level competencies of the American Health Information Management Association HIM Curriculum.
2. Pass the Registered Health Information Technician examination.

First Semester - Fall		Units
BIOL 5	Human Biology, <i>or</i>	
BIOL 55	Introduction to the Biology of Humans.....	3-4
CIT 15	Computer Concepts	3
HIT 1	Introduction to Health Information Management	3
HIT 10	Medical Terminology.....	3
MATH 11	Elementary Statistics.....	4

Second Semester - Spring		Units
HIT 2	Legal Aspects of Health Information	3
HIT 4	Disease Process.....	3
HIT 5	ICD Coding: Diagnoses.....	3
HIT 12	Health Information in Alternative Settings.....	2
MA 2	Pharmacology.....	3

Third Semester - Fall		Units
HIT 3	Quality Improvement.....	2
HIT 6	ICD Coding: Procedures.....	3
HIT 9	Hospital and Health Statistics	2
HIT 14	HIM Technology and Systems	3
Fourth Semester - Spring		Units
HIT 7	Directed Practice.....	3
HIT 8	Health Information Management and Supervision	
HIT 11	CPT Coding.....	3
HIT 16	Healthcare Reimbursement.....	2
		Total 51-52

MEDICAL CODING – MAJOR #4627

revised program, Spring 2020

The medical coding certificate program prepares students for a position as a coder in a hospital, physician office, clinic, long-term care facility, and other healthcare settings. Coders review patient health information, analyze and extract data, and ensure appropriate codes are assigned for internal and external data reporting, billing, research, and regulatory compliance.

Notes: Biology 20 and 22, or Biology 21A and 21B, or Biology 24 may be substituted for Biology 5.

Certificate of Achievement

Student Learning Outcomes:

1. Evaluate the content of patient health records and assign diagnostic and procedure codes following regulatory guidelines.
2. Use computer technology and applications as a coding professional would in the regular course of business for HIM functions such as the electronic health record, encoding, abstracting, billing, and revenue management.

First Semester		Units
BIOL 5	Human Biology, <i>or</i>	
BIOL 55	Introduction to the Biology of Humans.....	3-4
HIT 1	Introduction to Health Information Management	3
HIT 10	Medical Terminology.....	3
Second Semester		Units
CIT 15	Computer Concepts	3
HIT 4	Disease Process.....	3
HIT 5	ICD Coding: Diagnoses.....	3
Third Semester		Units
HIT 6	ICD Coding: Procedures.....	3
HIT 14	HIM Technology and Systems	3
MA 2	Pharmacology.....	3
Fourth Semester		Units
HIT 11	CPT Coding.....	3
HIT 15	Medical Coding Directed Practice	1
HIT 16	Healthcare Reimbursement.....	2
		Total 33-34

HEATING, VENTILATION, AND AIR CONDITIONING

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

revised program, Spring 2020

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.

Indicates items also included in November Addendum packet.

Required Courses		Units
HVAC 50	HVAC Introduction	2
HVAC 51	HVAC Comfort Systems	6.5
HVAC 52	HVAC System Components	6.5
HVAC 53	HVAC Comfort Troubleshooting.....	6.5
HVAC 54	HVAC System Processes.....	6.5
		Total 28

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

revised program, Spring 2020

Students who successfully complete the HVAC Technology III 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		Units
HVAC 50	HVAC Introduction	2
HVAC 51	HVAC Comfort Systems	6.5
HVAC 52	HVAC System Components	6.5
HVAC 53	HVAC Comfort Troubleshooting.....	6.5
HVAC 54	HVAC System Processes.....	6.5
		Total 28

HVAC TECHNOLOGY II – FORMERLY AIR CONDITIONING – MAJOR #8042

Certificate of Achievement

program deleted, Spring 2020

HVAC WIRELESS CONTROL I – MAJOR #8043

revised program, Spring 2020

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		Units
AT 10	Technical Computer Applications.....	3
HVAC 54	HVAC System Processes.....	6.5
		Total 9.5

HONORS PROGRAM

HONORS PROGRAM COMMENDATION – MAJOR #5332

program correction, Fall 2018

A Leon S. Peters Commendation Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 9 units of Honors courses, including 1 colloquium unit, with an overall GPA of 3.2 or better.

Certificate

Student Learning Outcome:

Because this is part of a comprehensive general education program, students who complete the Honors Certificate of Commendation program will gain outcomes from among the following:

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.

Elective Courses: Select a minimum of 8 units		Units
ANTHRO 2H	Honors Cultural Anthropology	3
ART 5H	Honors Art History Ancient to Medieval, <i>or</i>	
ART 6H	Honors Art History Renaissance to Modern	3
BIOL 11AH	Honors Biology for Science Majors I	5
COMM 8H	Honors Group Communication	3
ECON 40H	Honors Introduction to Microeconomics, <i>or</i>	
ECON 50H	Honors Introduction to Macroeconomics	3
ENGL 1AH	Honors Reading and Composition	4
ENGL 3H	Honors Critical Reading & Writing, <i>or</i>	
PHIL 2H	Honors Critical Reasoning and Analytic Writing	3
HIST 12H	Honors History of the United States since 1877	3
MATH 11H	Honors Elementary Statistics	4
PHIL 1AH	Honors Theories of Knowledge and Reality	3
PHIL 1CH	Honors Ethics	3
POLSCI 2H	Honors American Government	3
PSY 2H	Honors General Psychology	3
SOC 1AH	Honors Introduction to Sociology	3

Colloquia: Select a minimum of 1 unit		Units
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
		Total 9

HUMAN SERVICES

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

program revision, Spring 2020

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.

Indicates items also included in November Addendum packet.

Required Core Courses		Units
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		Units
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	Theories of Knowledge and Reality, <i>or</i>	
PHIL 1C	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

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

program correction, Fall 2019

This certificate of achievement is designed to prepare students for entry-level employment in a social service setting or with additional general education courses, to transfer as a junior to a baccalaureate degree program in Social Work. This program 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 certificate of achievement offers course work leading to a certificate of achievement in Human Services: Pre- Social Work Option. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

Indicates items also included in November Addendum packet.

Certificate of Achievement

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

Units

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	3-4
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

Units

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 30-31

Indicates items also included in November Addendum packet.

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

program revision, Spring 2020

This certificate of achievement is designed to prepare students for entry-level employment in a social service setting or with additional general education courses, to transfer as a junior to a baccalaureate degree program in Social Work. This program 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 certificate of achievement offers course work leading to a certificate of achievement in Human Services: Pre- Social Work Option. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

Certificate of Achievement

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

	Units
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

	Units
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

Indicates items also included in November Addendum packet.

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	

SOCIAL WORK AND HUMAN SERVICES FOR TRANSFER – MAJOR #7635

new program, Fall 2019

An Associate in Arts in Social Work and Human Services for Transfer degree, is designed for students who plan to complete a Bachelor's degree in a similar major at a CSU campus. The degree will acquaint students with the fundamentals of the human services system and the profession of Social Work, including introduction to the theories, principles, and values on which human services are offered and social work is practiced in the United States. To earn the Associate of Arts in Social Work/Human Services 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 of "C" or higher in each course taken to fulfill the major. Local graduation requirements are not necessary to complete the transfer degree. Students should consult with a knowledgeable academic counselor for more information on transfer requirements and university admission.

Associate in Arts

Student Learning Outcome:

1. Demonstrate a fundamental working knowledge of the social services system and social work as a profession.
2. Be prepared for entry level employment in a social services setting.
3. Apply the multiple perspectives of a broad liberal arts foundation to understanding and responding to human needs and social problems.

Required Core Courses	Units	
BIOL 20	Human Anatomy, <i>or</i>	
BIOL 22	Human Physiology, <i>or</i>	
BIOL 21A	Human Anatomy & Physiology I, <i>and</i>	
BIOL 21B	Human Anatomy & Physiology II.....	4-9
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
HS 19A	Work Experience (Cooperative), Occupational	3
HS 20	Introduction to Social Welfare	3
PSY 2/2H	General Psychology, <i>or</i> Honors General Psychology	3
MATH 11	Elementary Statistics, <i>or</i>	
MATH 42	Statistics for the Behavioral Sciences.....	4
SOC 1A/1AH	Introduction to Sociology, <i>or</i> Honors Introduction to Sociology	3

List A: Select two (2) courses.

List A: Select two (2) courses.	Units	
ANTHRO 2/2H	Cultural Anthropology, <i>or</i> Honors Cultural Anthropology.....	3
CHDEV 30	Child, Family and Community	3
CHDEV/PSY 38	Lifespan Development.....	3
CHDEV/PSY 39	Child Growth and Development	3
CRIM 1	Introduction to Criminology.....	3
ENGL 3/3H	Critical Reading & Writing, <i>or</i> Honors Critical Reading & Writing.....	3
PSY 16	Abnormal Psychology	3
SOC 1B	Critical Thinking about Social Problems	3
SOC 2	American Minority Groups	3
	Total 29-34	

Indicates items also included in November Addendum packet.

KINESIOLOGY

KINESIOLOGY – MAJOR #4555

revised program, Spring 2020

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

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

Minimum of 6 units from the following courses:

		Units
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 23	Lifeguard Training.....	3
PE 24	Sports Officiating.....	2
PE 26	Sports Psychology	3
PE 28	Foundations of Coaching.....	3

Fitness/Wellness Activities: Minimum of one course (1 unit)

		Units
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

Individual/Dual Sports: Minimum one course (1-3 units)		Units
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

Team Sports: Minimum one course (1-3 units)		Units
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

LAW

LAW, PUBLIC POLICY, AND SOCIETY FOR TRANSFER – MAJOR #8770

new program, Spring 2020

The coursework required to earn an Associate in Arts in Law, Public Policy, and Society for Transfer has been identified as good preparation for law school upon completion of a bachelor's degree. This interdisciplinary area of emphasis emphasizes the development of communication skills, introduces students to the legal field, and prepares students for further study in a variety of majors. Students who opt to pursue this course of study are encouraged to engage in further exploration of one or more specific majors as they select electives for degree completion. To earn the Associate in Arts in Law, Public Policy and Society 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 Art

Student Learning Outcomes:

1. Demonstrate independent and critical thinking regarding important topics in law.
2. Conduct research and effectively write about historical, social, political and economic issues related to law.

Required Courses		Units
AMST 11	Law and Democracy.....	3
BA 18	Business and the Legal Environment.....	4
COMM 4	Persuasion, <i>or</i>	
ENGL 3/3H	Critical Reading & Writing, <i>or</i>	
	Honors Critical Reading & Writing, <i>or</i>	
PHIL 2/2H	Critical Reasoning and Analytic Writing, <i>or</i>	
	Honors Critical Reasoning and Analytic Writing.....	3
COMM 25	Argumentation.....	3
CRIM 6	Concepts of Criminal Law.....	3
ENGL 1A/1AH	Reading and Composition, <i>or</i>	
	Honors Reading and Composition.....	4
HIST 11	History of the United States to 1877, <i>or</i>	
HIST 12/12H	History of the United States since 1877, <i>or</i>	
	Honors History of the United States since 1877.....	3

Indicates items also included in November Addendum packet.

MATH 11/11H	Elementary Statistics, <i>or</i> Honors Elementary Statistics, <i>or</i> MATH 42 Statistics for the Behavioral Sciences, <i>or</i> DS 23 Business Statistics	3-4
PHIL 1C	Ethics	3
POLSCI 2/2H	American Government, <i>or</i> Honors American Government.....	3
		Total 32-33

LIBERAL ARTS

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

program correction, Spring 2018

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:

	Units	
HIST 1/1H	Western Civilization to 1648, <i>or</i> Honors Western Civilization to 1648	3
HIST 2/2H	Western Civilization Since 1648, <i>or</i> Honors 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 SPANISH – MAJOR #5183

Associate in Arts

deleted program, Spring 2020

MARKETING

FASHION MERCHANDISING – MAJOR #2152

program correction, Fall 2016

This certificate prepares students for employment in the field of Fashion Merchandising.

Certificate of Achievement

Indicates items also included in November Addendum packet.

Student Learning Outcome:

1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.

Required Core Courses

	Units
ART 7	Beginning Drawing..... 3
BA 51	Business Planning and New Venture Launch..... 1.5
MKTG 10	Principles of Marketing..... 3
MKTG 11	Selling and Sales Management..... 3
MKTG 12	Advertising and Promotion..... 3
MKTG 14	Retailing..... 3
MKTG 17	Visual Merchandising..... 3
MKTG 21	Digital Marketing..... 3
MKTG 22	Introduction to Fashion Merchandising..... 3
	Total 25.5

MEDICAL ASSISTING

MEDICAL ASSISTANT-CLINICIAN – MAJOR #2120

revised 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 Core Courses

	Units
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
	Total 26

**BT 23, HLTH 2, and HS 24 are recommended electives as part of the Associate degree general education requirements.*

MUSIC

GUITAR MAJORS – MAJOR #5830

program correction, Fall 2018

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. Instrumental, vocal, guitar, and piano majors must take Music 1A, 1B, 2A, 2B, 7A, 7B, 7C, 7D, 13, and 18. 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

Indicates items also included in November Addendum packet.

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.

Required Core Courses	Units
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 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

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

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

select eight units from the following:	Units
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: New Orleans, Swing and Bop	2
MUS 47B Jazz Combo: Cool and Mainstream	2
MUS 47C Jazz Combo: Modern and Fusion	2
MUS 47D Jazz Combo: World Music.....	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 70 Contemporary Jazz Ensemble.....	1-2
MUS 71 Lab Jazz Ensemble.....	1-2
MUS 72 Jazz Composer's Orchestra.....	2
MUS 76 College Philharmonic Orchestra	1-2
MUS 90 Jazz Composers Workshop.....	2
MUS 91 Jazz Composers Ensemble.....	2
MUS 92 Vocal Jazz Ensemble.....	2
Total 37	

PHOTOGRAPHY

DIGITAL PHOTOGRAPHY – MAJOR #5223

program correction, Spring 2018

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

Indicates items also included in November Addendum packet.

RADIOLOGIC TECHNOLOGY

RADIOLOGIC TECHNOLOGY – MAJOR #4570

revised program, Spring 2020

Imaging examinations performed by, and accompanying responsibilities assigned to, a radiographer shall be at the direction of physicians qualified to request and/or perform radiologic procedures. Upon completion of the program the radiographer shall be able to:

1. Apply knowledge of anatomy, physiology, and radiographic techniques to demonstrate accurately anatomical structures on a radiograph or other imaging receptor.
2. Determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient.
3. Evaluate radiographic images for appropriate positioning and imaging quality.
4. Apply the principles of radiation protection for the patient, self, and others.
5. Provide patient care and comfort.
6. Recognize emergency patient conditions and initiate lifesaving first aid and basic life support procedures.
7. Evaluate the performance of radiologic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority.
8. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
9. Participate in radiologic quality assurance programs.
10. Assist in fluoroscopic procedures.

Classes are conducted on the Fresno City College campus. Students also attend classes at local hospitals affiliated with the program for clinical experience.

An associate in science degree will be granted upon successful completion of requirements for graduation, which includes formal hospital training. The student will be eligible to take the examination given by the American Registry of Radiologic Technologists upon successful completion of requirements for graduation.

Admission Policy:

Enrollment is limited in the Radiologic Technology Program. There are no restrictions as to age, race, or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions:

Application Requirements

Minimum prerequisite requirements for application to the Radiological Technology Program follow.

1. Have completed and submitted an Academic Summary Form for the Radiologic Technology Program.
2. Have completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, or Biology 21A, Human Anatomy and Physiology I, and Biology 21B, Human Anatomy and Physiology II (or equivalent), with a grade of “C” or better.
3. Have completed Health Information Technology 10, Medical Terminology (or equivalent), with a grade of “C” or better.
4. Have attained a minimum cumulative grade point average (GPA) of “C+” (2.75) in completed college work.
5. Have no physical impairment that would preclude the performance of all radiologic technology duties.
6. Be in good physical and mental health.

Note: Prior to registration for the semester in which the applicant is scheduled to take courses in Radiologic Technology, the student must submit evidence of physical examination by a licensed physician.

Background Check

Upon entry into the program, students will be required to obtain a background check.

Change of Name, Address, and/or Telephone Number

Applicants and radiologic technology students must keep the Allied Health, Physical Education, and Athletics office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Allied Health, Physical Education, and Athletics office of this vital information may result in loss of entry into the program.

Academic Requirements

All program entry requirement courses listed above must be completed with a grade of “C” or better.

Students in the radiologic technology program must earn a “C” grade or better (or a “Credit” grade when applicable) in all program courses. Less than a “C” or a “Credit” grade in any radiologic technology course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only. Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

Associate in Science

Student Learning Outcomes:

1. Students will pass the ARRT National Registry Examination on the first attempt.

First Year – First Semester

	Units
RAD 1A	Fundamentals of Radiologic Technology..... 6
RAD 1B	Basic Radiographic Positioning Laboratory 1
RAD 1C	Clinical Orientation Laboratory..... 3
RAD 1D	Nursing Procedures in Radiologic Technology 3

Indicates items also included in November Addendum packet.

First Year – Second Semester		Units
RAD 2A	Radiation Biology	6
RAD 2B	Advanced Radiographic Positioning Laboratory	1
RAD 2C	Clinical Observation Laboratory.....	3
RAD 2D	Quality Assurance in Radiologic Technology.....	1
First Year – Summer Semester		Units
RAD 3	Basic Clinical Radiologic Technology.....	8
Second Year – First Semester		Units
RAD 4A	Pathology in Radiologic Technology	2
RAD 4B	Advanced Clinical Radiologic Technology.....	12
RAD 4C	Advanced Radiographic Positioning Laboratory – Cranium.....	1
Second Year – Second Semester		Units
RAD 5A	Special Procedures in Radiologic Technology.....	2
RAD 5B	Specialized Clinical Radiologic Technology.....	12
RAD 5C	Fluoroscopy.....	2
Second Year – Second Summer		Units
RAD 6	Concentrated Clinical Radiologic Technology.....	4
		Total 67

SPANISH

SPANISH – MAJOR #5510

Associate in Arts

deleted program, Spring 2020

SPANISH FOR TRANSFER – MAJOR #5550

Associate in Arts

program correction, Fall 2018

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.

WELDING TECHNOLOGY

METAL FABRICATION OPTION – MAJOR #8371

revised program, Spring 2020

Instruction in the design and fabrication of metal projects by welding and related practices. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

Associate in Science

Student Learning Outcomes:

1. Given an idea or description, design and plan the construction of one or more advanced metal fabricated projects.
2. From the design and specifications, determine estimated steel weights and cost calculations.
3. Demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of their advanced projects.
5. During the construction of a project, demonstrate the efficient use of time and materials to produce advanced projects.

Required Courses		Units
AT 10	Technical Computer Applications.....	3
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
AT 130	Industrial Mathematics	3
CADD 16	3D Solid Modeling I.....	3
DRAFT 12	Drafting Practices.....	3
WELD 3A	Welding Design and Fabrication	5
WELD 3B	Intermediate Welding Design and Fabrication	5

Required Welding Sequence Options

WELD 2A	Introduction to Welding Technology, <i>and</i>	
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application, <i>and</i>	
WELD 6B	Semi-Automatic Wire Feed Welding, <i>and</i>	
WELD 6C	Gas Tungsten Arc Welding Theory and Application	10.5-11

Electives (Select 1 course)		Units
AT 140	Introduction to Machine Shop	3
CADD 24	2D CAD II	3
CAM 10	CNC Mill Programming & Operation I.....	4
ENGR 10	Introduction to Engineering.....	2
ENGR 11	Manufacturing Processes	3
WELD 56	Blueprint Reading for Welders	2
		Total 39.5-42

RECOMMENDED SEQUENCE

First Year – First Semester		Units
AT 10	Technical Computer Applications.....	3
AT 130	Industrial Mathematics	3
WELD 2A	Introduction to Welding Technology, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application.....	3.5-6

First Year – Second Semester		Units
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
CADD 16	3D Solid Modeling I.....	3
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6B	Semi-Automatic Wire Feed Welding.....	3.5-5

Second Year – First Semester		Units
DRAFT 12	Drafting Practices.....	3
WELD 3A	Welding Design and Fabrication	5
WELD 6C	Gas Tungsten Arc Welding Theory and Application	3.5

Second Year –Second Semester		Units
WELD 3B	Intermediate Welding Design and Fabrication	5
Elective Course	2-4

METAL FABRICATION OPTION – MAJOR #8371

revised program, Spring 2020

Instruction in the design and fabrication of metal projects by welding and related practices. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

Certificate of Achievement

Student Learning Outcomes:

1. Given an idea or description, design and plan the construction of one or more advanced metal fabricated projects.
2. From the design and specifications, determine estimated steel weights and cost calculations.
3. Demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of their advanced projects.
5. During the construction of a project, demonstrate the efficient use of time and materials to produce advanced projects.

Required Courses		Units
AT 10	Technical Computer Applications.....	3
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
AT 130	Industrial Mathematics	3
CADD 16	3D Solid Modeling I.....	3
DRAFT 12	Drafting Practices.....	3
WELD 3A	Welding Design and Fabrication	5
WELD 3B	Intermediate Welding Design and Fabrication	5

Required Welding Sequence Options

WELD 2A	Introduction to Welding Technology, <i>and</i>
WELD 2B	Advanced Multi-Process Welding, <i>or</i>
WELD 6A	Shielded Metal Arc Welding Theory and Application, <i>and</i>
WELD 6B	Semi-Automatic Wire Feed Welding, <i>and</i>
WELD 6C	Gas Tungsten Arc Welding Theory and Application10.5-11

Electives (Select 1 course)		Units
CADD 24	2D CAD II.....	3
CAM 10	CNC Mill Programming & Operation I.....	4
ENGR 10	Introduction to Engineering.....	2
ENGR 11	Manufacturing Processes.....	3
WELD 56	Blueprint Reading for Welders	2
Total		39.5-42

RECOMMENDED SEQUENCE

First Year – First Semester		Units
AT 10	Technical Computer Applications.....	3
AT 130	Industrial Mathematics	3
WELD 2A	Introduction to Welding Technology, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application.....	3.5-6

First Year – Second Semester		Units
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
CADD 16	3D Solid Modeling I.....	3
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6B	Semi-Automatic Wire Feed Welding.....	3.5-5

Second Year – First Semester		Units
DRAFT 12	Drafting Practices.....	3
WELD 3A	Welding Design and Fabrication	5
WELD 6C	Gas Tungsten Arc Welding Theory and Application.....	3.5

Second Year –Second Semester		Units
WELD 3B	Intermediate Welding Design and Fabrication	5
Elective Course	2-4

PIPE AND STRUCTURAL STEEL CERTIFICATION – FORMERLY PIPE AND STRUCTURAL STEEL CERTIFICATION OPTION – MAJOR #8375

revised program, Spring 2020

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations. Specific preparation is provided in welding and metal fabrication or pipe and steel certification procedures. Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, building, and pressure vessel systems.

Associate in Science and Certificate of Achievement

Student Learning Outcomes:

1. Students will demonstrate correct usage of all weld symbols on the American Welding Society welding symbols chart.
2. Students will weld in all welding positions.
3. Students will correctly use ASME, AWS and API codes.
4. Students will perform and weld different pipe configurations according to specification.

Required Courses		Units
AT 10	Technical Computer Applications.....	3
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
AT 130	Industrial Mathematics	3
DRAFT 12	Drafting Practices.....	3
WELD 4A	Heavy Plate, Structural Steel and Welding Certification.....	5
WELD 4B	Pipe, Tube Welding and Certification	5

Required Welding Sequence Options		
WELD 2A	Introduction to Welding Technology, <i>and</i>	
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application, <i>and</i>	
WELD 6B	Semi-Automatic Wire Feed Welding, <i>and</i>	
WELD 6C	Gas Tungsten Arc Welding Theory and Application	10.5-11

Electives (Select 2 courses)		Units
CADD 14	2D CAD I.....	3
CADD 24	2D CAD II.....	3
ENGR 10	Introduction to Engineering.....	2
ENGR 11	Manufacturing Processes.....	3
WELD 56	Blueprint Reading for Welders.....	2
Total		38.5-41

RECOMMENDED SEQUENCE

First Year – First Semester		Units
AT 10	Technical Computer Applications.....	3
AT 130	Industrial Mathematics	3
DRAFT 12	Drafting Practices.....	3
WELD 2A	Introduction to Welding Technology, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application.....	3.5-6

First Year – Second Semester		Units
AT 21	Occupational Safety and Health.....	2
AT 40	Preparing for Employment Opportunities.....	3
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6B	Semi-Automatic Wire Feed Welding.....	3.5-5

Second Year – First Semester		Units
WELD 4A	Heavy Plate, Structural Steel and Welding Certification.....	5
WELD 6C	Gas Tungsten Arc Welding Theory and Application.....	3.5
Elective Course	2-3

Second Year –Second Semester		Units
WELD 4B	Pipe, Tube Welding and Certification	5
Elective Course	2-3

WELDING MULTI-PROCESS – MAJOR #8373

revised program, Spring 2020

This certificate provides pre-employment training for an entry level job in the welding industry. Instruction in the areas of shielded metal, gas metal, gas tungsten and flux cored arc welding along with oxyacetylene cutting and plasma cutting will be presented. Skills will include welding in the flat, horizontal, vertical and overhead positions with the various processes as well as welding with aluminum and stainless steel with the Gas Metal and Gas Tungsten arc welding processes. Students will also use common power and hand tools to compliment related to the welding industry.

Certificate of Achievement

Student Learning Outcomes:

1. Identify defects and discontinuities in their horizontal, vertical, and overhead welds according to AWS (American Welding Society) standards.
2. Given a power source, properly set up and adjust the SMAW, GMAW, GTAW, FCAW and air carbon arc gouging machines to complete their lab assignment to AWS standards.
3. Given a drawing with weld symbols and specifications, prepare metal and perform the correct weld.

Required Courses		Units
AT 130	Industrial Mathematics	3
DRAFT 12	Drafting Practices.....	3

Indicates items also included in November Addendum packet.

Required Welding Sequence Options

WELD 2A	Introduction to Welding Technology, <i>and</i>	
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application, <i>and</i>	
WELD 6B	Semi-Automatic Wire Feed Welding, <i>and</i>	
WELD 6C	Gas Tungsten Arc Welding Theory and Application	10.5-11
		Total 16.5-17

RECOMMENDED SEQUENCE

First Year – First Semester		Units
AT 130	Industrial Mathematics	3
WELD 2A	Introduction to Welding Technology, <i>or</i>	
WELD 6A	Shielded Metal Arc Welding Theory and Application	3.5-6

First Year – Second Semester		Units
DRAFT 12	Drafting Practices	3
WELD 2B	Advanced Multi-Process Welding, <i>or</i>	
WELD 6B	Semi-Automatic Wire Feed Welding.....	3.5-5

Second Year – First Semester (For WELD 6 series)		Units
WELD 6C	Gas Tungsten Arc Welding Theory and Application	3.5

Indicates items also included in November Addendum packet.

COURSE DESCRIPTIONS

Changes to Pages 247-447

Course Classification System

Credit, Non-degree Applicable

Change: new

Admin of Justice 233T – Training Conference – Active Shooter Update	<i>effective Spring 2020</i>
Admin of Justice 233V – Officer Skills Orientation Update	<i>effective Spring 2020</i>
Admin of Justice 246L – Critical Incident Articulation Update	<i>effective Spring 2020</i>
Admin of Justice 291B – Police Field Training Techniques Update	<i>effective Spring 2020</i>
Developmental Services 252A – Communication Skills and Strategies 1	<i>effective Spring 2020</i>
Developmental Services 252B – Communication Skills and Strategies	<i>effective Spring 2020</i>
Developmental Services 283 – Reading Comprehension 1	<i>effective Spring 2020</i>
Developmental Services 284 – Reading Comprehension 2	<i>effective Spring 2020</i>
Developmental Services 285 – Paragraphs to Essays	<i>effective Spring 2020</i>
Developmental Services 286 – Essay Development and College Writing	<i>effective Spring 2020</i>

Change: delete

Business & Technology 271 – Business Grammar Fundamentals	<i>effective Spring 2020</i>
Developmental Services 251 – Workability Portfolio and Interview Development	<i>effective Spring 2020</i>
Developmental Services 252 – Workability Strategies and Communication Skills	<i>effective Spring 2020</i>
English 277 – Reading Skills	<i>effective Spring 2020</i>
English 278 – Reading Comprehension	<i>effective Spring 2020</i>
English 281 – Grammar and Sentence Writing	<i>effective Spring 2020</i>
English 282 – Paragraph Writing	<i>effective Spring 2020</i>
Fire Technology 222A – Firefighter II Part A	<i>effective Spring 2020</i>
Fire Technology 222B – Firefighter II Part B	<i>effective Spring 2020</i>

Noncredit

Change: new

Business & Technology 331 – 21 st Century Workforce Skills	<i>effective Spring 2020</i>
English for Multi-Lingual Students 364RA – Intermediate Reading and Vocabulary A	<i>effective Spring 2020</i>
English for Multi-Lingual Students 364RB – Intermediate Reading and Vocabulary B	<i>effective Spring 2020</i>
English for Multi-Lingual Students 364RC – Intermediate Reading and Vocabulary C	<i>effective Spring 2020</i>
English for Multi-Lingual Students 371A – Low-Intermediate Pronunciation Improvement and Accent Reduction	<i>effective Spring 2020</i>
English for Multi-Lingual Students 371B – High-Intermediate Pronunciation Improvement and Accent Reduction	<i>effective Spring 2020</i>
English for Multi-Lingual Students 371C – Advanced Pronunciation Improvement and Accent Reduction	<i>effective Spring 2020</i>
English for Multi-Lingual Students 372A – Low-Intermediate Academic Grammar	<i>effective Spring 2020</i>
English for Multi-Lingual Students 372B – High-Intermediate Academic Grammar	<i>effective Spring 2020</i>
English for Multi-Lingual Students 372C – Advanced Academic Grammar	<i>effective Spring 2020</i>
English for Multi-Lingual Students 373A – Low-Intermediate Listening and Speaking	<i>effective Spring 2020</i>
English for Multi-Lingual Students 373B – High-Intermediate Listening and Speaking	<i>effective Spring 2020</i>
English for Multi-Lingual Students 373C – Advanced Listening and Speaking	<i>effective Spring 2020</i>
Learning Assistance 360 – High School Equivalency Preparation	<i>effective Spring 2020</i>

Change: delete

English for Multi-Lingual Students 365R – High Intermediate Academic Reading and Vocabulary	<i>effective Fall 2019</i>
English for Multi-Lingual Students 365W – High Intermediate Academic Writing and Grammar	<i>effective Fall 2019</i>

Courses

Administration of Justice (AJ)

New course

effective Spring 2020

233T **Training Conference – Active Shooter Update, 0.1-0.3 unit, 0.47-0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit)**

Prerequisite: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Techniques and tactics for law enforcement officers to engage active shooters in various situations in order to reduce injuries or deaths in active shooting incidents.

New course

effective Spring 2020

233V **Officer Skills Orientation Update, 0.1 unit, 0.58 lab hour, (Pass/No Pass), (Open Entry/Open Exit)**

Prerequisite: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review and update case law, policies, firearms, chemical weapons, and less-than-lethal weapons, common to officers entering the patrol environment.

New course

effective Spring 2020

246L **Critical Incident Articulation Update, 0.3 unit, 0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit)**

Prerequisite: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provide public safety officers with a comprehensive understanding of case law and statutory law as it relates to use of force incidents. The students will be exposed to scenario based, force on force, training with outcomes ranging anywhere from verbal de-escalation to the application of lethal force. The students will have and understanding of the roles of all entities involved in the critical incident investigation process.

New course

effective Spring 2020

291B **Police Field Training Techniques Update, 0.1 unit, 0.06 lecture hour, 0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)**

Prerequisite: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Intended for current Field Training Officers to update them on new and current law enforcement trainee training methods, concerns, and policies.

Aerospace Studies (AEROST)

Change: title, description

effective Spring 2020

1A **Heritage and Values of the United States Air Force, 1 unit, 1 lecture hour**

Corequisite: Aerospace Studies 3. **Advisory:** Eligibility for English 1A recommended.

A survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force. (A, CSU, UC)

- Change: title, description** **effective Spring 2020**
- # 1B **Heritage and Values of the United States Air Force, 1 unit, 1 lecture hour**
Corequisite: Aerospace Studies 3. **Advisory:** Eligibility for English 1A recommended.
 A survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force. (A, CSU, UC)
- Change: title, description** **effective Spring 2020**
- # 2A **Team and Leadership Fundamentals, 1 unit, 1 lecture hour**
Corequisite: Aerospace Studies 3. **Advisory:** Eligibility for English 1A recommended.
 "Team and Leadership Fundamentals" focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate. (A, CSU, UC)
- Change: title, description** **effective Spring 2020**
- # 2B **Team and Leadership Fundamentals, 1 unit, 1 lecture hour**
Corequisite: Aerospace Studies 3. **Advisory:** Eligibility for English 1A recommended.
 "Team and Leadership Fundamentals" focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate. (A, CSU, UC)
- Change: hours** **effective Spring 2020**
- # 3 **Leadership Laboratory, 1 unit, 3 lab hours, (Pass/No Pass)**
- Course deleted** **effective Spring 2020**
- # 5 **Drill and Ceremony Fundamentals, 0.5 unit, 0.5 lecture hour, 0.5 lab hour**

Apprenticeship (APP)

- New course** **effective Spring 2020**
- 100 **Forklift Orientation Initial, 2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)**
Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
 An introduction to gain the understanding of current regulations, common type of Rough Terrain Variable Reach Lift trucks and understand why you conduct pre-shift inspections. Learn techniques for safe operation of Rough Terrain Variable Reach lift truck by hands-on operation and maneuvering accordance with OSHA Standard 29 CFR 1910.178(l). (A)
- New course** **effective Spring 2020**
- 101 **Fundamentals of Construction, 3.5 units, 3 lecture hours, 1.5 lab hours, (Pass/No Pass)**
Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
 An introduction to provide the trainees with basic overview of the general practices of construction work, including safety, tools, techniques, terms, safe work habits and knowledge of the industry. In accordance with the CAL-OSHA CCR Title 8 and OSHA CFR 1926 Construction Standards that are applicable to courses being covered. (A)
- New course** **effective Spring 2020**
- 102 **Hazardous Waste Removal Initial, 2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)**
Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
 An introduction to instruct trainees in the types of hazards and situations that can be encountered on the job site. trainees will learn protective measures, proper use of equipment and learn safety and health issues, in accordance with 29 CFR 1910.120, 132, 143, 146, and 1200. (A)
- New course** **effective Spring 2020**
- 103 **Safety Certification, 2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)**
Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
 Introduction to safety requirements set forth by the Occupational Safety and Health Administration (OSHA), Construction Industry Standards and General Standards, as they relate to the Construction Industry. Students may earn OSHA 10, OSHA 30, Cal-OSHA 10, and/or Cal-OSHA 30. (A)

New course **effective Spring 2020**

104 Aerial Work Platform Initial, 0.5 unit, 0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)

Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.

An introduction to provide the trainees with the knowledge of current regulations, common type of aerial work platforms and understand the need to conduct pre-shift inspections. Learn techniques for safe operation and maneuvering. Teach trainees to work safely on and around self-propelled aerial work platforms, such as scissor-lifts and boom lifts. (A)

New course **effective Spring 2020**

105 Rigging and Signaling, 2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)

Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Provide the trainees with an understanding of the safe approach to Rigging and Signaling. Describe and demonstrate the state procedures of Rigging and Signaling in accordance with OSHA CFR 1926.251 and 1926.5 Construction. (A)

New course **effective Spring 2020**

106 Skid Steer Loader Orientation Initial, 2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)

Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.

An introduction to provide student trainees with a good understanding of how to operate mobile equipment, learn current safety procedures and proper maintenance of a skid steer loader (Bobcat). (A)

New course **effective Spring 2020**

107 Concrete Techniques, 3.5 units, 3 lecture hours, 1.5 lab hours, (Pass/No Pass)

Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Familiarize students with concrete safety, its history, properties and components. It includes a hands-on portion in accordance with Cal-OSHA CCR Title 7 1712-1722 and OSHA CFR 1926.703. (A)

New course **effective Spring 2020**

108 Asphalt Paving Techniques, 3.5 units, 3 lecture hours, 1.5 lab hours, (Pass/No Pass)

Prerequisite: Registered Apprentice with LiUNA! Northern California District Council of Laborers.

An introduction to familiarize the trainees with the skills they need to work with Asphalt safely and learn the proper use of tools and equipment needed when working with Asphalt. (A)

Business Administration (BA)

Change: advisory, description **effective Spring 2020**

5 Workplace Communication, 3 units, 3 lecture hours, (See also Business & Technology 5)

Advisory: None.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. Cross-listed with BA-5. (A, CSU)

Business & Technology (BT)

Change: units, hours, advisory **effective Spring 2020**

1 Computer Document Processing I, 3 units, 2 lecture hours, 3 lab hours, (Formerly BSS 1A and Business Information Processing 1)

Advisory: None.

Change: advisory **effective Spring 2020**

2 Computer Document Processing II, 3 units, 2 lecture hours, 3 lab hours, (Formerly Business Information Processing 2)

Prerequisite: Business & Technology 1. **Advisory:** None.

Change: advisory, description **effective Spring 2020**

5 Workplace Communication, 3 units, 3 lecture hours, (See also Business Administration 5), (Formerly BSS 5 and Business General Office 5)

Advisory: None.

Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. Cross-listed with BA-5. (A, CSU)

Change: advisory **effective Spring 2020**

6 Records Management, 3 units, 3 lecture hours, 1 lab hour, (Formerly Business Information Processing 10 and Business & Technology 10)

Advisory: Business & Technology 106.

- Change: advisory** *effective Spring 2020*
- # 9 **Computer Applications I, 4 units, 3 lecture hours, 3 lab hours, (Formerly Business Information Processing 9)**
Advisory: Business & Technology 1.
- Change: advisory** *effective Spring 2020*
- # 10 **Computer Applications II, 4 units, 3 lecture hours, 3 lab hours**
Prerequisite: Business & Technology 9. Advisory: None.
- Change: advisory** *effective Spring 2020*
- # 11 **Today's Office, 3 units, 3 lecture hours, 1 lab hour, (Formerly Business General Office 18)**
Advisory: Business & Technology 1 and 106.
- Course deleted** *effective Spring 2020*
- # 13 **Applied Business Correspondence, 2 units, 2 lecture hours, (Formerly Business Information Processing 62)**
- Change: advisory** *effective Spring 2020*
- # 23 **Job Search and Workplace Skills, 3 units, 3 lecture hours**
Advisory: None.
- Change: advisory, description** *effective Spring 2020*
- # 24 **Beginning Excel, 1 unit, 1 lecture hour, (See also Computer Information Technology 31), (Formerly Business Information Processing 24)**
Advisory: None.
Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. Cross-listed with CIT-31. (A, CSU)
- Change: advisory** *effective Spring 2020*
- # 28 **Microsoft Word I, 1.5 units, 1.5 lecture hours, (Formerly Business Information Processing 28)**
Advisory: Business & Technology 106.
- Change: prerequisite, advisory** *effective Spring 2020*
- # 29 **Microsoft Word II, 1.5 units, 1.5 lecture hours 1 lab hour, (Formerly Business Information Processing 29)**
Prerequisite: Business & Technology 28. Advisory: None.
- Change: course number, advisory** *effective Spring 2020*
- # 31 **21st Century Workforce Skills, 1.5 units, 1.5 lecture hours, (Formerly Business & Technology 32)**
Advisory: None.
- Change: advisory** *effective Spring 2020*
- # 33 **Social Media and Emerging Technologies in the Workplace, 3 units, 2 lecture hours, 3 lab hours**
Advisory: Business & Technology 106.
- Change: advisory** *effective Spring 2020*
- # 106 **Computer Keyboarding, 1.5 units, 1 lecture hour, 1.5 lab hours, (Formerly Business Information Processing 6 and Business & Technology 6)**
Advisory: None.
- Change: advisory** *effective Spring 2020*
- # 112 **Business English, 3 units, 3 lecture hours, (Formerly Business Information Processing 59 and Business & Technology 12)**
Advisory: None.
- Change: advisory** *effective Spring 2020*
- # 115 **Refresher Math, 3 units, 3 lecture hours, (Formerly Business General Office 53 and Business & Technology 15)**
Advisory: None.
- Course deleted** *effective Spring 2020*
- # 116 **Spelling and Vocabulary Building, 2 units, 2 lecture hours, (Formerly BSS 61, Business General Office 61 and Business & Technology 16)**
- Change: advisory** *effective Spring 2020*
- # 120 **Resume/Interview, 1 unit, 1 lecture hour, (Formerly Business General Office 59 and 59A and Business & Technology 20)**
Advisory: None.

- Course deleted* *effective Spring 2020*
121 Working Relationships, 1.5 units, 1.5 lecture hours, (Formerly Business General Office 59B and Business & Technology 21)
- Change: advisory* *effective Spring 2020*
126 Automated Business Records, 1 unit, 1 lecture hour, 1 lab hour, (Formerly Business & Technology 206)
Advisory: None.
- Change: advisory* *effective Spring 2020*
127 Microsoft Outlook and E-Mail, 1 unit, 1 lecture hour, 1 lab hour
Advisory: None.
- Change: advisory* *effective Spring 2020*
130 Beginning PowerPoint, 1 unit, 1 lecture hour, 1 lab hour
Advisory: None.
- Change: advisory* *effective Spring 2020*
131 Applied Accounting, 3.5 units, 3 lecture hours, 2 lab hours, (Formerly Business General Office 51 and Business & Technology 31)
Advisory: None.
- Change: advisory* *effective Spring 2020*
132 Customer Service in the One-Person Office, 3 units, 2 lecture hours, 3 lab hours
Advisory: None.
- Course deleted* *effective Spring 2020*
134 Exploration of Careers in Business, 1 units, 1 lecture hour, 1 lab hour
- Change: advisory* *effective Spring 2020*
135 Capstone – One-Person Office, 3 units, 2 lecture hours, 3 lab hours
Advisory: Business & Technology 106.
- Change: advisory* *effective Spring 2020*
143 Medical Office Vocabulary, 1 unit, 1 lecture hour
Advisory: None.
- Change: advisory* *effective Spring 2020*
144 Medical Administrative Assistant, 2.5 units, 2 lecture hours, 2 lab hours, (Formerly BSS 58, Business General Office 58, and Business & Technology 44)
Advisory: None.
- Change: advisory* *effective Spring 2020*
147 Medical Management Software, 2 units, 1 lecture hour, 3 lab hours, (Formerly Business Information Processing 63 and Business & Technology 47)
Advisory: None.
- Change: advisory, description* *effective Spring 2020*
148 Medical Insurance & Billing Concepts, 2.5 units, 2 lecture hours, 2 lab hours, (Formerly BSS 64, Business General Office 64, and Business & Technology 48)
Advisory: None.
Interpret health insurance plans, complete various medical forms used in a medical office, and utilize ICD-10 and CPT codes. (A)
- Course deleted* *effective Spring 2020*
271 Business Grammar Fundamentals, 2 units, 2 lecture hours, (Formerly Business Information Processing 71 and Business & Technology 71)

New course**effective Spring 2020****# 331 21st Century Workforce Skills, 1.5 lecture hours****Prerequisite:** None.

Project-based course designed to help students develop the 'soft' skills needed to succeed in today's changing workplace. Course topics will include the changing global economy, the rise of entrepreneurial-ism, how to be a competitive job seeker, and the top ten soft skills which include adaptability, analysis/solution mindset, collaboration, communication, digital fluency, entrepreneurial mindset, empathy, resilience, self-awareness, and social/diversity awareness. Supplementary items may include career/personality assessments that require a fee.

Change: hours**effective Spring 2020****# 375A Introduction to Keyboarding, 4 lab hours, (Retakes = 5), (Open Entry/Open Exit)****Change: hours, description****effective Spring 2020****# 375B Introduction to Filing, 1.56 lab hours, (Retakes = 5), (Open Entry/Open Exit)****Prerequisite:** None.

An introduction to filing methods and principles. Utilize the 12 rules of filing which include alphabetic, geographic, numeric, government, and subject filing.

Change: hours**effective Spring 2020****# 375C Basic Office Communications, 1.78 lecture hours, 2.67 lab hours, (Retakes = 5), (Open Entry/Open Exit)****Change: hours****effective Spring 2020****# 375D Math Review and Ten-Key Calculator, 3.3 lab hours, (Retakes = 5), (Open Entry/Open Exit)****Change: hours, retake policy****effective Spring 2020****# 377 Getting Started with Computers and Workplace Technology, 0.84 lecture hours, 0.83 lab hours, (Retakes = 5), (Pass/No Pass)****Chemistry (CHEM)****Change: prerequisite****effective Spring 2020****# 1A General Chemistry, 5 units, 3 lecture hours, 6 lab hours**

Prerequisite: Mathematics 3A and Chemistry 3A or Chemistry 101P or high school chemistry with laboratory component. **Advisory:** Eligibility for English 1A recommended.

Change: prerequisite**effective Spring 2020****# 3A Introductory General Chemistry, 4 units, 3 lecture hour, 3 lab hours, (Replaces CHEM 2A-2B)**

Prerequisite: Mathematics 3A or 103. **Advisory:** Eligibility for English 1A recommended.

Communication (COMM)**Change: description****effective Spring 2020****26 Intercollegiate Forensics Laboratory, 1-3 units, 1 lecture hour, 1-6 lab hours, (Retakes = 3), (Formerly Speech 26)**

Advisory: Eligibility for English 1A recommended.

Competitive and practical experience in debate and public speaking. In addition to the class or activity hour each week on campus, students must attend intercollegiate tournaments for a specified number of days.

Computer Information Technology (CIT)**Change: advisory, description****effective Spring 2020****# 31 Beginning Excel, 1 unit, 1 lecture hour, (See also Business & Technology 24), (Formerly Information Systems 24 and 74)**

Advisory: None.

Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. Cross-listed with BT-24. (A, CSU)

Change: units, hours, advisory**effective Spring 2020****48B A+ and Security Principles, 4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 238, Computer Information Technology 238, and Computer Information Technology 48)**

Advisory: Computer Information Technology 15.

New course**effective Spring 2020****59 Linux System Administration, 3 units, 2 lecture hours, 3 lab hours****Advisory:** Computer Information Technology 48A and 48B.

Provides a technical overview of the Linux operating system, including hands-on experience with commands, files, and tools. Topics include basic Linux commands, files and directories, text editing, electronic mail, pipes and filters, X Windows, shell environments, and scripting. Required for students wishing to pursue the Linux track preparing for industry certification. (A, CSU)

Criminology (CRIM)**New course****effective Spring 2020****# 28 Probation and Parole, 3 units, 3 lecture hours****Advisory:** Eligibility for English 1A recommended.

Examine the history, development, and current practices of probation and parole, analyze the current trends and issues of community-based corrections and alternatives for offenders. (A, CSU)

Dance (DANCE)**Change: advisory****effective Spring 2020****# 8 Hip Hop Technique, 1 unit, 3 lab hours****Advisory:** None.**Change: advisory****effective Spring 2020****# 9 Dance Conditioning, 1 unit, 3 lab hours****Advisory:** None.**Change: advisory****effective Spring 2020****# 10A Beginning Modern Dance Technique, 1 unit, 3 lab hours, (Formerly Physical Education 4 and Dance 10)****Advisory:** None.**Change: advisory****effective Spring 2020****# 10B Pre-Intermediate Modern Dance Technique, 1 unit, 3 lab hours****Prerequisite:** Dance 10A or appropriate dance experience as determined by the instructor. **Advisory:** None.**Change: advisory****effective Spring 2020****# 12A Beginning Ballet Part 1, 1 unit, 3 lab hours, (Formerly Dance 12 and Physical Education 26)****Advisory:** None.**Change: prerequisite, advisory, description****effective Spring 2020****# 12B Beginning Ballet Part 2, 1 unit, 3 lab hours****Prerequisite:** Dance 12A. **Advisory:** None.

Pre-intermediate-level technique of classical Ballet using barre exercises and center work, learning more Ballet technique and terminology for the pre-intermediate students. (A, CSU, UC)

Change: prerequisite, advisory**effective Spring 2020****# 13A Intermediate Ballet Technique, 1.5 units, 1 lecture hour, 2 lab hours****Prerequisite:** Dance 12B or appropriate dance experience as determined by instructor. **Advisory:** None.**Change: prerequisite, advisory****effective Spring 2020****# 13B Pre-Advanced Ballet Technique, 1.5 units, 1 lecture hour, 2 lab hours****Prerequisite:** Dance 13A or appropriate dance experience as determined by instructor. **Advisory:** None.**Change: advisory****effective Spring 2020****# 14 Beginning Jazz Dance Technique, 1 unit, 3 lab hours, (Formerly Physical Education 270)****Advisory:** None.**Change: advisory****effective Spring 2020****# 15 Intermediate Jazz Dance Technique, 1 unit, 3 lab hours**

Prerequisite: Dance 14 or demonstration of comparable skill level to be determined by testing or video portfolio of past jazz dance performance work. **Advisory:** None.

- Change: advisory** **effective Spring 2020**
- # 16 **Beginning Tap Dance, 0.5 unit, 2 lab hours**
Advisory: None.
- Change: advisory** **effective Spring 2020**
- # 1-18 **Intermediate Tap Dance, 0.5 unit, 2 lab hours**
Prerequisite: Dance 16 or appropriate previous tap dance experience as determined by the instructor. **Advisory:** None.
- Change: advisory** **effective Spring 2020**
- # 20A **Beginning Modern Dance Composition, 3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education 20A)**
Advisory: Dance 10A.
- Change: prerequisite, advisory** **effective Spring 2020**
- # 20B **Intermediate Modern Dance Composition, 3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education 20B)**
Prerequisite: Dance 20A. **Advisory:** None.
- Change: title, prerequisite, advisory** **effective Spring 2020**
- # 21 **Fall Dance Concert 1, 2-4 units, 1 lecture hour, 3-9 lab hours, (Formerly Physical Education 21)**
Prerequisite: For Choreographers: Demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Jazz, or Ballet performance work. For Performers: previous Modern dance, Jazz, or Ballet experience or concurrent enrollment in Ballet, Jazz, or Modern dance. **Advisory:** None.
- Change: title, prerequisite, advisory** **effective Spring 2020**
- # 22 **Spring Dance Concert 1, 2-4 units, 1 lecture hour, 3-9 lab hours, (Formerly Physical Education 22)**
Prerequisite: For Choreographers: Demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Jazz, or Ballet performance work. For Performers: Current intermediate competency in Ballet, Jazz, or Modern Dance or concurrent enrollment in Ballet, Jazz or Modern Dance. **Advisory:** None.
- Change: corequisite, advisory, description** **effective Spring 2020**
- # 26 **American College Dance Festival, 1.5 units, 2 lecture hours, 5 lab hours, (9 weeks), (Retakes = 3)**
Corequisite: Dance 21, 22, 31, or 32. **Advisory:** None.
 Preparation of dance participants for attendance at the American College Dance Festival. Participation in master classes and participation/attendance at adjudication concerts. Participation/coordination of FCC National Dance Day Event. (A, CSU)
- Change: course number, advisory** **effective Spring 2020**
- # 28A **Intermediate Modern Dance Technique, 1.5 units, 1 lecture hour, 2 lab hours, (Formerly Dance 28)**
Prerequisite: Dance 10B. **Advisory:** None.
- Change: units, hours** **effective Spring 2020**
- # 28B **Pre-Advanced Modern Dance Technique, 1.5 units, 1 lecture hour, 2 lab hours**
- Change: description** **effective Spring 2020**
- # 30 **Dance Appreciation, 3 units, 3 lecture hours**
Advisory: Eligibility for English 1A recommended.
 Survey of dance as a historical form of cultural and theatrical expression. Emphasis on the growth of ballet, modern and jazz dance from their origins to the current trends in the United States. Dance 30 does not meet the Physical Education requirement. (A, CSU-GE, UC, I)
- Change: title, advisory** **effective Spring 2020**
- # 31 **Fall Dance Concert 2, 2-4 units, 1 lecture hour, 3-9 lab hours**
Prerequisite: Dance 21. **Advisory:** None.
- Change: title, advisory, description** **effective Spring 2020**
- # 32 **Spring Dance Concert 2, 2-4 units, 1 lecture hour, 3-9 lab hours**
Prerequisite: Dance 22. **Advisory:** None.
 Intermediate/advanced-level dance technique and conditioning, improvisation, choreography, rehearsal, and performance for formal theatrical presentation. Includes opportunities for support activities for the production. (A, CSU, UC)

Decision Science (DS)

New course

effective Spring 2020

- # 44 **Introduction to Predictive Modeling, 3 units, 3 lecture hours, 1 lab hour**
Prerequisite: Decision Science 21 and 23.
 Predictive analytics project lifecycles, data preparation, feature design, and model deployment. (A, CSU)

Dental Hygiene (DH)

Change: units, hours

effective Spring 2020

- 1B **General and Oral Pathology, 3 units, 3 lecture hours**

Change: title, units, hours, description

effective Spring 2020

- 1D **Applied Specialties, 1.5 units, 1.5 lecture hours**
Prerequisite: Dental Hygiene 1C, 5B, 6B, 7A, and 13. **Corequisite:** Dental Hygiene 3B, 5C, 7B, 8B, 9, and 14.
 The history and relationship of dental specialties within the broad scope of dentistry. Current concepts and future possibilities relevant to the practice of dental specialties; and dental hygienists' ethical and clinical responsibility in the treatment of periodontal disorders. Relationship of the dental specialty practice of periodontics within the broad scope of dentistry. (A, CSU)

Change: description, grade option

effective Spring 2020

- # 5A **Clinical Dental Hygiene I, 2.5 units, 8 lab hours**
Prerequisite: Dental Hygiene 1A, 3A, 4, and 10. **Corequisite:** Dental Hygiene 1B, 2, 6A, 8A, 11, and 12.
 Beginning experience in the dental hygiene process of care for treatment of pediatric, adolescent and adult patients; various clinical procedures including scaling and polishing techniques; oral inspection, dental and periodontal charting, principles of powered instrumentation, radiographic techniques, biofilm control instructions, and application of preventive agents. (A, CSU)

Change: grade option, description

effective Spring 2020

- 5C **Clinical Dental Hygiene III, 5 units, 16 lab hours**
Prerequisite: Dental Hygiene 1C, 5B, 6B, 7A, and 13. **Corequisite:** Dental Hygiene 1D, 3B, 7B, 8B, 9, and 14.
 Advanced experience in patient treatment procedures; includes principles and procedures of Dental Hygiene 5A and Dental Hygiene 5B plus the techniques of site specific chemotherapeutic agents. (A, CSU)

Change: units, hours, description

effective Spring 2020

- 6B **Pharmacology, 2 units, 2 lecture hours**
Prerequisite: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11, and 12. **Corequisite:** Dental Hygiene 1C, 5B, 7A, and 13.
 Sources, dosages, therapeutic action, and side effects of drugs used in dentistry; classification, administration, and effects of drugs; pharmacology, and pharmacokinetics of drugs. (A, CSU)

Change: units, hours, corequisite, description

effective Spring 2020

- 7B **Community Dental Health II, 2 units, 2 lecture hours**
Prerequisite: Dental Hygiene 1C, 5B, 6B, 7A, and 13. **Corequisite:** Dental Hygiene 1D, 3B, 5C, 8B, 9, and 14.
 Community dental health; implementation of target group dental health project; tobacco cessation program; health care delivery systems; presentation of dental care methods; community outreach community, fluoridation and bio-statistics. (A, CSU)

Change: title, units, hours, description

effective Spring 2020

- # 11 **Pain Management, 4 units, 2 lecture hours, 6 lab hours**
Prerequisite: Dental Hygiene 1A, 3A, 4, and 10. **Corequisite:** Dental Hygiene 1B, 2, 5A, 6A, 8A, and 12.
 Concepts of pain and pain control; anatomy of the trigeminal nerve, physiology of nerve conduction, and the blockage of nerve impulses. Pharmacology and physiology of topical and local anesthetic agents and nitrous oxide/oxygen gas. Preparation of the armamentarium for local anesthetic injections and techniques of regional anesthesia in dentistry. Clinical application and performance of topical, supraperiosteal and block techniques to anesthetize the oral cavity. Preparation of the armamentarium and techniques for the administration of nitrous oxide-oxygen analgesia in dentistry. Therapeutic action, side effects, overdose and management procedures of anesthetic drugs, analgesic gases and sedation drugs in dentistry. (A, CSU)

Developmental Services (DEVSER)

- Change: title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 250 **Career Awareness, 4 units, 4 lecture hours, (Pass/No Pass)**
Advisory: Counselor placement.
 Emphasizes the development of tools, ideas, and strategies designed to be the blueprints for obtaining and retaining a job. Attitude and personality traits will merge with goal setting and life management skills enabling students to better link personal issues to long-term career success. Designed for students with disabilities.
- Course deleted** **effective Spring 2020**
- # 251 **Workability Portfolio and Interview Development, 3 units, 2 lecture hours, 3 lab hours**
- New course** **effective Spring 2020**
- # 252A **Communication Skills and Strategies 1, 4 units, 4 lecture hours, (Pass/No Pass)**
Advisory: Counselor placement.
 Emphasizes developing foundational communication skills and social skills at home, school, and in the community, using a variety of basic skills. Expanding basic communication skills including the various ways people communicate, appropriate versus inappropriate communication, the different messages we send, styles of communication, and using communication for general conflict resolution. Designed for students with disabilities.
- Change: course number, title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 252B **Communication Skills and Strategies 2, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly Developmental Services 252)**
Advisory: Counselor placement.
 Emphasizes developing strategies in the workplace and personal life related to personal disability, work ethics, communication and socialization important for employment. Expanding communication skills as a vehicle for solving problems. Designed for students with disabilities.
- Change: title, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 260 **Job Search, Employment Portfolio, and Interview Development, 3 units, 3 lecture hours, 1 lab hour, (Pass/No Pass), (Formerly Developmental Services 60)**
Advisory: Counselor placement.
 Emphasizes the development of job search strategies including online applications, social networking sites, internet job search sites, creating and utilizing a professional network. Students will complete portfolios which will include the following: Resumes, cover letters, letters of recommendation, and references. Students will develop and demonstrate interview skills. Students will develop and maintain a job search log during their job search process. Designed for students with disabilities.
- Change: title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 262 **Group Interaction, 3 units, 3 lecture hours, (Pass/No Pass), (Formerly Developmental Services 62)**
Advisory: Counselor placement.
 Development and improvement of self-understanding through group interactions. Designed for students with disabilities.
- Change: prerequisite, advisory, description** **effective Spring 2020**
- # 264 **Transition to College for Students with Disabilities, 1 unit, 1 lecture hour, (Pass/No Pass)**
Advisory: Counselor placement.
 Assist students with disabilities in preparing for initial semester in a community college. Navigation of State Center Community College District campuses, resources, academic policies, procedures and services. Course content will cover issues related to accommodations and resources available to students with disabilities to enable them to be successful in a college setting, including disability evaluation and assessment, alternative media, course selection, and scheduling. Designed for students with disabilities.
- Change: prerequisite, advisory, description** **effective Spring 2020**
- # 272 **Consumer Skills, 2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 72)**
Advisory: Counselor placement.
 Emphasis on home and money management, health, hygiene and safety, food and nutrition. Designed for students with disabilities.
- Change: title, prerequisite, advisory, description** **effective Spring 2020**
- # 273 **Independent Living Skills for Students in DSP&S, 2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 73)**
Advisory: Counselor placement.
 Basic independent living skills; including appropriate social interaction, self-advocacy, self-care, community involvement, personal choice and managing life events. Designed for students with disabilities.

- Change: prerequisite, advisory, description** **effective Spring 2020**
- # 275 **Horticulture Skills I, 2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 75)**
Advisory: Counselor placement.
 Basic techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills. Designed for students with disabilities.
- Change: prerequisite, advisory, description** **effective Spring 2020**
- # 276 **Horticulture Skills II, 2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 76)**
Advisory: Developmental Services 275. Counselor placement.
 Intermediate techniques of foliage plant care and growing vegetables with emphasis on transferable employment skills. Designed for students with disabilities.
- Change: title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 277 **Beginning Computer Literacy, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly Developmental Services 77)**
Advisory: Counselor placement.
 Introduction to computers and commonly used microcomputer applications. Emphasis on computer use and adaptation. In depth coverage of computers and their impact in society. Designed for students with disabilities.
- Change: title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 278 **Basic Word Processing for Work, 3 units, 3 lecture hours, 1 lab hour, (Pass/No Pass), (Formerly Developmental Services 78)**
Advisory: Counselor placement.
 Basic word processing terminology and understanding of Microsoft Word. Designed for students with disabilities.
- Change: title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 279 **Basic Modified Computer Applications, 3 units, 3 lecture hours, 1 lab hour, (Pass/No Pass), (Formerly Developmental Services 79)**
Advisory: Counselor placement.
 Expansion and enhancement of word processing, data management, spreadsheet, and other highly marketable microcomputer applications. Designed for students with disabilities.
- Change: prerequisite, description** **effective Spring 2020**
- # 282 **Greenhouse Workforce Prep, 3 units, 9 lab hours, (Pass/No Pass), (Formerly Developmental Services 82)**
Advisory: Developmental Services 275 and 276.
 Introduction to vocational training in an actual working greenhouse. Assists students in preparing for success in future employment. Topics include ornamental and vegetable plant growing and care, occupational behavior and interpersonal skill development. Designed for students with disabilities.
- Change: discipline, course number, title, grade option, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 283 **Reading Comprehension 1, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 77 and English 277)**
Advisory: Counselor placement. Prior to entering this course, students should be comfortable reading beginning college level material. Not recommended for students learning English as a second language.
 Development of reading readiness skills through learning main ideas and important details; builds on already existing reading skills. Designed for students with disabilities. Prepares students for DEVSER 284.
- Change: discipline, course number, title, units, hours, prerequisite, advisory, description** **effective Spring 2020**
- # 284 **Reading Comprehension 2, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 78 and English 278)**
Advisory: Counselor placement. Not recommended for students learning English as a second language.
 Further development of reading skills and strategies while developing literal and critical comprehension. Designed for students with disabilities.
- Change: discipline, course number, title, prerequisite, advisory, description** **effective Spring 2020**
- # 285 **Paragraphs to Essays, 2.5 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Formerly English 81 and English 281)**
Advisory: Counselor placement. Prior to entering this course, it is recommended that students be able to compose an organized paragraph. Not recommended for students learning English as a second language.
 Development of a basic understanding of paragraph and essay structures. Identification of possible essay topics and develop an ability to find and correct grammatical errors. Designed for students with disabilities. Prepares students for DEVSER 286.

- Change: discipline, course number, title, prerequisite, advisory, description** **effective Spring 2020**
286 Essay Development and College Writing, 2.5 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Formerly English 82 and English 282)
Advisory: Counselor placement. Prior to entering this course, it is recommended that students be able to compose a short, organized paragraph. Not recommended for students learning English as a second language.
 Further development of college writing skills through composition, revision, and beginning research strategies. Designed for students with disabilities.
- Change: prerequisite, advisory, description** **effective Spring 2020**
291 Strategies for Academic Success, 2 units, 2 lecture hours, (Pass/No Pass)
Advisory: Counselor placement.
 Identification of learning strengths and weaknesses, educational, personal, career goals, study principles, methods and strategies to achieve them. Designed for students with disabilities.
- Change: title, prerequisite, advisory, description** **effective Spring 2020**
292 Learning Skills and Strategies, 2 units, 2 lecture hours, (Pass/No Pass)
Advisory: Counselor placement.
 Development of college survival skills. Emphasis on time management, note-taking, test taking, library skills, improvement of communication skills, and career exploration. Designed for students with disabilities.
- Change: title, retakes, prerequisite, advisory, description** **effective Spring 2020**
359 Learning Assessment, 8 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Retakes = 4), (Formerly Developmental Services 59)
Advisory: Counselor placement.
 Learning Assessment is designed to identify learning strengths and deficits, and to provide information to DSP&S for verification of a disability and accommodations needed. Designed for students with disabilities.

English for Multi-Lingual Students (EMLS)

- Course deleted** **effective Fall 2019**
265R High Intermediate Academic Reading and Vocabulary, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English as a Second Language 65R and 265R)
- Course deleted** **effective Fall 2019**
265W High Intermediate Academic Writing and Grammar, 4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54C and English as a Second Language 65, 65W, and 265W)
- Change: prerequisite** **effective Spring 2020**
284RW Intermediate Academic Reading and Writing, 5 units, 5 lecture hours, (Pass/No Pass)
Prerequisite: English for Multi-Lingual Students 263RW or 363RW, or 263R and 263W.
- Change: prerequisite** **effective Spring 2020**
285RW High-Intermediate Academic Reading and Writing, 5 units, 5 lecture hours, (Pass/No Pass)
Prerequisite: English for Multi-Lingual Students 284RW or 384RW, or 264R and 264W.
- New course** **effective Spring 2020**
364RA Intermediate Reading and Vocabulary A, 1 lecture hour, (Pass/No Pass), (Retakes = 3)
Prerequisite: None.
 This intermediate level course is designed to develop the students' reading skills and strategies that aid in the literal interpretation of a given text, increase academic vocabulary, and develop metacognition in preparation for EMLS 364RB and other mainstream classes.
- New course** **effective Spring 2020**
364RB Intermediate Reading and Vocabulary B, 1 lecture hour, (Pass/No Pass), (Retakes = 3)
Prerequisite: None.
 This intermediate level course is design to develop the students' reading skills and strategies that aid in analyzing a given text, increase academic vocabulary develop, and develop metacognition in preparation for EMLS 364RC and other mainstream classes.
- New course** **effective Spring 2020**
364RC Intermediate Reading and Vocabulary C, 1 lecture hour, (Pass/No Pass), (Retakes = 3)
Prerequisite: None.
 This intermediate level course is design to develop the students' reading skills and strategies that aid in evaluating a given text, increase academic vocabulary, and develop metacognition in preparation for EMLS 365R and other mainstream classes.

- New course** **effective Spring 2020**
- # 371A **Low-Intermediate Pronunciation Improvement and Accent Reduction, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- This non-credit course is for EMLS students at the Low Intermediate level to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.
- New course** **effective Spring 2020**
- # 371B **High-Intermediate Pronunciation Improvement and Accent Reduction, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- This non-credit course is for EMLS students at the high-intermediate level to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.
- New course** **effective Spring 2020**
- # 371C **Advanced Pronunciation Improvement and Accent Reduction, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- This non-credit course is for EMLS students at the advanced level to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.
- New course** **effective Spring 2020**
- # 372A **Low-Intermediate Academic Grammar, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- This non-credit grammar skills course is designed for speakers of other languages who want to comprehend and use grammar structures in written and oral academic English. This low-intermediate course may be taken concurrently with other EMLS courses.
- New course** **effective Spring 2020**
- # 372B **High-Intermediate Academic Grammar, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- This non-credit grammar skills course is designed for speakers of other languages who want to comprehend and use grammar structures in written and oral academic English. This high-intermediate course may be taken concurrently with other EMLS courses.
- New course** **effective Spring 2020**
- # 372C **Advanced Academic Grammar, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- This non-credit grammar skills course is designed for speakers of other languages who want to comprehend and use grammar structures in written and oral academic English. This advanced course may be taken concurrently with other EMLS courses.
- New course** **effective Spring 2020**
- # 373A **Low-Intermediate Listening and Speaking, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- A non-credit listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the low-intermediate level. This course can be taken concurrently with other English for Multi-Lingual Students courses.
- New course** **effective Spring 2020**
- # 373B **High-Intermediate Listening and Speaking, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- A non-credit listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the high-intermediate level. This course can be taken concurrently with other English for Multi-Lingual Students courses.
- New course** **effective Spring 2020**
- # 373C **Advanced Listening and Speaking, 1 lecture hour, (Pass/No Pass), (Retakes = 3)**
- Prerequisite:** None.
- A non-credit listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the advanced level. This course can be taken concurrently with other English for Multi-Lingual Students courses.

Fire Technology (FIRET)

Change: course number **effective Spring 2020**
 22A Firefighter II Part A, 2 units, 1.87 lecture hours, 0.47 lab hour, (Formerly Fire Technology 222A)

Change: course number **effective Spring 2020**
 22B Firefighter II Part B, 3 units, 2.7 lecture hours, 1.79 lab hour, (Formerly Fire Technology 222B)

Change: units, hours **effective Spring 2020**
 130A Basic Fire Academy – Part 1, 14.5 units, 8 lecture hours, 20 lab hours

Change: units, hours **effective Spring 2020**
 130B Basic Fire Academy – Part 2, 14.5 units, 8.42 lecture hours, 19.5 lab hours

Geology (GEOL)

Course deleted **effective Spring 2020**
 # 7 Natural History of Dinosaurs, 3 units, 3 lecture hours

Course deleted **effective Spring 2020**
 # 8 Geology of Moons and Planets, 3 units, 3 lecture hours

Change: advisory **effective Spring 2020**
 # 12 Environmental Science, 3 units, 3 lecture hours, (Formerly Environmental Science 7)
 Advisory: Knowledge of basic algebra. Eligibility for English 1A recommended.

Graphic Communications (GRC)

New course **effective Summer 2020**
 55 Social Media Design, 2 units, 2 lecture hours, 1 lab hour
 Prerequisite: None.
 Graphic design principles and processes directly related to current social media platforms and interactions. (A, CSU)

Health Information Technology (HIT)

Change: description **effective Spring 2020**
 # 1 Introduction to Health Information Management, 3 units, 3 lecture hours, (Formerly Medical Records Technology 1)
 Advisory: Eligibility for English 1A recommended.
 Introduction to health care delivery systems, hospital organization, the medical record, the processes of health information management including access, retention, data collection, quantitative and qualitative analysis, and health information systems; accreditation, licensure, and regulatory requirements; the role of the health information management professional. (A, CSU)

Change: prerequisite **effective Spring 2020**
 # 4 Disease Process, 3 units, 3 lecture hours
 Prerequisite: Biology 5 or 55 and Health Information Technology 10. **Advisory:** Eligibility for English 1A recommended.

Change: title, prerequisite, description **effective Spring 2020**
 # 5 ICD Coding: Diagnoses, 3 units, 3 lecture hours
 Prerequisite: Health Information Technology 1 and 10. **Corequisite:** Health Information Technology 4. **Advisory:** Eligibility for English 1A recommended.
 Medical coding of diagnoses using the International Classification of Diseases (ICD); overview of nomenclatures and classification systems; coding rules, principles, guidelines, and conventions; state and federal regulations impacting coding; documentation to support coding. Introduction to coding software applications. (A, CSU)

- Change: title, prerequisite, corequisite, description** **effective Spring 2020**
- # 6 **ICD Coding: Procedures, 3 units, 3 lecture hours**
Prerequisite: Health Information Technology 1 and 10. **Corequisite:** Health Information Technology 4. **Advisory:** Eligibility for English 1A recommended.
 Medical coding of procedures using the International Classification of Diseases - Procedure Coding System; coding rules, principles, guidelines, and conventions; regulations impacting coding; documentation to support coding. Use of coding software applications. (A, CSU)
- Change: units, hours, grade option, prerequisite, corequisite, description** **effective Spring 2020**
- # 7 **Directed Practice, 3 units, 1 lecture hour, 6 lab hours**
Prerequisite: Health Information Technology 2, 3, 5, 6, and 14. **Corequisite:** Health Information Technology 8 and 16. **Advisory:** Eligibility for English 1A recommended.
 Practical application of advanced principles and practices of health information technology; directed practice combines a supervised field experience performing HIT competencies in an affiliated healthcare organization with virtual laboratory skills practice. (A, CSU)
- Change: description** **effective Spring 2020**
- # 8 **Health Information Management and Supervision, 3 units, 3 lecture hours**
Prerequisite: Health Information Technology 1. **Advisory:** Eligibility for English 1A recommended.
 Effective management of technical and human factors in health information management: leadership, work design and process improvement, human resources, training and development, strategic and organizational management, financial management, project management, cultural diversity, and ethics. (A, CSU)
- Change: advisory** **effective Spring 2020**
- # 9 **Hospital and Health Statistics, 2 units, 2 lecture hours**
Prerequisite: Computer Information Technology 15 and Health Information Technology 1. **Advisory:** Eligibility for English 1A recommended. Math 11 or equivalent recommended.
- Change: prerequisite, description** **effective Spring 2020**
- # 15 **Medical Coding Directed Practice, 1 units, 3 lecture hours, (Pass/No Pass)**
Prerequisite: Health Information Technology 5 and 6. **Corequisite:** Health Information Technology 11. **Advisory:** Eligibility for English 1A recommended.
 Supervised practice of diagnostic and procedure coding; demonstration of knowledge in regulatory compliance, revenue cycle, and reimbursement methodologies. Practice with AHIMA Virtual Lab encoding and revenue cycle applications. (A, CSU)

Heating, Ventilation, and Air Conditioning (HVAC)

- Course deleted** **effective Spring 2020**
- 56 **HVAC System Installation, 2 units, 1 lecture hour, 3 lab hours, (Formerly Air Conditioning 53 and 56)**
- Course deleted** **effective Spring 2020**
- 57 **HVAC Digital Control Principles, 2 units, 2 lecture hours, 1 lab hour, (Formerly Air Conditioning 57)**
- Course deleted** **effective Spring 2020**
- 150 **Wireless HVAC Controls, 2 units, 2 lecture hours, 1 lab hour**

Learning Assistance (LA)

- New course** **effective Spring 2020**
- # 360 **High School Equivalency Preparation, 3 lab hours, (Retakes = 99), (Pass/No Pass), (Open Entry/Open Exit)**
Prerequisite: None.
 The High School Equivalency (HSE) Preparation course equips individuals with the skills and knowledge base necessary to pass the HSE exam. Students review the five examination content areas (language arts-reading and writing, mathematics, social sciences, and science) with particular emphasis on writing and math. Instructors will assess individual skill levels to help the student focus on tutoring weaknesses into strengths.

Manufacturing Mechanic (MFGMCTC)

Change: hours

352C Job Preparation, 0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)

effective Spring 2020

Change: hours

352D Technical Report Writing, 0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)

effective Spring 2020

Mathematics (MATH)

Change: prerequisite

effective Spring 2020

- # 5A Mathematical Analysis I, 5 units, 5 lecture hours**
Prerequisite: Mathematics 4B or 3A and 4A.

Medical Assisting (MA)

Change: advisory

effective Spring 2020

- # 2 Pharmacology, 3 units, 3 lecture hours**

Advisory: Biology 5 or 55. Eligibility for English 1A recommended. Knowledge of basic arithmetic.

Change: advisory

effective Spring 2020

- # 4 Office Laboratory Procedures, 3 units, 2.5 lecture hours, 2 lab hours**

Advisory: Biology 5 or 55. Eligibility for English 1A recommended. Knowledge of basic arithmetic.

Change: advisory

effective Spring 2020

- # 5 Diagnostic & Therapeutic Procedures, 3 units, 2.5 lecture hours, 2 lab hours**

Prerequisite: Medical Assisting 4. **Advisory:** Biology 5 or 55. Eligibility for English 1A recommended. Knowledge of basic arithmetic.

Change: advisory

effective Spring 2020

- # 6A Clinical Training, 3 units, 3 lecture hours, 1 lab hour, (Formerly Medical Assisting 60A)**

Advisory: Biology 5 or 55. Eligibility for English 1A recommended.

Change: advisory

effective Spring 2020

- # 6B Advanced Training, 3 units, 3 lecture hours, 1 lab hour, (Formerly Medical Assisting 60B)**

Prerequisite: Medical Assisting 6A. **Advisory:** Biology 5 or 55. Eligibility for English 1A recommended.

Military Science (MILSC)

Change: title, advisory, description

effective Spring 2020

- # 1 Introduction to the U.S. Army and Critical Thinking, 1 unit, 1 lecture hour**

Advisory: Eligibility for English 1A recommended.

An introduction to the Army and critical thinking. Introduces Cadets to the Army and the Profession of Arms. Examines the Army Profession and what it means to be a professional in the U.S. Army. Develops basic knowledge and comprehension of the Army Leadership Requirements Model and a complete understanding of the Reserve Officers' Training Corps (ROTC), its purpose, and the advantages for the student. Cadets also learn how resiliency and fitness support their development as Army Leaders. (A, CSU, UC)

Change: title, advisory, description

effective Spring 2020

- # 2 Foundations of Agile and Adaptive Leadership, 1 unit, 1 lecture hour**

Advisory: Eligibility for English 1A recommended.

Introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Personal development of life skills such as critical thinking, time management, goal setting, and communication. Cadets learn the basics of the communications process and the importance for leaders to develop the essential skills to effectively communicate in the Army. (A, CSU, UC)

- Change: title, advisory, description** **effective Spring 2020**
- # 11 **Leadership and Decision-Making, 2 units, 2 lecture hours**
Advisory: Eligibility for English 1A recommended.
 Leadership and decision-making. Application of Troop Leading Procedures (TLP) and Innovative Solutions to Problems in concert with the Principles of Mission Command. The Army Profession is also stressed through leadership forums and a leadership self-assessment. (A, CSU, UC)
- Change: title, advisory, description** **effective Spring 2020**
- # 12 **Army Doctrine and Team Development, 2 units, 2 lecture hours**
Advisory: Eligibility for English 1A recommended.
 Army Doctrine and team development. Beginning understanding and demonstration of competencies related to Army doctrine. Army Values, Teamwork, and Warrior Ethos and their relationship to the Law of Land Warfare and the philosophy of military service are also stressed. The ability to lead and follow is also covered through Team Building exercises in small units up to squad level. (A, CSU, UC)
- Change: advisory** **effective Spring 2020**
- # 50 **Freshman Leadership Laboratory I, 1 units, 3 lab hours, (Formerly Military Science 50A)**
Advisory: Eligibility for English 1A recommended.
- Change: advisory** **effective Spring 2020**
- # 55 **Freshman Leadership Lab II, 1 units, 3 lab hours**
Advisory: Eligibility for English 1A recommended.
- Change: advisory** **effective Spring 2020**
- # 60 **Sophomore Leadership Lab I, 1 units, 3 lab hours, (Formerly Military Science 50B)**
Advisory: Eligibility for English 1A recommended.
- Change: advisory** **effective Spring 2020**
- # 65 **Sophomore Leadership Lab II, 1 units, 3 lab hours**
Advisory: Eligibility for English 1A recommended.

Music (MUS)

- Change: advisory, description** **effective Spring 2020**
- 8 **Audio Engineering, 3 units, 2 lecture hours, 3 lab hours**
Advisory: None.
 A basic view of the digital recording studio as a sound storage, manipulation, reproduction and post-production facility. Designed for students in music, commercial music and electronic media. (A, CSU, UC)

Natural Science (NATSCI)

- Change: description** **effective Spring 2020**
- # 1A **Integrated Science: Physics and Chemistry, 4 units, 3 lecture hours, 3 lab hours**
Prerequisite: Mathematics 103. **Advisory:** Eligibility for English 1A recommended.
 Basic concepts of physics and chemistry and their relation to the everyday environment. Includes laboratory and demonstrations with special application to K-6 teachers. Specifically designed to satisfy the requirements of students who intend on transferring to the CSU Liberal Studies Major. (C-ID PHYS 140 and CHEM 140) (A, CSU-GE, UC)

Physical Education (PE)

- Change: title** **effective Spring 2020**
- 41B **Competitive Men's Wrestling, 3 units, 9.5 lab hours, (Retakes = 2)**
- Change: title, description** **effective Spring 2020**
- 41C **Off-Season Conditioning for Men's Wrestling, 1 unit, 3 lab hours, (Retakes = 2)**
Advisory: Eligibility for English 1A recommended.
 Off-season conditioning activities for Men's wrestling. (A, CSU-GE, UC)

New course**effective Spring 2020****46B Competitive Women's Wrestling, 3 units, 9.5 lab hours, (Retakes = 2)****Prerequisite:** None.

Designed primarily for students possessing the desire, ability and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of each sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU)

Physical Science (PHYSC)**Course deleted****effective Spring 2020****# 42 Applications of Physical Science, 1-3 units, 1-3 lecture hours, (Pass/No Pass)****Physics (PHYS)****Change: description****effective Spring 2020****# 4A Physics for Scientists and Engineers, 4 units, 3 lecture hours, 3 lab hours****Corequisite:** Mathematics 5B. **Advisory:** Eligibility for English 1A recommended.

Classical mechanics: kinematics, Newton's Laws, energy, momentum, gravitation, and fluids. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 205 and PHYS 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)

Change: description**effective Spring 2020****# 4B Physics for Scientists and Engineers, 4 units, 3 lecture hours, 3 lab hours****Prerequisite:** Physics 4A. **Corequisite:** Mathematics 5B. **Advisory:** Mathematics 6.

Electricity and magnetism: electrostatics, electric potential, DC circuits, magnetic fields, induction, and AC circuits. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 210 and PHYS 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)

Change: description**effective Spring 2020****# 4C Physics for Scientists and Engineers, 4 units, 3 lecture hours, 3 lab hours****Prerequisite:** Physics 4A. **Corequisite:** Mathematics 5B. **Advisory:** Mathematics 6.

Oscillations, waves, thermodynamics, optics, relativity, quantum mechanics, and nuclear physics. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 215 and PHYS 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)

Political Science (POLSCI)**New course****effective Spring 2020****# 6 California Politics and Government, 1 unit, 1 lecture hour****Advisory:** Eligibility for English 1A recommended.

Analysis of the executive, judicial, legislative and local government structures and processes of California Government. (A, CSU)

Radiation Technology (RAD)**Change: course number****effective Spring 2020****6 Concentrated Clinical Radiologic Technology, 4 units, 13 lab hours, (Formerly Radiation Technology 106)****Welding Technology (WELD)****Change: advisory****effective Spring 2020****# 1 Exploring Welding/Metals, 3 units, 2 lecture hours, 3 lab hours, (Formerly Industrial Education 5)****Advisory:** Applied Technology 130. Eligibility for English 1A recommended.**Change: advisory****effective Spring 2020****# 2A Introduction to Welding Technology, 6 units, 4 lecture hours, 6 lab hours****Advisory:** Applied Technology 130. Eligibility for English 1A recommended.

- Change: prerequisite, corequisite** **effective Spring 2020**
- # 3A **Welding Design and Fabrication, 5 units, 3 lecture hours, 7 lab hours**
Prerequisite: Welding 2B. **Corequisite:** Computer Aided Drafting & Design 16. **Advisory:** Drafting 12.
- Change: prerequisite, advisory, description** **effective Spring 2020**
- # 4A **Heavy Plate, Structural Steel and Welding Certification, 5 units, 3 lecture hours, 7 lab hours**
Prerequisite: Welding 2B. **Advisory:** Applied Technology 130 and Drafting 12. Eligibility for English 1A recommended.
An emphasis on obtaining certification in vertical and overhead welding positions (3G and 4G) in structural welding with Shielded Metal Arc Welding (SMAW), Flux Cored arc Welding (FCAW) and Gas Metal Arc Welding (GMAW) processes leading to the American Welding Society (AWS) Structural Welding Code Certification test. (A, CSU)
- Change: advisory, description** **effective Spring 2020**
- # 4B **Pipe, Tube Welding and Certification, 5 units, 3 lecture hours, 7 lab hours**
Prerequisite: Welding 4A. **Advisory:** Applied Technology 130 and Drafting 12. Eligibility for English 1A recommended.
Shielded Metal Arc, Gas Tungsten Arc, and Flux Cored Arc welding processes on different piping systems. Fit up and assemble joint configurations used in pressure vessel, power systems, cross country and refinery applications. Certification procedures in accordance with API, AWS, and ASME codes. (A, CSU)
- New Course** **effective Spring 2020**
- # 5A **Automated Welding, 3 units, 2 lecture hours, 4 lab hours**
Prerequisite: None.
The first of a two-part series introducing fundamental theory and hands-on application of robotic welding automation. Emphasizes safety awareness, programming techniques, and basic gas metal arc welding. Application will consist of using six-axis robotic welding equipment. (A, CSU)
- New Course** **effective Spring 2020**
- # 5B **Advanced Automated Welding and Cutting, 3 units, 2 lecture hours, 4 lab hours**
Prerequisite: Welding Technology 5A.
The second of a two-part series introducing fundamental theory and hands-on application of robotic welding automation and cutting. Emphasizes safety awareness, programming techniques, and basic gas metal arc welding and plasma cutting applications using six-axis robotic welding and a 5 axis CNC plasma cutting system. (A, CSU)
- New Course** **effective Spring 2020**
- # 6A **Shielded Metal Arc Welding Theory and Application, 3.5 units, 2 lecture hours, 4.75 lab hours**
Advisory: Applied Technology 10.
Theory and application of the shielded metal arc welding process. Welding will be done in the flat, horizontal, vertical and overhead positions on mild steel. This will prepare students to take the American Welding Society (AWS) D1.1 qualification test. An introduction to the principles of shielded metal arc welding (SMAW), setup/use of SMAW equipment, and safe use of tools and equipment. Provides instruction in welding carbon steel weld joints in various positions. (A, CSU)
- New Course** **effective Spring 2020**
- # 6B **Semi-Automatic Wire Feed Welding, 3.5 units, 2 lecture hours, 4.75 lab hours**
Advisory: Applied Technology 10.
Theory and application of semi-automatic wire feed process to include Gas Metal Arc Welding and Flux Core Arc Welding. Welding will be done in the flat, horizontal, vertical, and overhead position using mild steel, and stainless steel. (A, CSU)
- New Course** **effective Spring 2020**
- # 6C **Gas Tungsten Arc Welding Theory and Application, 3.5 units, 2 lecture hours, 4.75 lab hours**
Advisory: Applied Technology 10.
Theory and application of the Gas Tungsten Arc Welding (GTAW) process. Welding will be done in the flat, horizontal, vertical, and overhead position using mild steel, and stainless steel and aluminum. (A, CSU)
- Change: advisory** **effective Spring 2020**
- # 56 **Blueprint Reading for Welders, 2 units, 2 lecture hours**
Advisory: Applied Technology 130. Eligibility for English 1A recommended.