



2020-2021 CATALOG ADDENDUM



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Academic Regulations

Earning Course and Unit Credit

Credit for Prior Learning (CPL)

Definition

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

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

Credit for Prior Learning Categories

Students may demonstrate proficiency in a course eligible for CPL and receive college credit through the approved alternative methods for awarding credit listed below:

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

CPL Assessment Methods

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

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

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

Credit for Prior Learning Process

Step 1

In consultation with a counselor, student determines that s/he is eligible for CPL through an intake process

Step 2

Student is referred to discipline faculty

Step 3

Discipline faculty conduct appropriate assessment

Eligibility for CPL

- Current students must have an education plan on file
- The course for which the student is seeking credit is listed in the current college catalog
- The student is not currently enrolled in the course to be challenged past census date
- Credit by Examination:
 - The student is registered in the district and not currently enrolled in nor received credit for a more advanced course in the same subject (may be waived by department)
 - The student must be in good academic standing in the District
 - The course can only be challenged once unless the College Vice President of Instruction determines that there are extenuating circumstances that justify a subsequent retake

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

Transcript

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

Certificate & Degree Requirements

REQUIREMENTS FOR AA AND AS DEGREES

AREA D - LANGUAGE AND RATIONALITY (6 UNITS)

D.1 = 3 units; D.2 = 3 units

2. BA 39

ENGL 2, 2H

Transfer Information & Requirements

AREA C: ARTS, LITERATURE, PHILOSOPHY AND FOREIGN LANGUAGE

Nine semester units minimum with at least one course each from C1 and C2.

Change: add ART 26, ESL 14, 15

Area C1: Arts

Art 26

effective fall 2020

English as a Second Language 14, 15

effective fall 2020 ^E

AREA D: SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR, HISTORICAL BACKGROUND

Nine semester units minimum from at least two disciplines.

Area D0-D9: Social and Behavioral Sciences

American Sign Language 5

effective fall 2020

Veterans Services

Financial Aid and Scholarships

Reedley College administers a variety of educational programs for eligible veterans through the Veterans Service staff in Admissions and Records (located in the Student Service Building) or our Veterans Center (VC). The Veteran Center is located in the Student Center in room 105 and is furnished with a study space, computers, and written materials pertinent to Veteran service. The VC serves as a place for student Veterans to meet fellow student Veterans, other Reedley College student services representatives, and instructional representatives who are ready to assist them in their pursuits at our institution.

In addition, there are educational benefits for dependents (spouses and/or children) of veterans under the Survivors' and Dependents' Educational Assistance Program.

(1) Veterans who were separated from active duty with the armed forces may be eligible for educational benefits through the Veterans Administration and the following benefit programs:

- a. Post 9/11 GI Bill[®] – 90 Days of active duty service after Sept. 10, 2001, and are still on active duty, or if you are honorably discharged Veteran or were discharged with a service-connected disability after 30 days (Chapter 33)
- b. Montgomery GI Bill[®] - Active Duty Educational Assistance program (Chapter 30)
- c. Montgomery GI Bill[®] - Selected Reserve Educational Assistance Program (Chapter 1606)
- d. VEAP (Chapter 32) - Contributed to VEAP or Section 903 - Military service beginning on or after January 1, 1977 and ending on or before June 30, 1985
- e. Vocational Rehabilitation (Chapter 31) - Veterans who served in the Armed Forces are eligible for vocational rehabilitation if they suffered a service-connected disability while on active service which entitles them to compensation, or would do so except for the receipt of retirement pay. The Veterans' Administration (VA) determines a veteran's need for vocational rehabilitation to overcome the handicap of his/her disabilities.

(2) Spouses and/or children of the following categories of veterans may be eligible for the Dependents' Educational Assistance Program:

- a. Veterans who died or are 100 percent permanently disabled as the result of a service-connected disability. The disability must arise out of active service in the Armed Forces.
- b. Veterans who died from any cause while such service connected disability was in existence.
- c. Service persons missing in action or captured in the line of duty by a hostile force.
- d. Service persons forcibly detained or interned in the line of duty by a foreign government or power.

Veteran and Veteran dependent students can learn more about each Veteran Education Benefit at <https://www.va.gov/education/about-gi-bill-benefits/>

APPLICATION PROCESS

To apply for any of these benefits, students must apply with the Veterans Administration at this link <https://www.va.gov/education/how-to-apply/>. Students will also need to complete an application packet which is available through our Veterans Services staff, or at our Veterans Center. In addition, students must meet with an academic counselor and have a Veterans Student Education Plan completed for the major they are declaring.

APPROVED MAJORS

All AA, AS, AA-T, AS-T and certificate programs at Reedley College are approved majors for veterans education benefits. Additionally, some articulated transfer programs to the CSU and UC systems as well as private institutions have been approved. Students should inquire about their particular major at the time of application.

EVALUATION OF PREVIOUS EDUCATIONAL/TRAINING CFR S21.4253 (d) (3)

As required by federal law Reedley College will conduct an evaluation of previous education and training, grant appropriate credit, and notify the VA and student of transfer credit granted. Students applying for veterans benefits must submit transcripts from all prior college and universities attended as well as military training transcripts PRIOR to having their benefits processed regardless of whether or not the student, counselor or certifying official believe that any transfer credit will be granted.

STANDARDS OF PROGRESS, CFR S21.4253 (d)(1) (ii)

A complete copy of the Veterans Academic Progress Policy is available in the Veterans Education Benefits Office or by written request.

VETERANS DEPENDENT FEE WAIVER

Dependents of veterans with disabilities (spouses and/or children) may be eligible to receive tuition free assistance at any California post-secondary educational institution (California Community College, California State University, and/or University of California). Additional information may be obtained from a Veteran Service Office and to look for a County Veterans Service Office in your area go to this link <https://www.calvet.ca.gov/VetServices/Pages/CVSO-Locations.aspx>

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 website at <http://www.benefits.va.gov/gibill>.

PROGRAMS

ASSOCIATE DEGREE & CERTIFICATE PROGRAMS

ACADEMIC AND VOCATIONAL ENGLISH AS A SECOND LANGUAGE (MAJOR #R.3032.CC) effective spring 2021

Certificate of Competency

The Certificate of Competency in Academic and Vocational English as a Second Language prepares intermediate level ESL students with the reading, writing and oral skills in English needed to succeed in a variety of advanced academic and vocational situations. Students attaining this certificate will be ready to begin study in vocational and academic programs.

Program Requirements

ESL 314 High-Intermediate Academic Reading and Writing

ESL 315 Advanced Academic Reading and Writing

Select two courses

ESL 314G High-Intermediate Academic Grammar

ESL 314LS High-Intermediate Academic Listening and Speaking

ESL 315G Advanced Academic Grammar

ESL 315LS Advanced Academic Listening and Speaking

BASIC ENGLISH AS A SECOND LANGUAGE (MAJOR #R.3011.CC) effective spring 2021

Certificate of Competency

The Certificate of Competency in Basic English as a Second Language prepares beginning level ESL students with reading, writing, and oral skills in English needed to succeed in a variety of basic social and vocational situations. Students attaining this certificate will be ready to begin study toward the Intermediate Academic and Vocational English as a Second Language Certificate.

Program Requirements

ESL 310 Low-Beginning Reading, Writing, and Grammar

ESL 311 Beginning Reading, Writing, and Grammar

ESL 310LS Low-Beginning Listening and Speaking

OR

ESL 311LS High-Beginning Listening and Speaking

INTERMEDIATE ACADEMIC AND VOCATIONAL ENGLISH AS A SECOND LANGUAGE (MAJOR #R.3021.CC)

Certificate of Competency

The Certificate of Competency in Intermediate Academic and Vocational English as a Second Language prepares high-beginning to low-intermediate ESL students with reading, writing and oral skills in English needed to succeed in a variety of intermediate social vocational and academic situations. Students attaining this certificate will be ready to begin study toward the Advanced Academic and Vocational English as a Second Language Certificate.

Program Requirements

ESL 312 Low-Intermediate Reading, Writing, and Grammar

ESL 313 Intermediate Academic Reading and Writing

Select either ESL 312LS or ESL 313G & ESL 313LS

ESL 312LS Low-Intermediate Listening and Speaking

ESL 313G Intermediate Academic Grammar

ESL 313LS Intermediate Listening and Speaking

ANIMAL SCIENCE

effective fall 2019

Certificate of Achievement

Students completing this program will have the basic animal husbandry skills required for entry-level employment in the livestock industry in areas such as livestock herdsman, animal trainer, livestock fitter, brand inspector, or in occupations within the food animal industry. They will understand animal behavior and have the skills and knowledge to perform safe handling

techniques, feeding practices, breeding, environmental management, marketing, health maintenance, nutritional needs and common veterinary procedures. (formerly Animal Husbandry)

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Identify the skills, education, and work experiences needed to pursue his/her chosen career path.
- Maintain an up-to-date comprehensive career portfolio to include a personal résumé, cover letter, application, skills inventory, employment history, and copies of employment application and interview correspondence (thank you letters, etc.).
- Apply effective oral and written communication skills to the work environment.
- Exhibit a high level of work ethic and good time management skills.
- Work in group settings to accomplish team goals.
- Apply commonly used computer programs to the workplace.
- Utilize equipment and technology commonly utilized in the livestock industry and related fields.
- Apply ethical animal husbandry practices and industry accepted quality assurance measures to the responsible production, processing, and marketing of livestock and animal products.
- Demonstrate basic animal management skills in regard to behavior, parturition, identification, nutrition, reproduction and health for common livestock species.
- Evaluate animal conformation and performance data in accordance with industry standards and make selection decisions, based on given scenarios, for various livestock species.

Required Courses	11	
AGBS 4 Computer Applications in Agriculture	3	
AS 1 Introduction to Animal Science	3	
AS 5 Animal Nutrition	3	
AS 40 Livestock Exhibition and Marketing	2	
Select one course	3	
AS 2 Beef Production	3	
AS 3 Small Ruminant Production	3	
AS 4 Swine Production	3	
AS 21 Equine Science	3	
Select one course	3	
AS 6 Livestock Selection and Evaluation	3	
AS 10 Meat Evaluation and Processing	3	
		Total Units
		17

FLIGHT SCIENCE

effective fall 2020

ASSOCIATE IN SCIENCE DEGREE

The Associate Degree in Flight Science is designed to provide students the knowledge, skills, and flight experience required to become certified commercial airplane pilots and flight instructors. Students will complete academic, simulator, and flight courses taught within the guidelines of the Federal Aviation Administration. Emphasis is placed on aeronautical decision making, flight safety, and effective teaching techniques. As courses within the degree are successfully completed, the student will earn the Private Pilot Certificate, Instrument Rating, Commercial Pilot Certificate, and Flight Instructor Certificate. Degree graduates will be ready to enter the aviation industry as commercial airplane pilots and flight instructors.

Program Learning Outcomes

Upon successful completion of the program students will:

- Apply situational awareness and decision making skills.
- Demonstrate proficiency of take-offs, landings, and missed approaches.
- Evaluate how day-to-day weather elements like clouds, wind, and rain affect flight operation and interpret graphic weather products such as surface analysis, weather depiction, and prognostic charts.
- Exhibit proper emergency procedures decision-making skills.
- Demonstrate flight proficiency during instrument approach procedures.
- Effectively communicate with students while demonstrating proper coordination of flight controls.

FLGHT 101 Private Pilot 1 Ground School	4
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FLGHT 105	Private Pilot 1 Flight Lab	1
FLGHT 106	Private Pilot 2 Flight Lab	1.5
FLGHT 107	Private Pilot 1 Simulation Lab	5
FLGHT 108	Private Pilot 2 Ground School	4
FLGHT 109	Private Pilot 2 Simulation Lab	5
FLGHT 111	Instrument Rating Ground School	5
FLGHT 113	Advanced Meteorology	3
FLGHT 115	Instrument Rating Flight Lab	2
FLGHT 117	Instrument Rating Simulation Lab	5
FLGHT 121	Commercial Pilot Ground School	5
FLGHT 125	Commercial Pilot 1 Flight Lab	2.5
FLGHT 126	Commercial Pilot 2 Flight Lab	2.5
FLGHT 131	Flight Instructor Ground School	5
FLGHT 135	Flight Instructor Flight Lab.....	1.5
	Total Units	38.5

Advisor(s): Asman, Johnson, Woolsey, Zielke

FOREST SURVEYING TECHNOLOGY

effective fall 2020

CERTIFICATE OF ACHIEVEMENT

Students will have the knowledge, training, and hands-on experience to pursue a career in Natural Resources emphasizing the measurement of objects at or near the Earth's surface in the context of managing resources for multiple use. They will enter the workforce with specialized surveying, mapping, GIS, GPS, and photo interpretive training.

Program Learning Outcomes:

Upon completion of this program, students will be able to:

- Communicate effectively, including use of proper presentation and interpretative techniques to, the public and co-workers, using diverse media.
- Utilize and apply digital/electronic technology and specialized software programs for forest mapping, inventorying, and communication.
- Demonstrate a breadth of knowledge of scientific, social, and political issues tied to the natural resources industry, providing a base for decision making and credibility in personal interactions and career decisions.
- Perform technical skills important for entry level positions in the forestry and natural resources field.
- Successfully secure and maintain seasonal employment in the forestry and natural resources field while demonstrating professional ethics.
- Describe scientific concepts and processes which affect the sustainability of natural resources.

Required Core	12	
NR 8	Natural Resources Career Preparation	1
NR 17	Introduction to Forest Surveying	3
NR 18	Remote Sensing & Geographic Information Systems.....	3
NR 19V	Cooperative Work Experience – Forestry	2
NR 20	Forest Measurements	3
Select two (2):	1	
NR 108	Introduction to Forestry Field Studies	5
NR 109	Forestry Field Studies I	5
NR 110	Forestry Field Studies II	5
NR 115	Advanced Field Studies I	5
NR 116	Advanced Field Studies II	5
Select one math course	3-5	
BA 39	Finite Mathematics for Business	3
CSCI 26	Discrete Mathematics for Computer Science	4
MATH 3A	College Algebra.....	4
MATH 4A	Trigonometry	4
MATH 5A	Math Analysis I	5
MATH 11	Elementary Statistics.....	4
MATH 11C	Elementary Statistics with Support.....	5
MATH 45	Contemporary Mathematics	3
MATH 103	Intermediate Algebra.....	5
PLS 9	Biometrics.....	3

PSY 42	Statistics for the Behavioral Sciences	4	
STAT 7	Elementary Statistics	4	
	Total Credits		16 - 18

FORESTRY

effective fall 2020

Associate in Science Degree

The Associate in Science Degree in Forestry is designed to provide students with the knowledge, training, and hands-on experience necessary to pursue a career in forestry. Students are exposed to the guiding principles and philosophies of forestry and natural resource management in the context of ecosystem management. Following completion of this program, students will have the specialized training and technical skills for entry-level positions that can lead to accelerated advancement into supervisory and/or management positions. Opportunities exist within private, state and federal agencies such as Cal Fire and U.S. Forest Service. Careers abound in the areas of timber management, forest surveying, and land management.

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Understand which silvicultural systems can be used to achieve different forest management objectives.
- Utilize and apply digital/electronic technology and specialized software programs for forest mapping, forest inventorying, and surveying.
- Demonstrate a breadth of knowledge of scientific, social, and political issues tied to the forestry industry, providing a base for decision making and credibility in personal interactions and career decisions.
- Perform technical skills important for entry-level positions in the forestry field, such as timber cruising.
- Successfully secure and maintain seasonal employment in the forestry field while demonstrating professional ethics.
- Describe scientific concepts and processes which affect the sustainability of natural resources.

Required Courses	34
NR 1 Introduction to Forestry	3
NR 3 Computers in Natural Resources	1
NR 4 Forest Ecosystems	3
NR 6 Dendrology	3
NR 8 Natural Resources Career Preparation	1
NR 11 Silviculture	3
NR 17 Introduction to Forest Surveying	3
NR 18 Remote Sensing & Geographic Information Systems	3
NR 19V Cooperative Work Experience – Forestry	2
NR 20 Forest Measurements	3
NR 21 Forest Products	3
NR 22 Forest Protection	2
NR 25 Forest and Resource Management	1
NR 35 Interpretation of Natural Resources	3
Required Courses - select 2 units from following	2
NR 108 Introduction to Forestry Field Studies	5
NR 109 Forestry Field Studies I	5
NR 110 Forestry Field Studies II	5
NR 115 Advanced Field Studies I	5
NR 116 Advanced Field Studies II	5
Restricted Electives - select at least 3 units from following	3
NR 5 Wildland Fire Technology	3
NR 12 Watershed Ecology	3
NR 14 Principles of Wildlife Management	3
NR 30 Forest Recreation	3
NR 31 Animal Packing	2
NR 32A Museum Techniques-Beginning Taxidermy	1
NR 32B Museum Techniques-Intermediate Taxidermy	1
NR 32C Museum Techniques-Advanced Taxidermy	1
NR 34 Conservation Laboratory	1
NR 42 Advanced Wildland Fire Technology	2

NR 45	Fuels Management	3
NR 90	Backpacking.....	1
NR 91	Wilderness Navigation	1
NR 92	Wilderness Survival.....	1
NR 133	Introduction to Chainsaw Operations	1
	Total Units	39

FORESTRY AND NATURAL RESOURCES TRAINING

effective fall 2020

Certificate of Achievement

Students will have broad-based knowledge, training, and hands-on experience to pursue a career in Forestry and Natural Resources. Following completion of this program, students will be able to enter the workforce as a generalist to allow flexibility in pursuing careers in Forestry and Natural Resources management.

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Communicate effectively, including use of proper presentation and interpretative techniques to, the public and co-workers, using diverse media.
- Utilize and apply digital/electronic technology and specialized software programs for forest mapping, inventorying, and communication.
- Demonstrate a breadth of knowledge of scientific, social, and political issues tied to the natural resources industry, providing a base for decision making and credibility in personal interactions and career decisions.
- Perform technical skills important for entry level positions in the forestry and natural resources field.
- Successfully secure and maintain seasonal employment in the forestry and natural resources field while demonstrating professional ethics.
- Describe scientific concepts and processes which affect the sustainability of natural resources.

Required Courses	7
NR 1 Introduction to Forestry	3
NR 4 Forest Ecosystems.....	3
NR 8 Natural Resources Career Preparation	1
Select two (2):	1
NR 108 Introduction to Forestry Field Studies5
NR 109 Forestry Field Studies I5
NR 110 Forestry Field Studies II5
NR 115 Advanced Field Studies I5
NR 116 Advanced Field Studies II5
Select at least 8 units from following:.....	8
NR 3 Computers in Natural Resources	1
NR 5 Wildland Fire Technology.....	3
NR 6 Dendrology	3
NR 17 Introduction to Forest Surveying	3
NR 18 Remote Sensing & Geographic Information Systems.....	3
NR 20 Forest Measurements	3
NR 21 Forest Products	3
NR 30 Forest Recreation.....	3
NR 31 Animal Packing.....	2
NR 32A Museum Techniques-Beginning Taxidermy.....	1
NR 90 Backpacking	1
NR 91 Wilderness Navigation	1
NR 92 Wilderness Survival.....	1
NR 133 Introduction to Chainsaw Operations	1
	Total Credits
	16

NATURAL RESOURCES

effective fall 2020

Associate in Science Degree

The Associate in Science Degree in Natural Resources is designed to provide students with the knowledge, training, and hands-on experience necessary to pursue a career in Natural Resources. Students are exposed to the guiding principles and

philosophies of natural resource management in the context of ecosystem management. Following completion of this program, students will have the specialized training and technical skills for entry-level positions that can lead to accelerated advancement into supervisory and/or management positions. Opportunities exist within private, state and federal agencies such as the California Department of Fish and Game, Cal Fire, U.S. Forest Service, and the U.S. Fish and Wildlife Service. Careers abound in the areas of fire suppression and management, outdoor recreation, interpretation, wildlife management, and watershed management.

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Communicate effectively, including use of proper presentation and interpretative techniques to, the public and co-workers, using diverse media.
- Utilize and apply digital/electronic technology and specialized software programs for forest mapping, inventorying, and communication
- Demonstrate a breadth of knowledge of scientific, social, and political issues tied to the natural resources industry, providing a base for decision making and credibility in personal interactions and career decisions.
- Perform technical skills important for entry level positions in the forestry and natural resources field.
- Successfully secure and maintain seasonal employment in the forestry and natural resources field while demonstrating professional ethics.
- Describe scientific concepts and processes which affect the sustainability of natural resources.

Required Courses	30
NR 1 Introduction to Forestry	3
NR 3 Computers in Natural Resources	1
NR 4 Forest Ecosystems	3
NR 6 Dendrology	3
NR 8 Natural Resources Career Preparation	1
NR 12 Watershed Ecology	3
NR 14 Principles of Wildlife Management	3
NR 18 Remote Sensing & Geographic Information Systems	3
NR 19V Cooperative Work Experience - Forestry	2
NR 20 Forest Measurements	3
NR 35 Interpretation of Natural Resources	3
Select 2 units from following:	2
NR 108 Introduction to Forestry Field Studies	5
NR 109 Forestry Field Studies I	5
NR 110 Forestry Field Studies II	5
NR 115 Advanced Field Studies I	5
NR 116 Advanced Field Studies II	5
Select at least 9 units from following	9
NR Wildland Fire Technology	3
NR 11 Silviculture	3
NR 17 Introduction to Forest Surveying	3
NR 21 Forest Products	3
NR 22 Forest Protection	2
NR 25 Forest and Resource Management	1
NR 30 Forest Recreation	3
NR 31 Animal Packing	2
NR 32A Museum Techniques-Beginning Taxidermy	1
NR 32B Museum Techniques-Intermediate Taxidermy	1
NR 32C Museum Techniques-Advanced Taxidermy	1
NR 34 Conservation Laboratory	1
NR 36 Natural Resources Law Enforcement	3
NR 42 Advanced Wildland Fire Technology	2
NR 44 Fire Ecology	3
NR 45 Fuels Management	3
NR 90 Backpacking	1
NR 91 Wilderness Navigation	1
NR 92 Wilderness Survival	1
NR 133 Introduction to Chainsaw Operations	1

RECREATION AND INTERPRETATION TECHNIQUES*effective fall 2020*

Certificate of Achievement

Students will have the knowledge, training, and hands-on experience to pursue a career in Natural Resources emphasizing Recreation and Interpretation in the context of managing resources for multiple use. Following completion of this program, students will be able to enter the workforce with specialized recreation and interpretative training.

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Communicate effectively, including use of proper presentation and interpretative techniques to, the public and co-workers, using diverse media.
- Utilize and apply digital/electronic technology and specialized software programs for forest mapping, inventorying, and communication.
- Demonstrate a breadth of knowledge of scientific, social, and political issues tied to the natural resources industry, providing a base for decision making and credibility in personal interactions and career decisions.
- Perform technical skills important for entry level positions in the forestry and natural resources field.
- Successfully secure and maintain seasonal employment in the forestry and natural resources field while demonstrating professional ethics.
- Describe scientific concepts and processes which affect the sustainability of natural resources

Required Courses	14
NR 6 Dendrology	3
NR 14 Principles of Wildlife Management	3
NR 19V Cooperative Work Experience – Forestry	2
NR 30 Forest Recreation	3
NR 35 Interpretation of Natural Resources	3
Select 3 units	3
NR 5 Wildland Fire Technology	3
NR 17 Introduction to Forest Surveying	3
NR 18 Remote Sensing & Geographic Information Systems	3
NR 20 Forest Measurements	3
NR 21 Forest Products	3
NR 31 Animal Packing	2
NR 32A Museum Techniques-Beginning Taxidermy	1
NR 90 Backpacking	1
NR 91 Wilderness Navigation	1
NR 92 Wilderness Survival	1
NR 133 Introduction to Chainsaw Operations	1
Total Credits	17

WILDLAND FIRE ADVANCEMENT (MAJOR #R.1200.CA)*effective fall 2020*

Certificate of Achievement

Students successfully completing the outlined course of study for the Wildland Fire Advancement Program will be prepared for workforce advancement as an advanced firefighter forestry technician or fuels reduction crewmember. Students will learn how to apply and initiate wildland firefighting fundamentals, risk management, wildland fire behavior, human factors effecting human performance, chainsaw operations, hand tool use, prescribed fire and fuels reduction operations and federal physical readiness standards. Training will require arduous working conditions similar to those performed as a wildland firefighter. Upon completion of this program students will have the NWCG course work necessary for the competitive advancement to a permanent GS-5 senior fire fighter position in the Federal fire service. This academy will focus on principals of leadership, command and control, operational tactics and intermediate fire behavior. Students will be expected to operate in a physically demanding work place like environment where safety and skills are emphasized. Due to the requirements for federal and state employment both physical and other applicable prerequisites may be required.

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Apply the fundamental and intermediate wildland fire principals surrounding safety, operational engagement and risk management.
- Initiate and develop safe efficient line construction tactics and knowledge of fundamental fire behavior factors including fuels, topography and weather.
- Develop communication protocols by effectively utilizing programmable radio systems, formalized briefings and other non-verbal methods.
- Initiate the use of the incident command structure to manage span of control and incident organization.
- Apply a working knowledge of the factors effecting human performance in high risk environments.
- Track and document appropriate use and maintenance of wildland fire hand tools and power tools.
- Utilize the fundamentals of prescribed fire and fuels reduction operations and the associated tactics and equipment.
- Proficiently utilize chainsaws to cut trees, brush and other vegetation for fireline construction and fuels management projects.

NR 19V	Cooperative Work Experience – Forestry	7
NR 96	Wildland Fire School-Advancement	9
	Total Units	16

Change: units

effective spring 2021

COACHING CERTIFICATE

Students who complete this program will be well-informed of current topics associated with the coaching profession. Topics include Title IX, prevention and treatment of injuries, and basic coaching pedagogy. Completion of the program prepares students for coaching at elementary, middle, and high school levels as well as recreational coaching.

Required Courses	12.5
HLTH 1 Contemporary Health Issues	3
HLTH 2 First Aid and Safety	3
KINES 20 Athletic Training.....	3.5
KINES 22 Introduction to Physical Education	3
Select	1-3
PE 2 Aerobics (Dance, Step or Water)	1
PE 4 Badminton	1
PE 5 Basketball.....	1
PE 5B Intermediate Basketball.....	1
PE 6 Fitness and Health	1
PE 7 Golf.....	1
PE 8 Martial Arts/Self Defense.....	1
PE 10 Racquetball	1
PE 12 Beginning Swim for Fitness.....	1
PE 12B Intermediate Swim for Fitness.....	1
PE 12C Advanced Swim for Fitness.....	1
PE 13 Tennis.....	1
PE 14 Volleyball.....	1
PE 15 Weight Training	1
PE 16 Fitness Walking.....	1
PE 15B Advanced Weight Training	1
PE 18 Floor Exercises.....	1
PE 19 Weight Training and Aerobics	1
PE 19B Advanced Weight Training and Aerobics	1
PE 30A Theory of Baseball	1
PE 30B Competitive Baseball	3
PE 30C Off-Season Conditioning for Baseball	1
PE 30D Baseball Training	3
PE 31A Theory of Basketball	1
PE 31B Competitive Basketball.....	3
PE 31C Off-Season Conditioning for Basketball	1
PE 33A Theory of Football	1

PE 33B	Competitive Football	3	
PE 33C	Off-Season Conditioning for Football	1	
PE 34A	Theory of Golf.....	1	
PE 34B	Competitive Golf.....	3	
PE 34C	Off-Season Conditioning for Golf	1	
PE 35B	Pep Squad	3	
PE 36B	Competitive Soccer	3	
PE 36C	Off-Season Conditioning for Soccer.....	1	
PE 37A	Theory of Softball	1	
PE 37B	Competitive Softball	3	
PE 37C	Off-Season Conditioning for Softball.....	1	
PE 38A	Theory of Tennis	1	
PE 38B	Competitive Tennis	3	
PE 38C	Off-Season Conditioning for Tennis	1	
PE 40A	Theory of Volleyball.....	1	
PE 40B	Competitive Volleyball.....	3	
PE 40C	Off-Season Conditioning for Volleyball	1	
PE 45	Performance Training and Conditioning Techniques for Intercollegiate Athletics	1-2	
PE 49	Weight Training for Collegiate Athletes.....	1	
PE 49A	Beginning Circuit Training	1	
PE 71	Soccer	1	
	Total Units		13.5-15.5

COURSE DESCRIPTION INFORMATION

Course Number Changes

Old Course Number	New Course Number
ESL 117G	ESL 115G
ESL 227G	ESL 214G
ESL 260	ESL 210
ESL 260LS	ESL 210LS
ESL 261I	ESL 211
ESL 261LS	ESL 211LS
ESL 264	ESL 212
ESL 264LS	ESL 212LS
ESL 266G	ESL 213G
ESL 266LS	ESL 213LS
ESL 317G	ESL 315G
ESL 327G	ESL 314G
ESL 360	ESL 310
ESL 360LS	ESL 310LS
ESL 361I	ESL 311
ESL 361LS	ESL 311LS
ESL 364	ESL 312
ESL 364LS	ESL 312LS
ESL 366G	ESL 313G
ESL 366LS	ESL 313LS

COURSES

ANIMAL SCIENCE (AS)

New Course

effective spring 2021

323 INTRODUCTORY FARRIER SCIENCE

0 units, 2 lecture hours, 3 lab hours, pass/no pass only

This course covers fundamental horseshoeing principles and practices, basic anatomy and physiology of the horse's limbs and feet, horseshoeing terminology, and guidelines for assessing a proper horseshoeing job. The examination of treatment and prevention of common lameness problems are also included.

ART (ART)

Change: catalog description

effective fall 2020

13 BEGINNING WATERCOLOR PAINTING

3 units, 2 lecture hours, 4 lab hours, pass/no pass

ADVISORIES: English 1A or 1AH.

In this class, students will develop beginning level skills in watercolor painting. Through lecture and studio practice, students learn representational, abstract, nonobjective, and conceptual approaches/ techniques to painting. Traditional and experimental techniques are explored. (A, CSU, UC)

Change: approved for CSU-GE Area C.1

effective fall 2020

26 SURVEY OF NON-WESTERN ART

3 units, 3 lecture hours

ADVISORIES: English 1A or 1AH.

This course is a survey of art outside the western European tradition, focusing on the major artistic traditions of Africa, Oceania, Indigenous North America, and the Pre- Columbian Americas, from ancient times up to the impact of European contact. The course will focus on the role of the visual arts in non-western cultural perspectives, including discussion of sacred ritual, social and cultural constructs, materials, and artistic creation. Emphasis will be placed on the recognition of works from major civilizations, their artistic traditions, and what can be revealed about the cultures and peoples who created them from historical and cultural viewpoints. Course content will include the availability of a trip to a internationally recognized art venue. (A, CSU-GE)

AUTOMOTIVE TECHNOLOGY (AUTOT)

New course

effective fall 2020

309 AUTOMOTIVE ESSENTIALS

0 units, 3 lecture hours, pass/no pass only

This course is an overview of the automobile and its basic components. General servicing procedures and basic troubleshooting are included for anyone needing an introduction to the operating principles of the automobile.

New course

effective fall 2020

312 AUTOMOTIVE STEERING AND SUSPENSION

0 units, 3 lecture hours, 3 lab hours, pass/no pass only

PREREQUISITES: Automotive Technology 9 or 309.

This course will cover the identification and diagnosis of steering and suspension components. The lab will provide hands-on experience and skills that automotive chassis technicians need to succeed, in the automotive industry.

New course

effective fall 2020

313 AUTOMOTIVE BRAKE SYSTEMS

0 units, 3 lecture hours, 3 lab hours, pass/no pass only

PREREQUISITES: Automotive Technology 9 or 309.

This course will cover the diagnosis and repair of automotive brake systems.

New course

effective fall 2020

314 ENGINE AND EMISSION CONTROL FUNDAMENTALS

0 units, 2 lecture hours, 3 lab hours, pass/no pass only

PREREQUISITES: Automotive Technology 10 and 11.

This course is designed to prepare the students for the Bureau of Automotive Repair Smog Check Licensing Exam. Level 1 Training provides students with the basic knowledge of engine and emission controls needed to move forward with Level 2 Smog Check Procedures Training. Smog check rules and regulations are covered in detail. This course provides an introduction to Smog Check Program inspection procedures and policies mandated by the Bureau of Automotive Repair.

New course

effective fall 2020

315 SMOG CHECK PROCEDURES TRAINING LEVEL 2

0 units, 2 lecture hours, 2 lab hours, pass/no pass only

PREREQUISITES: Automotive Technology 10, 11, and 114 or 314.

This course provides students with the procedural knowledge, skills, and abilities needed to perform Smog Check inspections. Students who complete and pass this course will have met the California Bureau of Automotive Repair training requirements to qualify to take the Smog Check Inspector state licensing examination.

AVIATION MAINTENANCE TECHNOLOGY (AMT)

New course

effective spring 2021

10 AVIATION MAINTENANCE GENERAL A

6.5 units, 7 lecture hours, 7 lab hours

ADVISORIES: English 1A or 1AH.

This course prepares students with the skills and technical knowledge they need to perform maintenance on aircraft in the aviation maintenance industry. The content of this course is a variety of general aviation maintenance subjects required by the Federal Aviation Administration as part of the Aviation Maintenance Technology Program. Topics covered will include: fundamental electricity and electronics; aircraft weight and balance; mathematics; physics for aviation; ground operations and servicing; and human factors. (A, CSU)

New course

effective spring 2021

20 AVIATION MAINTENANCE GENERAL B

6.5 units, 7 lecture hours, 7 lab hours

ADVISORIES: English 1A or 1AH.

This course prepares students with the skills and technical knowledge they need to perform maintenance on aircraft in the aviation maintenance industry. The content of this course is a variety of general aviation maintenance subjects required by the Federal Aviation Administration as part of the Aviation Maintenance Technology Program. Topics covered will include: maintenance forms, records, and publications; mechanic privileges and limitations; aircraft material, hardware, and processes; aircraft drawings; fluid lines and fittings; cleaning and corrosion control; inspection concepts and techniques; foreign object elimination (foe); and alerts, cautions, and warning indications.

BIOLOGY (BIOL)

Change: advisories

effective spring 2021

5 HUMAN BIOLOGY

4 units, 3 lecture hours, 3 lab hours, pass/no pass

ADVISORIES: English 1A or 1AH.

This course is an introductory human biology course that examines science and societal issues. This course emphasizes the structure of the human body and the functional interrelationships of the body's systems: integument, circulatory, digestive, respiratory, urinary, skeletal, muscular, nervous, endocrine, reproductive, and genetics. (A, CSU-GE, UC, I)

Change: advisories

effective spring 2021

10 INTRODUCTION TO LIFE SCIENCE LECTURE

3 units, 3 lecture hours, pass/no pass

ADVISORIES: English 1A or 1AH.

This lecture course is recommended for the non-biological science and pre-education majors. This is an introductory course using biological concepts. The organismal structure, function, inheritance, evolution, and ecology are covered. Not open to students with credit in Biology 3. (A, CSU-GE, UC, I)

Change: approved for CSU-GE Area B.2, IGETC Area 5B

effective fall 2020

10H HONORS INTRODUCTION TO LIFE SCIENCE LECTURE

3 units, 3 lecture hours, pass/no pass

ADVISORIES: English 1A or 1AH.

This lecture course is recommended for the non-biological science and pre-education majors seeking honors natural science credit. In this introductory course a range of biological concepts will be examined; organismal structure, function, inheritance, evolution, and ecology are covered. Within this course honors level student directed research will be incorporated into the teaching curriculum. This course is not open to students with credit in Biology 3. (A, CSU, UC-GE, UC, I)

Change: corequisites, advisories, catalog description

effective spring 2021

10L INTRODUCTION TO LIFE SCIENCE LAB

1 unit, 3 lab hours, pass/no pass

COREQUISITES: Biology 10 or 10H. ADVISORIES: English 1A or 1AH.

This lab course is recommended for the non-biological science and pre-education majors. This is an introductory laboratory course using biological concepts. The organismal structure, function, inheritance, evolution, and ecology are covered in this course. Field trips may be required. This course is not open to students with credit for Biology 3. (A, CSU-GE, UC, I)

Change: prerequisites, advisories, catalog description

effective spring 2021

11B BIOLOGY FOR SCIENCE MAJORS II

5 units, 3 lecture hours, 6 lab hours

PREREQUISITES: Biology 11A and Mathematics 103 or equivalent. ADVISORIES: English 1A or 1AH.

This course is the second course of a two-semester sequence of general biology for science majors. Students will study the origins of life, the evolutionary history of biodiversity, plant form and function, animal form and function, and ecology. This course is intended for science majors and pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. (A, CSU-GE, UC, I) (C-ID BIOL 140) (C-ID 135S BIOL 11A + BIOL 11B)

Change: advisories

effective spring 2021

20 HUMAN ANATOMY

4 units, 3 lecture hours, 3 lab hours

PREREQUISITES: Biology 1 or 5 or 11A. ADVISORIES: English 1A or 1AH and Mathematics 11 or 45.

This is a course providing a basic understanding and working knowledge of the human body with emphasis on the structure of each major system. The interrelationship between human systems and the relationships between the structure and functions of each system will be studied at several levels: cellular, tissue, organ, system, and organismal. (A, CSU-GE, UC, I) (C-ID BIOL 110)

Change: advisories

effective spring 2021

31 MICROBIOLOGY

5 units, 3 lecture hours, 6 lab hours

PREREQUISITES: Biology 1 or 5 or 11A and Chemistry 1A or 3A. ADVISORIES: English 1A or 1AH.

This course provides an introduction to the structure, metabolism and ecology of microorganisms with special emphasis on microbe-related human diseases. This course is designed to introduce the student to a variety of topics in the area of microbiology. The text, lab manuals, and lectures are geared to students in biological, medical, physical education and health-oriented programs. (A, CSU-GE, UC, I)

CHEMISTRY (CHEM)

Change: advisories

effective spring 2021

1B GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS

5 units, 3 lecture hours, 6 lab hours, pass/no pass

PREREQUISITES: Chemistry 1A and Mathematics 103 or equivalent. ADVISORIES: English 1A or 1AH.

This course completes the year-long general chemistry sequence (1A-1B) and covers the principles of physical and inorganic chemistry with an emphasis on quantitative, mathematical problem solving. Topics covered include acid-base theory, chemical kinetics, equilibrium (acid-base, hydrolysis, and solubility), chemical thermodynamics, electrochemistry, selected

topics in nuclear chemistry, coordination chemistry, and/or chemistry of selected groups. Students will analyze inorganic compounds qualitatively and quantitatively. (A, CSU-GE, UC, I) (C-ID CHEM 120S: CHEM 1A & CHEM 1B)

Change: advisories

effective spring 2021

8 ELEMENTARY ORGANIC CHEMISTRY

3 units, 3 lecture hours, pass/no pass

PREREQUISITES: Chemistry 1A or 3A. ADVISORIES English 1A or 1AH.

A survey of the important classes of organic compounds with emphasis upon materials of interest to students in the biological sciences. This thorough introduction to organic chemistry is recommended for students who need to take Chemistry 28A or for biology majors, students in prehealth sciences or environmental sciences. (A, CSU-GE, UC, I)

Change: advisories

effective spring 2021

9 ELEMENTARY ORGANIC CHEMISTRY LABORATORY

3 units, 1 lecture hour, 6 lab hours, pass/no pass

PREREQUISITES: Chemistry 1A or 3A. COREQUISITES: Chemistry 8 or the equivalent. ADVISORIES: English 1A or 1AH.

Reactions and physical properties of the main functional groups of organic compounds such as alkanes, alkenes, alkylhalides, acids and esters. Students will work hands-on with a melting point apparatus, a refractometer, a gas-chromatograph, an infra-red spectrometer and a nuclear magnetic resonance spectrometer. The course is designed to accompany an elementary organic chemistry lecture course such as Chemistry 8. This course, along with Chemistry 8, is a thorough preparation for the advanced organic chemistry courses, Chemistry 28A and 29A. (A, CSU-GE, UC, I)

Change: advisories

effective spring 2021

28A ORGANIC CHEMISTRY I

3 units, 3 lecture hours, pass/no pass

PREREQUISITES: Chemistry 1B. ADVISORIES: English 1A or 1AH.

This course is a study of the structures, properties, nomenclature and reactions of organic compounds with emphasis on reaction mechanisms. The course is recommended for students whose major is chemistry, premedical, pre dental, prepharmacy, biology, biochemistry or chemical engineering. The following topics are included: stereochemistry, alkanes, alkenes, alkynes, alkyl halides, alcohols, amines, ethers, epoxides, aromatics, and organometallic compounds, resonance and conjugation, kinetic and thermodynamic control of reactions, multistep syntheses, infrared spectroscopy, nuclear magnetic spectroscopy, and mass spectroscopy. (A, CSU-GE, UC, I) (C-ID CHEM 150: CHEM 28A & CHEM 29A)

Change: advisories

effective spring 2021

28B ORGANIC CHEMISTRY II

3 units, 3 lecture hours, pass/no pass

PREREQUISITES: Chemistry 28A. ADVISORIES: English 1A or 1AH.

This is the second semester in a year-long course in organic chemistry designed for students majoring in chemistry and related disciplines, such as premedical, prepharmacy, pre dental, biology, biochemistry or chemical engineering. It covers the study of several groups of compounds in organic chemistry including aromatic compounds, benzene derivatives, carbonyl compounds, amines, amino acids, lipids, and nucleic acids. Each group is analyzed in terms of their structure, physical properties, nomenclature, reactions and reaction mechanisms. Also included are the oxidation-reduction of organic functional groups and protecting groups in multistep syntheses. (A, CSU-GE, UC, I) (C-ID CHEM 160: CHEM 28A+CHEM 28B+CHEM 29A+CHEM 29B)

Change: advisories

effective spring 2021

29A ORGANIC CHEMISTRY LABORATORY I

2 units, 6 lab hours, pass/no pass

COREQUISITES: Chemistry 28A. ADVISORIES: English 1A or 1AH.

Chemistry 29A is the first of two laboratory courses in organic chemistry, and as such it is primarily concerned with introducing the tools and techniques that chemists use to investigate the nature of organic compounds. Students will learn a variety of isolation and purification techniques such as recrystallization, liquid-liquid extraction, distillation (simple, fractional, steam), and chromatography (solid and gas phase). Students will also synthesize organic compounds and characterize their purified products using melting point determination and FTIR analysis. Gas chromatography, boiling point, refractometry, polarimetry, and NMR will also be utilized in this course. (A, CSU, GE-UC, I) (C-ID CHEM 150: CHEM 28A & CHEM 29A)

Change: advisories

effective spring 2021

29B Organic Chemistry Laboratory II

2 units, 6 lab hours, pass/no pass

PREREQUISITE: Chemistry 29A. COREQUISITES: Chemistry 28B. ADVISORIES: English 1A or 1AH.

Chemistry 29B is the second of two laboratory courses in organic chemistry, and as such it is primarily concerned with introducing intermediate level techniques used in organic chemistry. Although many of the familiar, introductory techniques from 29A will be used in 29B also, additional methods of analysis such as NMR spectroscopy, mass spectrometry, and computational methods will be utilized. In CHEM 29B students will carry out multi-step syntheses, and additional emphasis will be placed on problem solving, application of theory, and structural identification. (A, CSU-GE, UC, I) (C-ID CHEM 160: CHEM 28A+CHEM 28B+CHEM 29A+CHEM+29B)

COMMUNICATION (COMM)

New course

effective fall 2020

25H HONORS ARGUMENTATION AND DEBATE

3 units, 3 lecture hours, pass/no pass

PREREQUISITES: Completion of English 1A or 1AH. Advisories: Communication 1 or 1H.

Argumentation is designed to provide students with the methods for critical inquiry and advocacy. Emphasis will be placed on analysis, presentation and evaluation of oral and written argumentation. This course focuses on identifying fallacies, testing evidence, and advancing a reasoned position while defending and refuting arguments. Students will write a minimum of 6,000 words during the course of the semester. As an Honor's section, this class will employ enhanced methods of debate and critical analysis of arguments. (A, CSU)

ENGLISH (ENGL)

Correction: advisory to prerequisite

1AH HONORS READING AND COMPOSITION

4 units, 4 lecture hours

PREREQUISITE: English 132.

English 1AH focuses on conducting research and on reading, analyzing, and composing college-level prose, with emphasis on the expository: research (gathering, organizing, evaluating, integrating, and documenting information), culminating in a term research paper using both traditional and original research; studying writing as a process; exploring different composing structures and strategies; editing and revising one's own writing. As an Honors section, this course is organized on a theme with a seminar approach. Students will write a minimum of 8,000 words in formal academic language. (A, CSU-GE, UC, I) (C-ID ENGL 100)

ENGLISH AS A SECOND LANGUAGE (ESL)

Change: approved for CSU-GE Area C.2

effective fall 2020

14 HIGH-INTERMEDIATE ACADEMIC READING AND WRITING

6 units, 6 lecture hours, pass/no pass

ADVISORIES: English as a Second Language 266R and 266W or English as a Second Language 366R and 366W or placement through an approved multiple-measure process.

ESL 14 is an integrated reading and writing course designed for multilingual students to develop academic literacy skills at the high-intermediate level. Students explore themes in various texts employing reading strategies with the purpose of developing and supporting theses in multiple-draft, source-based expository essays. This course provides language support and a lens for cultural insight for multilingual students. Successful completion of this course will prepare students for ESL 15 or ESL 315. (A, CSU-GE)

Change: number, requisites

effective spring 2021

115G ADVANCED ACADEMIC GRAMMAR (formerly ESL 117G)

3 units, 3 lecture hours, pass/no pass

ADVISORIES: ESL 214G or ESL 314G, or placement through an approved multiple-measure process.

ESL 115G is an advanced grammar skills course designed for multilingual students who want to comprehend and use grammar structures in written and spoken academic English. This course may be taken to strengthen student performance in other ESL, English, or collegiate level courses.

Change: number

effective spring 2021

210 LOW-BEGINNING READING, WRITING, AND GRAMMAR (formerly ESL 260)

6 units, 6 lecture hours, pass/no pass only

ADVISORIES: Placement through an approved multiple-measure process.

ESL 210 is an integrated reading, writing, and grammar course designed for ESL students to develop literacy skills at the low-beginning level. Students learn how to write sentences using basic grammatical structures. Students develop vocabulary by reading about life skills, the work place, and everyday situations. This course may be taken concurrently with other ESL 210-level courses. Successful completion of this course will prepare students for ESL 211 or ESL 311.

Change: number

effective spring 2021

210LS LOW-BEGINNING LISTENING AND SPEAKING (formerly ESL 260LS)

6 units, 6 lecture hours, pass/no pass only

Placement through an approved multiple-measure process.

ESL 210LS is a listening and speaking course for ESL students who want to develop oral language skills at the low-beginning level. Students learn to converse on everyday topics, using basic phrases and sentences. ESL 210LS is the lowest level in the ESL sequence. This course may be taken concurrently with other ESL 210-level courses. Students who successfully complete this course will be prepared for ESL 211LS or ESL 311LS.

Change: number, requisites, title

effective spring 2021

211 HIGH-BEGINNING READING, WRITING, AND Grammar (formerly ESL 261I)

6 units, 6 lecture hours, pass/no pass only

ADVISORIES: ESL 210 or ESL 310, or placement through an approved multiple-measure process.

ESL 211 is an integrated reading, writing, and grammar course designed for ESL students to develop literacy skills at the high-beginning level. Students learn to write basic paragraphs on familiar topics. Students increase reading comprehension and vocabulary by reading stories, articles, and novels on various high interest topics and themes. This course may be taken concurrently with other ESL 211-level courses. Successful completion of this course will prepare students for ESL 212 or ESL 312.

Change: number, requisites, title

effective spring 2021

211LS HIGH-BEGINNING LISTENING AND SPEAKING (formerly ESL 261LS)

6 units, 6 lecture hours, pass/no pass only

ADVISORIES: English as a Second Language 210LS or 310LS or placement through a multiple-measure process.

ESL 211LS is a listening and speaking course for ESL students who want to develop oral language skills at the high-beginning level. Students learn to communicate on personal and workplace topics, expressing ideas in a series of phrases and sentences. This course may be taken concurrently with other ESL 211-level courses. Successful completion of this course will prepare students for ESL 212LS or ESL 312LS.

Change: number, requisites, title

effective spring 2021

212 LOW-INTERMEDIATE READING, WRITING, AND GRAMMAR (formerly ESL 264)

6 units, 6 lecture hours, pass/no pass only

ADVISORIES: ESL 211 or ESL 311, or placement through an approved multiple-measure process.

ESL 212 is an integrated reading, writing, and grammar course designed for ESL students to develop literacy skills at the low-intermediate level. Students learn to write organized paragraphs on familiar topics. Students increase reading comprehension and vocabulary by reading stories, articles, and novels on various high interest topics and themes. This course may be taken concurrently with other ESL 212-level courses. Successful completion of this course will prepare students for ESL 213 or ESL 313.

Change: number, requisites, title

effective spring 2021

212LS LOW-INTERMEDIATE LISTENING AND SPEAKING (formerly ESL 264LS)

6 units, 6 lecture hours, pass/no pass only

ADVISORIES: ESL 211LS or ESL 311LS or placement through a multiple-measure process.

ESL 212LS is a listening and speaking course for ESL students who want to develop oral language skills at the low-intermediate level. Students learn to exchange information on a variety of common topics, expressing ideas in an extended series of phrases and sentences. This course may be taken concurrently with other ESL 212-level courses. Successful completion of this course will prepare students for ESL 213LS or ESL 313LS.

Change: number

effective spring 2021

213G INTERMEDIATE ACADEMIC GRAMMAR (formerly ESL 266G)

3 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 212 or ESL 312, or placement through an approved multiple-measure process

ESL 213G is an intermediate grammar skills course designed for multilingual students who want to comprehend and use grammar structures in written and spoken academic English. This course may be taken concurrently with other ESL courses to strengthen student academic performance. Successful completion of this course will prepare students for ESL 214G or ESL 314G.

Change: number

effective spring 2021

213LS INTERMEDIATE LISTENING AND SPEAKING (formerly ESL 266LS)

3 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 212LS or ESL 312LS, or placement through a multiple-measure process.

ESL 213LS is a listening and speaking course for ESL students who want to develop oral language skills at the intermediate level. Students learn to comprehend extended spoken discourse and lectures, and learn to give explanations and opinions on a variety of common academic topics. This course may be taken concurrently with other ESL 213-level courses. Successful completion of this course will prepare students for ESL 214LS or ESL 314LS.

Change: number, requisites

effective spring 2021

214G HIGH-INTERMEDIATE ACADEMIC GRAMMAR (formerly ESL 227G)

3 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 213G or ESL 313G, or placement through an approved multiple-measure process

ESL 214G is a high-intermediate grammar skills course designed for multilingual students who want to comprehend and use grammar structures in written and spoken academic English. This course may be taken concurrently with other ESL courses to strengthen student academic performance. Successful completion of this course will prepare students for ESL 215G or ESL 315G.

New Course

effective spring 2021

214LS HIGH-INTERMEDIATE ACADEMIC LISTENING AND SPEAKING

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 213LS or ESL 313LS, or placement through a multiple-measure process.

ESL 214LS is a listening and speaking course for ESL students who want to develop oral language skills at the high-intermediate level. Students learn to comprehend authentic lectures, talks and reports and effectively express ideas and points of view in spoken English on a variety of common academic topics. This course may be taken concurrently with other ESL 214-level courses. Successful completion of this course will prepare students for ESL 215LS or ESL 315LS.

New Course

effective spring 2021

215LS ADVANCED ACADEMIC LISTENING AND SPEAKING

0 units, 3 lecture hours, pass/no pass

ADVISORIES: ESL 214LS or ESL 314LS, or placement through a multiple-measure process.

ESL 215LS is a listening and speaking course for ESL students who want to develop oral language skills at the advanced level. Students learn to comprehend sophisticated, authentic lectures, talks and reports and exchange complex information using effective, fluent and spontaneous spoken English on a variety of common academic topics. This course may be taken concurrently with other ESL 215-level courses.

Change: number, requisites

effective spring 2021

310 LOW-BEGINNING READING, WRITING, AND GRAMMAR (formerly ESL 360)

0 units, 6 lecture hours, pass/no pass only

ADVISORIES: Placement through an approved multiple-measure process

ESL 310 is an integrated reading, writing, and grammar course designed for ESL students to develop literacy skills at the low-beginning level. Students learn how to write sentences using basic grammatical structures. Students develop vocabulary by reading about life skills, the work place, and everyday situations. This course may be taken concurrently with other ESL 210-level courses. Successful completion of this course will prepare students for ESL 211 or ESL 311.

Change: number, requisites

effective spring 2021

310LS LOW-BEGINNING LISTENING AND SPEAKING (formerly ESL 360LS)

0 units, 6 lecture hours, pass/no pass only

ADVISORIES: Placement through an approved multiple-measure process.

ESL 310LS is a listening and speaking course for ESL students who want to develop oral language skills at the low-beginning level. Students learn to converse on everyday topics, using basic phrases and sentences. ESL 310LS is the lowest level in the ESL sequence. This course may be taken concurrently with other ESL 210-level courses. Students who successfully complete this course will be prepared for ESL 211LS or ESL 311LS.

Change: number, requisites

effective spring 2021

311 BEGINNING READING, WRITING, AND GRAMMAR (formerly ESL 361I)

0 units, 6 lecture hours, pass/no pass only

ADVISORIES: ESL 210 or ESL 310, or placement through an approved multiple-measure process.

ESL 311 is an integrated reading, writing, and grammar course designed for ESL students to develop literacy skills at the high-beginning level. Students learn to write basic paragraphs on familiar topics. Students increase reading comprehension and vocabulary by reading stories, articles, and novels on various high interest topics and themes. This course may be taken concurrently with other ESL 311-level courses. Successful completion of this course will prepare students for ESL 212 or ESL 312.

Change: number, requisites

effective spring 2021

311LS HIGH-BEGINNING LISTENING AND SPEAKING (formerly ESL 361LS)

0 units, 6 lecture hours, pass/no pass only

ADVISORIES: English as a Second Language 210LS or 310LS or placement through a multiple-measure process.

ESL 311LS is a listening and speaking course for ESL students who want to develop oral language skills at the high-beginning level. Students learn to communicate on personal and workplace topics, expressing ideas in a series of phrases and sentences. This course may be taken concurrently with other ESL 311-level courses. Successful completion of this course will prepare students for ESL 212LS or ESL 312LS.

Change: number, requisites, title

effective spring 2021

312 LOW-INTERMEDIATE READING, WRITING, AND GRAMMAR (formerly ESL 364)

0 units, 6 lecture hours, pass/no pass only

ADVISORIES: ESL 211 or ESL 311, or placement through an approved multiple-measure process.

ESL 312 is an integrated reading, writing, and grammar course designed for ESL students to develop literacy skills at the low-intermediate level. Students learn to write organized paragraphs on familiar topics. Students increase reading comprehension and vocabulary by reading stories, articles, and novels on various high interest topics and themes. This course may be taken concurrently with other ESL 312-level courses. Successful completion of this course will prepare students for ESL 213 or ESL 313.

Change: number, requisites, title

effective spring 2021

312LS LOW-INTERMEDIATE LISTENING AND SPEAKING (formerly ESL 364LS)

0 units, 6 lecture hours, pass/no pass only

ADVISORIES: ESL 211LS or ESL 311LS or placement through a multiple-measure process.

ESL 312LS is a listening and speaking course for ESL students who want to develop oral language skills at the low-intermediate level. Students learn to exchange information on a variety of common topics, expressing ideas in an extended series of phrases and sentences. This course may be taken concurrently with other ESL 312-level courses. Successful completion of this course will prepare students for ESL 213LS or ESL 313LS.

Change: number, requisites

effective spring 2021

313G INTERMEDIATE ACADEMIC GRAMMAR (formerly ESL 366G)

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 212 or ESL 312, or placement through an approved multiple-measure process.

ESL 313G is an intermediate grammar skills course designed for multilingual students who want to comprehend and use grammar structures in written and spoken academic English. This course may be taken concurrently with other ESL courses to strengthen student academic performance. Successful completion of this course will prepare students for ESL 214G or ESL 314G.

Change: number, requisites

effective spring 2021

313LS INTERMEDIATE LISTENING AND SPEAKING (formerly ESL 366LS)

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 212LS or ESL 312LS, or placement through a multiple-measure process.

ESL 313LS is a listening and speaking course for ESL students who want to develop oral language skills at the intermediate level. Students learn to comprehend extended spoken discourse and lectures, and learn to give explanations and opinions on a variety of common academic topics. This course may be taken concurrently with other ESL 313-level courses. Successful completion of this course will prepare students for ESL 214LS or ESL 314LS.

Change: number, requisites

effective spring 2021

314G HIGH-INTERMEDIATE ACADEMIC GRAMMAR (formerly ESL 327G)

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 213G or ESL 313G, or placement through an approved multiple-measure process.

ESL 314G is a high-intermediate grammar skills course designed for multilingual students who want to comprehend and use grammar structures in written and spoken academic English. This course may be taken concurrently with other ESL courses to strengthen student academic performance. Successful completion of this course will prepare students for ESL 215G or ESL 315G.

New Course

effective spring 2021

314LS HIGH-INTERMEDIATE ACADEMIC LISTENING AND SPEAKING

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 213LS or ESL 313LS, or placement through a multiple-measure process.

ESL 314LS is a listening and speaking course for ESL students who want to develop oral language skills at the high-intermediate level. Students learn to comprehend authentic lectures, talks and reports and effectively express ideas and points of view in spoken English on a variety of common academic topics. This course may be taken concurrently with other ESL 314-level courses. Successful completion of this course will prepare students for ESL 215LS or ESL 315LS.

Change: number, requisites

effective spring 2021

315G ADVANCED ACADEMIC GRAMMAR (formerly ESL 317G)

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 214G or ESL 314G, or placement through an approved multiple-measure process.

ESL 315G is an advanced grammar skills course designed for multilingual students who want to comprehend and use grammar structures in written and spoken academic English. This course may be taken to strengthen student performance in other ESL, English, or collegiate level courses.

New Course

effective spring 2021

315LS ADVANCED ACADEMIC LISTENING AND SPEAKING

0 units, 3 lecture hours, pass/no pass only

ADVISORIES: ESL 214LS or ESL 314LS, or placement through a multiple-measure process.

ESL 315LS is a listening and speaking course for ESL students who want to develop oral language skills at the advanced level. Students learn to comprehend sophisticated, authentic lectures, talks and reports and exchange complex information using effective, fluent and spontaneous spoken English on a variety of common academic topics. This course may be taken concurrently with other ESL 315-level courses. This course may be taken concurrently with other ESL 315-level courses.

FLIGHT SCIENCE (FLGHT)

Change: units, hours, catalog description

effective fall 2020

101 PRIVATE PILOT 1 GROUND SCHOOL

4 units, 3 lecture hours, 3 lab hours

ADVISORIES: Mathematics 45 and English 1A or 1AH.

This lecture and lab course provides the first of two parts of the aeronautical knowledge needed to earn a private pilot certificate. Some of the topics covered include principles of flight, aerodynamics, aircraft controls, engine systems, and Federal Aviation Regulations applicable to flying under visual flight rules. (A)

Change: catalog description, advisories

effective fall 2020

105 PRIVATE PILOT 1 FLIGHT LAB

1 unit, 3 lab hours

COREQUISITES: Flight 101 and 107. ADVISORIES: Mathematics 45 and English 1A or 1AH.

This course is the first of two portions of the flight training required to earn the Private Pilot Certificate. Some of the topics covered are fundamental flight maneuvers, performance maneuvers, and development of aeronautical decision making skills. Prior to the first day of class, students must hold a valid 3rd Class or higher FAA medical certificate. Students must also be able to read, speak, write, and understand the English language. Prior to beginning flight training, students must 1) provide TSA proof of Flight Training Eligibility and 2) receive an Airport Identification Badge from Fresno Yosemite International Airport. The cost of this course is substantial. See current published costs in Flight Science Student Handbook. (A)

Change: catalog description, grading basis

effective fall 2020

106 PRIVATE PILOT 2 FLIGHT LAB

1.5 units, 4.5 lab hours

PREREQUISITE: Flight Science 105. COREQUISITES: Flight Science 108 and 109.

This course provides advanced flight training for individuals seeking to increase flight proficiency in preparation for Private Pilot Certification. Some of the topics covered will be fundamental flight maneuvers, performance maneuvers, use of navigation aids, cross country flying, and development of aeronautical decision making skills to the FAA Practical Test Standards. Students must hold a valid 3rd class (or higher) FAA medical certificate and a valid Fresno-Yosemite Airport ID Badge for the duration of this course. The cost of this course is substantial. See current published costs in the Flight Science Student Handbook. (A)

Change: units, hours, catalog description

effective fall 2020

108 PRIVATE PILOT 2 GROUND SCHOOL

4 units, 3 lecture hours, 3 lab hours

PREREQUISITE: Flight Science 101.

This lecture and lab course provides the second portion of the aeronautical knowledge required to earn a private pilot airplane certificate. Some of the topics covered include basic weather and weather services for pilots, navigation, radio communication, and human factors. (A)

Change: units, hours, catalog description

effective fall 2020

111 INSTRUMENT RATING GROUND SCHOOL

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Flight Science 108.

This lecture and lab course covers the aeronautical knowledge required to earn an instrument rating. Some of the topics covered will include principles of instrument flight, flight instruments, instrument navigation systems, IFR departure-enroute-arrival procedures, analyzing weather information and conditions, IFR flight planning, and IFR emergency procedures. (A)

Change: units, hours, catalog description

effective fall 2020

113 ADVANCED METEOROLOGY

PREREQUISITE: Flight 101. ADVISORIES: Mathematics 201.

This lecture and lab course is designed to provide an in depth look at weather and how weather relates to aviation. Some topics of discussion will be weather basics, circulation systems, weather hazards, and applying weather knowledge. This course will prepare the student for more advanced levels of aviation training. (A)

Change: units, hours, catalog description

effective fall 2020

121 COMMERCIAL PILOT GROUND SCHOOL

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Flight Science 111.

This lecture and lab course provides the aeronautical knowledge required for the commercial airplane pilot certificate. Some of the topics covered include high performance powerplants, environmental and ice control systems, complex aircraft systems, advanced aerodynamics, predicting performance, controlling weight and balance, and Federal Aviation Regulations. FAA written test and flight equipment costs for this course are substantial. (A)

Change: units

effective fall 2020

125 COMMERCIAL PILOT 1 FLIGHT LAB

2.5 units, 8 lab hours

PREREQUISITE: Flight Science 106.

This course provides flight training for individuals seeking Commercial Pilot Certification. Some of the topics covered will be commercial flight maneuvers, advanced performance maneuvers, use of navigation aids, long distance cross country

flying, and development of advanced aeronautical decision making skills. Students must hold a valid 3rd class (or higher) FAA medical certificate and a valid Fresno-Yosemite Airport ID Badge for the duration of this course. The cost of this course is substantial. See current published costs in the Flight Science Student Handbook. (A)

Change: catalog description, grading basis

effective fall 2020

126 COMMERCIAL PILOT 2 FLIGHT LAB

2.5 units, 6 lab hours

PREREQUISITE: Flight Science 125. COREQUISITE: Flight Science 121.

This course provides advanced flight training for individuals seeking Commercial Pilot airplane certification. Some of the topics covered are commercial flight maneuvers, advanced performance maneuvers, use of navigation aids, long distance cross country flying, and development of advanced aeronautical decision making skills. Students must hold a valid 3rd class (or higher) FAA medical certificate and a valid Fresno-Yosemite Airport ID Badge for the duration of this course. The cost of this course is substantial. See current published costs in the Flight Science Student Handbook. (A)

Change: units, hours, catalog description

effective fall 2020

131 FLIGHT INSTRUCTOR GROUND SCHOOL

5 units, 4 lecture hours, 3 lab hours

PREREQUISITE: Flight Science 121.

This lecture and lab course provides ground training for individuals seeking Flight Instructor Certification. Some of the topics covered will be fundamentals of instructing and areas of operations for a private and commercial pilot. (A)

GEOGRAPHY (GEOG)

Change: hours

effective summer 2020

10 INTRODUCTION TO GIS

3 units, 2.5 lecture hours, 2 lab hours, pass/no pass

ADVISORIES: English 1A or 1AH, and Mathematics 103 or the equivalent.

Introduction to the fundamental concepts of Geographic Information Systems (GIS), including familiarization with computers, data input, raster GIS, vector GIS, querying, methods of spatial analysis, and applications of GIS. (A, CSU, UC)

MATHEMATICS (MATH)

Change: approved for CSU-GE Area B.4

effective fall 2020

21 FINITE MATHEMATICS

3 units, 3 lecture hours

PREREQUISITES: Mathematics 103 or equivalent. ADVISORIES: English 1A or 1AH.

This course is an introduction to linear functions, systems of linear equations and inequalities, matrices, linear programming, mathematics of finance, sets and Venn diagrams, combinatorial techniques and an introduction to probability. Topics include applications in business, economics and social sciences. (A, CSU-GE)

New Course

effective spring 2021

270A ASSISTANCE FOR MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS I

.5 units, 2 lab hours, pass/no pass only

COREQUISITE: Mathematics 10A.

This course is for students requiring help with math assignments in MATH 10A. The course will provide intensive assistance in Mathematics for Elementary School Teachers, critical thinking, and study skills via an embedded tutor and assigned small groups. Students will develop their understanding of course specific mathematics topics and improve their overall ability to reason mathematically.

New Course

effective fall 2020

271 ASSISTANCE IN STATISTICS

.5 units, 2 lab hours, pass/no pass only

COREQUISITE: Mathematics 11.

This course is for students requiring help with math assignments in MATH 11. The course will provide intensive assistance in statistic topics, critical thinking, and study skills via an embedded tutor and assigned small groups. Students will develop their understanding of course specific mathematics topics and improve their overall ability to reason mathematically. COREQUISITE: Mathematics 11.

NATURAL RESOURCES (NR)

Change: advisories

effective fall 2020

1 INTRODUCTION TO FORESTRY

3 units, 2 lecture hours, 3 lab hours
ADVISORIES: English 1A or 1AH.

This course is an overview of natural resources management and technician skills. It is intended for those who wish to work as a technician for natural resource entities such as the U.S. Forest Service. History of resources management, governmental and private land management entity structure, basic hand tool identification and use, map reading, wood characteristics, forest health, personal safety and first aid, and forest measurements will be included. Field trips may be required. (A, CSU)

Change: advisories

effective fall 2020

3 COMPUTERS IN NATURAL RESOURCES

1 unit, .5 lecture hour, 1.5 lab hours
ADVISORIES: English 1A or 1AH.

This course is for natural resources students with little or no knowledge of microcomputers. Topics include an introduction to microcomputers, their importance in the field of natural resources, and various problem-solving software packages commonly used in the natural resources industry. (A, CSU)

Change: advisories

effective fall 2020

4 FOREST ECOSYSTEMS

ADVISORIES: English 1A or 1AH.

The forest community is used as a model to discuss the role of ecology in forest management. Students will become familiar with basic biological concepts which are the building blocks for understanding forest ecosystems. Students will gain a better understanding of biological processes and organization, the physical environment, and ecological processes such as: nutrient cycling, succession, natural selection, and application of the scientific method. (A, CSU, UC)

Change: advisories

effective fall 2020

5 WILDLAND FIRE TECHNOLOGY

3 units, 2 lecture hours, 3 lab hours
ADVISORIES: English 1A or 1AH.

This course will prepare students for basic employment as a wildland fire fighter with State and Federal agencies. Successful completers may earn basic National Wildfire Coordinating Group course certificates for ICS I-100, S-130, S-190, L-180 and IS-700. The course stresses field performance and teamwork. (A, CSU)

Change: advisories

effective fall 2020

6 DENDROLOGY

2 units, 2 lecture hours, 3 lab hours
ADVISORIES: English 1A or 1AH.

Students will study the ranges and botanical characteristics of the major natural trees and shrubs in the Western United States. Students will learn to collect, preserve, and identify plants. Frequent field trips that may extend beyond scheduled lab hours are required. (A, CSU, UC)

Change: advisories

effective fall 2020

11 SILVICULTURE

3 units, 2 lecture hours, 3 lab hours
ADVISORIES: English 1A or 1AH.

Students will learn the concepts of managing forests for establishment, growth, composition, health, and quality of forests on a sustained yield basis, using varying techniques including: precommercial and commercial harvesting, regeneration methods, site preparation, and forest pest controls. In this course emphasis is placed upon meeting the objectives of landowners through appropriate silvicultural systems as required by federal and/or state regulations. Field trips may be required for this course. (A, CSU)

Change: advisories

effective fall 2020

12 WATERSHED ECOLOGY

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: English 1A or 1AH.

In this course students will learn about watershed ecology including, lakes, streams, and rivers. Students will gain an understanding of water storage facilities and water utilization issues. Students will also gain an understanding of fisheries management issues. The course covers use of instruments to monitor water quality at numerous field sites. Field exercises include studies of the lower Kings River, Pine Flat Reservoir, and agricultural water uses. Students will be introduced to the methods, techniques, and tools used to manage and enhance watershed health. Laboratory is required. Field trips may be required for this course. (A, CSU)

Change: advisories

effective fall 2020

14 PRINCIPLES OF WILDLIFE MANAGEMENT

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: English 1A or 1AH.

This course will be an examination of plant and animal ecology in relation to wildlife management. There will be a review of wildlife management techniques. Identification of wildlife species found in the western United States and the evaluation of the role of wildlife management in endangered species recovery will be learned. Field trips may be required in this course. (A, CSU)

Change: advisories, catalog description

effective fall 2020

17 INTRODUCTION TO FOREST SURVEYING

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: Mathematics 103 or 4A and English 1A or 1AH.

Students will learn the use of basic surveying equipment such as hand compass, staff compass, topographic and engineer's chain, electronic distance machine (EDM), total station, automatic level, Global Positioning System (GPS) and Philadelphia rod in the measurement of distance, direction, and elevation. Collecting, recording, and plotting field data using field workbooks, and/or computer software will be learned. Field trips may be required in this course. (A, CSU)

Change: title, added advisories

effective fall 2020

18 REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEMS

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: English 1A or 1AH.

This course will cover interpretation and use of aerial photographs, remote sensing, and of geographic information systems (GIS) as they relate to natural resources, and will include photo scale calculations, point location, locating datasets and photographs, and field verification of vegetation/conditions. Additionally, questions pertaining to natural resource issues will be addressed through analyzing, creating, displaying, and modeling feature data (i.e. soils, topography, vegetative cover, etc.) using geographic information systems (GIS). This course will also cover the fundamentals of using ESRI ArcGIS software in GIS applications. Field trips may be required in this course. (A, CSU)

Change: advisories

effective fall 2020

20 FOREST MEASUREMENTS

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: Mathematics 103 and English 1A or 1AH.

Students will learn about the measurement of timber and growth quantity and quality. Students will study timber inventory systems, cruise design, aerial photographic interpretation, and log scaling. Measurement of natural resources including forest inventory, tree growth, and rangeland resources will be learned. Topics covered may include basic statistical methods, sampling design, log scaling, tree volume calculations, and tree measurement. Students will use forestry equipment such as a Relaskop, scaling stick, wedge prism, and clinometer. Field trips may be required in this course. (A, CSU)

Change: advisories

effective fall 2020

21 FOREST PRODUCTS

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: English 1A or 1AH.

This course is a technological study of wood manufacturing processes. Operations from contract through harvest, transport, and sawmill will be learned. Students will study safety codes and laws, other forest products and their uses, and new

developments will be learned. This course also includes wood and defect identification. Field trips may be required in this course. (A, CSU)

Change: advisories

effective fall 2020

30 FOREST RECREATION

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: English 1A or 1AH.

The course prepares students for entry-level duties as a recreation technician. Study topics include water-oriented recreation, winter sports, wilderness management, and administration of recreation contracts. Trail construction skills are emphasized, and include maintenance and use of crosscut saws, rock drills, cable hoists and animal pack stock. Activities include campground planning, soil conservation practices and field trips to public and private recreation facilities. Laboratory will include operation of trucks and tractors to hitch and pull trailers and implements. Field trips may be required in this course. (A, CSU)

Change: advisories

effective fall 2020

32A MUSEUM TECHNIQUES-BEGINNING TAXIDERMY

1 unit, .5 lecture hour, 2.5 lab hours

ADVISORIES: English 1A or 1AH.

This course is an introduction to the art of preparing, stuffing, and mounting the skins of animals (especially vertebrates) for study or display. (A, CSU)

Change: advisories

effective fall 2020

32B MUSEUM TECHNIQUES-INTERMEDIATE TAXIDERMY

1 unit, .5 lecture hour, 2.5 lab hours

PREREQUISITES: Natural Resources 32A. ADVISORIES: English 1A or 1AH.

This course is an introduction to intermediate skills in the art of preparing, stuffing, and mounting the skins of animals (especially vertebrates) for study or display. (A, CSU)

Change: advisories

effective fall 2020

32C MUSEUM TECHNIQUES-ADVANCED TAXIDERMY

1 unit, .5 lecture hour, 2.5 lab hours

PREREQUISITES: Natural Resources 32B. ADVISORIES: English 1A or 1AH.

This course is an introduction to advanced techniques for stuffing and mounting the skins of animals (especially vertebrates) for study or display. (A, CSU)

Change: advisories

effective fall 2020

34 CONSERVATION LABORATORY

1 unit, 3 lab hours

ADVISORIES: English 1A or 1AH.

This course is the application of conservation techniques, basic ecological principles, energy efficiency, and group study using basic scientific methods. There will be frequent field trips and one extended overnight field trip might be required. (A, CSU)

Change: advisories

effective fall 2020

35 INTERPRETATION OF NATURAL RESOURCES

3 units, 2 lecture hours, 3 lab hours

ADVISORIES: Natural Resources 1 and English 1A or 1AH.

Students will learn the theory and techniques of thematic environmental interpretation. Logical organization and composition of guided and self-guided media will be learned. Practical application through public presentation including narrated walks and campfire talks will be learned. Topics covered will include development of self-guided interpretive media including signs, brochures, and interpretive center displays. Field trips may be required for this course. (A, CSU)

Change: advisories

effective fall 2020

40 FOREST MACHINERY

2 units, 1 lecture hour, 3 lab hours

ADVISORIES: English 1A or 1AH.

This course is designed to acquaint the student with the safe operation, preventative maintenance and general use of heavy equipment used in forestry. Course not intended to develop expertise, but to develop an awareness of track laying vehicles, wheeled equipment, pumping systems, jackhammers, and cable yarding systems. Contract inspection and administration standards are also part of this course. (A, CSU)

Change: advisories

effective fall 2020

42 ADVANCED WILDLAND FIRE TECHNOLOGY

2 units, 1 lecture hour, 3 lab hours

PREREQUISITES: Natural Resources 5. ADVISORIES: English 1A or 1AH.

This course is a preparation for employment as an advanced wildland firefighter/squad boss (FFT1) with state and federal fire suppression agencies. Course meets or exceeds the minimum requirements for employment through basic inter-agency courses (S-131, S-211). (A, CSU)

Change: advisories

effective fall 2020

45 FUELS MANAGEMENT

COREQUISITES: Natural Resources 5. ADVISORIES: English 1A or 1AH.

This course provides preparation for employment and advancement within State and Federal wildland fire management agencies. This course will provide students with the knowledge of hazardous fuels mitigation to reduce the damaging effects of wildfires to natural resources and human improvements. Emphasis will be placed on prescribed burning, smoke management mitigations, coordination with silvicultural practices, and wildland-urban interface mitigations. Field trips may be required in this course. (A, CSU)

New course

effective fall 2020

95 INTEGRATED FUELS MANAGEMENT

9 units, 8 lecture hours, 3 lab hours

PREREQUISITES: Natural Resources 19V and 97. ADVISORIES: English 1A or 1AH.

LIMITATION ON ENROLLMENT: Successful completion of federal work capacity test within two calendar years.

Incoming students may enroll based off equivalency course completion and extensive work experience.

This Course will allow for advancement in wildland fire fuels and prescribed fire concepts, leadership development and overall knowledge base in hazardous wildland fire fuels management. Work Labs will be tied to agency projects which will provide students the opportunity to apply skills and leadership in a training environment. Students who complete this course will have required training and experience to competitively apply for state, federal and private fuels management occupations. This course will also provide a pathway to current and former wildland fire employees that meet the course equivalent and work experience. (A, CSU)

New course

effective fall 2020

96 WILDLAND FIRE SCHOOL-ADVANCEMENT

9 units, 8 lecture hours, 3 lab hours

PREREQUISITES: Natural Resources 19V and 97. ADVISORIES: English 1A or 1AH. LIMITATION ON

ENROLLMENT: Successful completion of federal work capacity test within two calendar years. Incoming students may enroll based off equivalency course completion and extensive work experience.

This course is designed for student who have completed the NR-97 Wildland Fire School or equivalent and have obtained work experience in wildland fire. This Course will allow for advancement in wildland fire suppression and prescribed fire concepts, leadership development and overall knowledge base in the wildland fire service. Work Labs will be tied to agency projects which will provide students the opportunity to apply skills and leadership in a training environment. Students who complete this course will have required training and experience to competitively apply for a permanent GS-5 position with the federal fire service. This course will also provide a pathway to current and former wildland fire employees that meet the course equivalent and work experience. (A, CSU)

New course

effective fall 2020

97 WILDLAND FIRE SCHOOL-FUNDAMENTALS

14 units, 11 lecture hours, 9 lab hours

PREREQUISITES: Natural Resources 1 and 5 and 4 and 8 and 133 and 108 and 109. ADVISORIES: English 1A or

1AH. LIMITATION ON ENROLLMENT: Successful completion of federal work capacity test within two calendar years.

Incoming students may enroll based off equivalency course completion and extensive work experience.

The Wildland Fire School Fundamentals course is a rigorous work simulation program that trains students for the wildland fire suppression and fuels reduction service. Students who complete the Wildland Fire School Fundamentals will be

fully qualified to fill the position as a Federal wildland firefighter under the National Wildland Fire Coordinating Group (NWCG) Standards. This program's training approach is rooted in its field-based lessons where the students are first trained in the classroom then are prepared in the wildland environment that mimics fire-based scenarios and proficiency drills. 60-70 percent of the training hours will be in the field utilizing various forest and timberland environments as well as cooperative local agency projects. The Wildland Fire School Fundamentals is targeted for students who are interested in pursuing jobs in the field of wildland fire suppression and fuels management. This course is the pathway foundation for Career Technical Education training and degree programs specializing in wildland fire suppression and fuels management under the Natural Resource land management agencies. (A, CSU)

Change: advisories

effective fall 2020

133 INTRODUCTION TO CHAINSAW OPERATIONS

1 unit, .5 lecture hour, 1.5 lab hours, pass/no pass

ADVISORIES: English 1A or 1AH.

This course provides introductory level training for the use of chainsaws in the forestry and natural resources field. Emphasis is placed on defining and applying chainsaw safety standards, maintenance and function of personal protective equipment (PPE), identification of chainsaw parts, maintenance, tuning, and tactical application of techniques required for brushing, limbing, bucking, and falling trees. (A)

Change: units, hours, advisories

effective fall 2020

150 INCIDENT COMMAND SYSTEM 200

1 unit, 1 lecture hour, pass/no pass

ADVISORIES: English 1A or 1AH.

This course is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). This course focuses on the management of single resources. (A)

Change: units, hours, advisories

effective fall 2020

151 S-211 PORTABLE PUMPS AND WATER USE

1 unit, 1 lecture hour, pass/no pass

ADVISORIES: English 1A or 1AH.

This course covers principles of positive displacement pumps but focuses on the Wajax-Pacific Mark III Pump which is primarily used by the National Fire Equipment System. Instruction emphasizes effective and efficient utilization of portable pumps and water under field conditions. (A)

New Course

effective fall 2020

152 RT-130 WILDLAND FIRE TOPICS - SAFETY TRAINING

1.5 units, 1.56 lecture hours, .45 lab hours, pass/no pass

ADVISORIES: English 1A or 1AH.

The Wildland Fire Topics course provides a range of training options to meet National Wildfire Coordinating Group (NWCG) position training requirements and agency specific course hours requirements. This course will focus on operations and decision-making issues related to fireline and all hazard incident safety in order to recognize and mitigate risk, maintain safe and effective practices, and reduce accidents and near misses. (A)

New Course

effective fall 2020

153 S-131 WILDLAND FIREFIGHTER TYPE 1

.5 unit, .67 lecture hours, pass/no pass

LIMITATION ON ENROLLMENT: Students must be qualified as a National Wildfire Coordinating Group (NWCG), Fire Fighter Type 2 (FFT-). ADVISORIES: English 1A or 1AH.

This course is targeted for personnel desiring to be qualified as a Firefighter Type 1 (FFT-1) and or Incident Commander Type 5 (ICT5) in the Federal fire service. Course content will cover what is required to meet the training needs of the NWCG Firefighter Type 1 and or Incident Commander Type 5. Topics include operational leadership, communications, Look-outs/Communications/Escapes routes/Safety Zones and tactical decision making. This course contains class discussion and several tactical decision games designed to facilitate learning the objectives. Upon completion, students must then take and pass a final assessment to receive credit for the course. (A)

New Course

effective fall 2020

154 S-219 FIRING OPERATIONS

1 unit, 1.12 lecture hours, .23 lab hours, pass/no pass

LIMITATION ON ENROLLMENT: National Wildfire Coordinating Group (NWCG) qualified as a firefighter type 2 (FFT2). ADVISORIES: English 1A or 1AH.

The course introduces the roles and responsibilities of a Firing Boss, Single Resource (FIRB), and outlines duties of other personnel who may engage firing operations. The course discusses and illustrates common firing devices and techniques. The course provides students with important information regarding general tasks required to be successful. When feasible this course will demonstrate to students a real ignition or demonstrate the use of an actual firing device will assist in transferring these new concepts and skills to the job. There is an optional field day outlined in the course, it is the discretion of the delivery unit to include the field day. (A)

New Course

effective fall 2020

155 S-212 WILDLAND FIRE CHAINSAWS

1.5 units, 1.34 lecture hours, .5 lab hours, pass/no pass

LIMITATION ON ENROLLMENT: National Wildfire Coordinating Group (NWCG) qualified as a Firefighter Type 2 (FFT2) and satisfactory completion of pre-course work. ADVISORIES: English 1A or 1AH.

The course provides introduction to the function, maintenance and use of internal combustion engine powered chain saws, and their tactical wildland fire application. Field exercises support entry level training for firefighters with little or no previous experience in operating a chain saw and provide hands-on cutting experience in surroundings similar to fireline situations. This course is targeted for individuals desiring to be qualified as Basic Faller (FAL3), Firefighter Type 1 (FFT1), Incident Commander Type 5 (ICT5), or Felling Boss, Single Resource (FELB) under the National Wildfire Coordinating Group qualification system. (A)

New Course

effective fall 2020

156 L-280 FOLLOWERSHIP TO LEADERSHIP

1 unit, .92 Lecture hours, .25 lab hours, pass/no pass

LIMITATION ON ENROLLMENT: Experience on a wildland fire incident in operations or support functions, successful completion of L-180, Human Factors in the Wildland Fire Service and satisfactory completion of pre-course work. ADVISORIES: English 1A or 1AH.

This course is designed as a self-assessment opportunity for individuals preparing to step into a leadership role in the wildland fire service. The course combines one day of classroom instruction followed by a second day in the field with students working through a series of problem-solving events in small teams (Field Leadership Assessment Course). Topics include leadership values and principles, transition challenges for new leaders, situational leadership, team cohesion factors, ethical decision-making, and after-action review techniques. Some course delivery may be arduous in nature. (A)

Change: units, hours, advisories

effective fall 2020

157 S-230 CREW BOSS (SINGLE RESOURCE)

1.5 units, 1.5 lecture hours, pass/no pass

ADVISORIES: English 1A or 1AH.

Crew Boss (Single Resource), S-230 is a course designed to meet the training needs of a crew boss on a wildland fire incident. The purpose is to provide fire suppression trainees with the skills/knowledge required to perform tasks listed in National Wildfire Coordinating Group Single Resource Boss. (A)

Change: units, hours, advisories

effective fall 2020

158 S-231 ENGINE BOSS

.5 units, .9 lecture hours, pass/no pass

ADVISORIES: English 1A or 1AH.

This course is suggested training for the position of Single Resource Boss. Upon completion students will be able to perform Engine Boss tasks and make tactical decisions required to safely manage an engine and the associated personnel on an incident. (A)

New course

effective fall 2020

159 S-236 HEAVY EQUIPMENT BOSS

1 unit, 1.12 lecture hours, .23 lab hours, pass/no pass

LIMITATION ON ENROLLMENT: National Wildfire Coordinating Group (NWCG) qualified as Firefighter Type 1 (FFT1) and satisfactory completion of pre-course work. ADVISORIES: English 1A or 1AH.

This course is designed to meet the training needs of a Heavy Equipment Boss, Single Resource (HEQB) on an incident as outlined in the National Incident Management System: Wildland Fire Qualification System Guide, PMS 310-1, and the position task book developed for the position. The target group for this course is personnel desiring to be qualified as

Heavy Equipment Boss, Single Resource (HEQB). Primary considerations are tactical use and safety precautions required to establish and maintain an effective dozer operation. A field exercise is required as part of the course. (A)

OFFICE TECHNOLOGY (OT)

Change: deleted advisory

effective summer 2020

12A Microsoft Excel Essentials

1.5 units, 1.5 lecture hours, .5 lab hours, pass/no pass.

This course is designed for the student who wishes to enter the work force with a basic understanding of Microsoft Excel spreadsheets. Topics will include creating and formatting worksheets, using formulas and functions, and creating graphs. (A, CSU)

Change: advisories

effective summer 2020

42 Medical Document Preparation

3 units, 3 lecture hours, 1 lab hour, pass/no pass.

ADVISORIES: Office Technology 10.

This course covers health insurance plans, insurance claim forms used in a medical office, and diagnostic and procedural coding. (A, CSU)

PHYSICS (PHYS)

Change: lecture and lab hours (compliance of units to hours), advisories

effective summer 2020

2A GENERAL PHYSICS I

4 units, 3 lecture hours, 3 lab hours

PREREQUISITES: Mathematics 4A. ADVISORIES: English 1A or 1AH.

The topics covered in this course include mechanics, properties of matter, heat, sound and waves. (A, CSU-GE, UC, I) (C-ID PHYS 105) (C-ID PHYS 100S: PHYS 2A + PHYS 2B)

Change: lecture and lab hours (compliance of units to hours), advisories

effective summer 2020

2B GENERAL PHYSICS II

4 units, 3 lecture hours, 3 lab hours

PREREQUISITES: Physics 2A. ADVISORIES: English 1A or 1AH.

The topics covered in this course include electricity, magnetism, light, atomic and nuclear physics. (A, CSU-GE, UC, I) (C-ID PHYS 110) (C-ID PHYS 100S: PHYS 2A+PHYS 2B)

Change: lecture and lab hours (compliance of units to hours), advisories

effective summer 2020

4A PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours

COREQUISITES: Mathematics 5B. ADVISORIES: English 1A or 1AH.

The topics covered in this course include: classical mechanics, properties of matter, gravitation, fluid mechanics, oscillatory motion and mechanical waves. (A, CSU-GE, UC, I) (C-ID PHYS 205) (C-ID PHYS 200S: PHYS 4A + PHYS 4B + PHYS 4C)

Change: lecture and lab hours (compliance of units to hours), advisories

effective summer 2020

4B PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours

PREREQUISITES: Physics 4A. COREQUISITES: Mathematics 6. ADVISORIES: English 1A or 1AH.

The topics covered in this course include: Mechanical waves, Thermodynamics, electricity, magnetism. (A, CSU-GE, UC, I) (C-ID PHYS 210) (C-ID PHYS 200S: PHYS 4A + PHYS 4B + PHYS 4C)

Change: lecture and lab hours (compliance of units to hours), advisories

effective summer 2020

4C PHYSICS FOR SCIENTISTS AND ENGINEERS

4 units, 3 lecture hours, 3 lab hours

PREREQUISITES: Physics 4B. ADVISORIES: Mathematics 17 and English 1A or 1AH.

The topics covered in this course include: electromagnetic waves, optics, modern physics, condensed matter and nuclear physics. (A, CSU-GE, UC, I) (C-ID PHYS 215) (C-ID PHYS 200S: PHYS 4A + PHYS 4B + PHYS 4C)

PLANT SCIENCE (PLS)

Change: approved for IGETC AREA 2

effective fall 2020

9 BIOMETRICS

3 units, 3 lecture hours, pass/no pass

PREREQUISITES: Mathematics 103.

An introduction to data description, presentation, experimental design, statistical procedures, experimental methods and hypothesis testing with particular emphasis on biological systems. Upon completion of this course, the student will be able to perform basic statistical procedures, including t-tests, ANOVA, linear regression and correlation. (A, CSU-GE, UC, I) (C-ID MATH 110)

PHILOSOPHY (PHIL)

Change: approved for IGETC Area 3B

effective fall 2020

3A HISTORY OF ANCIENT PHILOSOPHY

3 units, 3 lecture hours, pass/no pass

ADVISORIES: English 1A or 1AH.

This course introduces students to the history of ancient western philosophy, specifically the writings and ideas of the Pre-Socratics, Plato, Aristotle, and the philosophers of the Hellenistic period. Topics may include the sources and limits of knowledge, the nature of reality, the nature of virtue and right action, and theories of the good life. Readings will include selections drawn from the primary texts of Plato and Aristotle as well as other primary and secondary sources on the ancient philosophers. (A, CSU-GE, UC, I) (C-ID PHIL 130)

Change: approved for CSU-GE Area C.2, IGETC Area 3B

effective fall 2020

3B HISTORY OF MODERN PHILOSOPHY

3 units, 3 lecture hours, pass/pass

ADVISORIES: English 1A or 1AH.

This course introduces students to the history of modern philosophy, including the major tenets of Rationalism, Empiricism, Idealism, and Existentialism. Topics may include skepticism, mind/body dualism, identity, the sources of knowledge, the nature of reality, and the problem of induction. Readings will include selections drawn from the primary texts of Descartes, Locke, Berkeley, Hume, and Kant as well as other primary and secondary sources on the modern philosophers. (A, CSU-GE, UC, I) (C-ID PHIL 140)

Faculty and Administration

Numbers in parenthesis indicate year of appointment at Reedley College.

CONNELLY, ANYA (2019)

English

M.A., California State University, Sacramento

Culver-Dockins, Natalie (2020) Dean, Student Success and Achievement

B.S., California State University Stanislaus

M.A., San Jose State University

Ed.D., California State University Fresno

EUBANKS, AARON (2019)

Career, Transfer and Transitions

Counselor/Coordinator

B.S., M.S., California State University, Fresno

GARABEDIAN, DEANNA (2019)

English

B.A., University of California, Berkeley

M.A., California State University, Sacramento

GOMEZ, BONITA (2019)

Career, Transfer and Transitions Coordinator

B.A., M.S., California State University, Fresno

JOHNSON, JOHN (2018)

Flight Science

B.S., Embry-Riddle Aeronautical
University

M.S., Central Missouri State University

Lorenzano, Adelfa (2012)

Coordinator

B.A., Fresno Pacific University

M.S., National University