CUYAMACA COLLEGE
ACADEMIC PROGRAM CHANGES
November 2022
for the
2022-2023, and
2023-2024 CATALOGS

COURSE ADDITIONS

ENGINEERING 103 – ENVIRONMENTAL ENGINEERING SEMINAR **3 UNITS**
Prerequisite: None
3 hours lecture
Exploring the breadth and depth of environmental engineering field through presentations by invited faculty, guests, and seminar enrollees; includes individual library/internet research with written and oral presentations on selected environmental topics.

ENGINEERING 261 – MATERIALS LABORATORY **1 UNIT**
Prerequisite: None
Corequisite: ENGR 260 – Engineering Materials
3 hours laboratory
Experimental methods used to characterize engineering materials and their mechanical behavior. Students will use a variety of material testing equipment to gain hands-on experience testing for materials properties and exploring the mechanical behaviors of materials.

COURSE MODIFICATIONS

The following reflect changes in subject designator, course number and/or title, prerequisite/corequisite/recommended preparation, units, hours, and/or course description. Other areas (e.g., course objectives, course content, student learning outcomes, etc.) may also have been modified to meet Title 5 standards (reflected as "*Review and update of course outline*"). These modifications have been carefully reviewed by the Curriculum, General Education and Academic Policies and Procedures Committee.

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
COMPUTER AND INFORMATION SCIENCE 162 – TECHNICAL DIAGRAMMING USING MICROSOFT VISIO	*Review and update of course outline*
COMPUTER AND INFORMATION SCIENCE 205 – IMPLEMENTING CISCO IP ROUTING (ROUTE) Prerequisite: "C" grade or higher or "Pass" in CIS 204 or equivalent or successful completion of the current version of CCNA1, 2, 3 and 4 at another Cisco Networking Academy or possess a current CCNA.	Prerequisite: "C" grade or higher or "Pass" in CIS 203 or equivalent or successful completion of the current version of CCNA1, 2, and 3 at another Cisco Networking Academy or possess a current CCNA.
COMPUTER AND INFORMATION SCIENCE 207 – CISCO NETWORKING ACADEMY VII Prerequisite: "C" grade or higher or "Pass" in CIS 204 or equivalent or successful completion of the current version of CCNA1, 2, 3 and 4 at another Cisco Networking Academy or possess a current CCNA certification	Prerequisite: "C" grade or higher or "Pass" in CIS 203 or equivalent or successful completion of the current version of CCNA1, 2, and 3 at another Cisco Networking Academy or possess a current CCNA certification
COMPUTER AND INFORMATION SCIENCE 210 – CISCO NETWORKING ACADEMY–VOICE Prerequisite: "C" grade or higher or "Pass" in CIS 204 or equivalent or Cisco Networking Academy CCNA1, 2, 3, and 4 version 4 or version 5; or possess current CCNA certification	Prerequisite: "C" grade or higher or "Pass" in CIS 203 or equivalent or Cisco Networking Academy CCNA1, 2, 3,; or possess current CCNA certification
COMPUTER AND INFORMATION SCIENCE 291 – LINUX SYSTEM ADMINISTRATION Comprehensive hands-on application and instruction in multi-user, multi-tasking operating systems and networked operating systems. Topics include: operating system installation and configuration, storage configuration and management, server security configuration, user and group management, configuration and management of various server roles (such as LDAP, DNS, DHCP, Print, Mail, Samba, Apache), troubleshooting, and disaster recovery. Course maps to the Linux Professional Institute (LPI) Certification Level 2 exam.	Comprehensive hands-on application and instruction in multi-user, multi-tasking operating systems and networked operating systems. Topics include: operating system installation and configuration, storage configuration and management, server security configuration, user and group management, configuration and management of various server roles (such as LDAP, DNS, DHCP, Print, Mail, Samba, Apache), troubleshooting, and disaster recovery. Course maps to the Linux Professional Institute (LPI) Certification Level 4.5 exam and the Red Hat Systems Administrator certification.
COMPUTER SCIENCE 165 – ASSEMBLY LANGUAGE AND MACHINE ARCHITECTURE Prerequisite: "C" grade or higher or "Pass" in CS 181, CS 182 or equivalent, or experience programming in C/C++ or Java.	Prerequisite: "C" grade or higher or "Pass" in CS 181 or CS 182 or equivalent, or experience programming in C/C++ or Java.
COMPUTER SCIENCE 240 – DISCRETE STRUCTURES Prerequisite: "C" grade or higher or "Pass" in CS 181, CS 182 or equivalent, or experience programming in C/C++ or Java.	Prerequisite: "C" grade or higher or "Pass" in CS 181 or CS 182 or equivalent, or experience programming in C/C++ or Java.
HEALTH EDUCATION 105 – HEALTH EDUCATION FOR TEACHERS	*Review and update of course outline*
HEALTH EDUCATION 202 – HEALTH PROFESSIONS AND ORGANIZATIONS	*Review and update of course outline*
HEALTH EDUCATION 204 – HEALTH AND SOCIAL JUSTICE	*Review and update of course outline*
HUMANITIES 110 – PRINCIPLES OF THE HUMANITIES In this interdisciplinary humanities course, students will learn how to examine, compare, analyze, evaluate, interpret and discuss creative works within their cultural contexts. Examples for study will be selected from the world's great works of literature, drama, painting, sculpture, architecture, music, etc.	Humanities of the world explored through film and television, music, dance, graphic novels, writing, photography, handicrafts (i.e. weaving, pottery, quilting, etc.), architecture, food, philosophy, etc. Focus will be on the forms of cultural expression produced by a variety of diverse artists and on the context in which they were produced; will include present-day creative forms of expression.
MATHEMATICS 110 – INTERMEDIATE ALGEBRA FOR BUSINESS, MATH, SCIENCE AND ENGINEERING MAJORS	*Review and update of course outline*
MATHEMATICS 176 – PRECALCULUS: FUNCTIONS AND GRAPHS	*Review and update of course outline*
NUTRITION 155 –INTRODUCTION TO NUTRITION	*Review and update of course outline*
NUTRITION 158 – NUTRITION FOR FITNESS AND SPORTS	*Review and update of course outline*

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
ORNAMENTAL HORTICULTURE 290 – COOPERATIVE WORK EXPERIENCE EDUCATION	*Review and update of course outline*
PARALEGAL STUDIES 135 – BANKRUPTCY LAW	*Review and update of course outline*
PHILOSOPHY 110 – A GENERAL INTRODUCTION TO PHILOSOPHY	*Review and update of course outline*
PHILOSOPHY 125 – CRITICAL THINKING	*Review and update of course outline*
PHILOSOPHY 130 – LOGIC	*Review and update of course outline*
PHILOSOPHY 140 – PROBLEMS IN ETHICS	*Review and update of course outline*
PSYCHOLOGY 140 – PHYSIOLOGICAL PSYCHOLOGY	*Review and update of course outline*
RELIGIOUS STUDIES 120 – WORLD RELIGIONS	*Review and update of course outline*
SPANISH 141 – SPANISH AND LATIN AMERICAN CULTURES Survey of the major characteristics of Spanish, Latin American and Chicano cultures as reflected in literature, the arts, philosophy and folklore.	Survey of the major characteristics of Spanish, Latin American and Chicano cultures as reflected in literature, the arts, philosophy, and folklore. Topics include the lived experiences; traditions; family structure and gender roles; racialization and discrimination; social stratification; social struggles that led to emigration; and contributions of Spanish, Latin American, and Chicano cultures in the United States.
SPANISH 145 – HISPANIC CIVILIZATIONS General overview of the characteristics and cultures of Hispanic civilizations as reflected in literature, philosophy, architecture, and the arts of Spain and Latin American countries. This course may have an emphasis on a selected Hispanic country or countries.	General overview of the characteristics and cultures of civilizations of Spanish speaking countries as reflected in literature, philosophy, architecture, and the arts of Spain and Latin American countries. This course will have an emphasis on a selected Spanish speaking country or countries. Topics include the lived experiences; traditions; family structure and gender roles; racialization and discrimination; social stratification; social movements; social struggles that led to emigration; and contributions of the selected country or countries in the United States.

DEACTIVATIONS

Course	Reason For Deletion per Department Faculty and/or Advisory Committee Recommendations
ART 149 – History of Graphic Design	Recommendation of the department faculty. The course has never been offered.
CD 101 – Parent Education	Recommendation of the department faculty. The course has not been offered since the COVID-19 pandemic, spring 2020.
CD 116 – Parent Education II	Recommendation of the department faculty. The course has not been offered since fall 2017.
CIS 105 – Introduction to Computing	Recommendation of the department faculty. The course has not been offered since fall 2009.
CIS 262 – Wireless Networking	Recommendation of the department faculty. The course has not been offered since fall 2017. There is no longer certification associated with this course.
CS 175 – Mechatronics: Introduction to Microcontrollers and Robotics	Recommendation of the department faculty. The course has never been offered.
CS 176 - Mechatronics: Prototype Design	Recommendation of the department faculty. The course has never been offered.
ENGR 175 – Mechatronics: Introduction to Microcontrollers and Robotics	Recommendation of the department faculty. The course has not been offered since spring 2016.
ENGR 176 – Mechatronics: Prototype Design	Recommendation of the department faculty. The course has not been offered since spring 2017.
PHYC 190 – Mechanics and Heat	Recommendation of the department faculty. The course has been replaced with PHYC 201, which is aligned with Grossmont.
PHYC 200 – Electricity and Magnetism	Recommendation of the department faculty. The course has been replaced with PHYC 202, which is aligned with Grossmont.
PHYC 210 – Wave Motion and Modern Physics	Recommendation of the department faculty. The course has been replaced with PHYC 203, which is aligned with Grossmont.

DISTANCE EDUCATION

Course	**Title**
(Effective Spring 2023)	***Fully Online unless otherwise noted***
PARA 135	Bankruptcy Law
PSY 140	Physiological Psychology

DEGREE AND CERTIFICATE MODIFICATIONS

BIOLOGICAL SCIENCES: PRE-ALLIED HEALTH
Associate in Science Degree

This program provides students with a pathway into allied health programs at baccalaureate institutions. Required science courses provide training in the methods of scientific inquiry, the fundamental principles of natural science, and the principle laws and theories governing the physical and life sciences. Recommended general education courses expose students to the necessary base of knowledge that will serve them well in any of the allied health fields. This degree prepares students for transfer to a baccalaureate institution or for advanced studies in an allied health major. Prior to enrolling in several courses in this major, students must take general biology and general biology laboratory as prerequisites*. It is recommended that students check with transfer institutions for specific program requirements.*

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Explain the principles and laws of living systems with particular reference to human disease and human performance, including the role of scientific inquiry in life/medical science, cell theory, the hierarchy of structure and function in living organisms and principles of heredity.
- Describe the normal relationships between structure and function relationships of humans, alterations in normal structure/function that characterize disease; the structure, function, classification and epidemiology of pathogenic microorganisms; and normal cellular and nutritional biochemistry.
- Exhibit competency in the methods used to study living systems, with a focus on human biology including applying principles and procedures of research and experimental design, and gathering, organizing interpreting, evaluating and communicating data.
- Exhibit confidence and ability to function as a health care professional including the ability to conduct independent and collaborative investigation skills, communicate scientific information effectively in oral and written form, and utilize technology effectively and appropriately.
- Exhibit the ability to integrate the content, skills and abilities gained in courses and practice independent, self-directed learning.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BIO 140	Human Anatomy	5
BIO 141	Human Physiology	3
BIO 141L	Laboratory in Human Physiology	1
BIO 152	Paramedical Microbiology	5
CHEM 102	Introduction to General, Organic and Biological Chemistry	5
~~or~~		
~~CHEM 115 &~~	~~Fundamentals of Chemistry~~	~~4~~
~~CHEM 116~~	~~Introductory Organic and Biochemistry~~	~~4~~
COMM 122	Public Speaking	3
PSY 120	Introductory Psychology	3
SOC 120	Introductory Sociology	3
	Total Required	28~~-31~~
	Plus General Education Requirements	

Recommended Electives: CD 125 or ~~PSY 165;~~ MATH 160 or PSY 150

PARALEGAL STUDIES
Associate in Science Degree

The legal profession has evolved, like the medical profession, into a profession of specialties. Based on this development, lawyers need qualified assistants to better help them provide legal services to their clients. Paralegals are trained, professional technicians able to provide this needed legal assistance.

This degree program is specifically designed to prepare and provide students with the analytical skills and written abilities necessary to assist attorneys in the practice of law. The technical curriculum goals and objectives emphasize three primary areas:

1.Legal Research, Analysis and Writing
2. Ethics and the Mechanics of Law
3. Integration of Substantive and Procedural Law

The successful paralegal degree candidate will possess a broad educational background with an opportunity to gain specialized skills in specific areas of law. The large curriculum offering also allows practicing paralegals to attend college refresher or new skills development courses.

This program does not prepare students for law school or the practice of law. Please note: Paralegals may not provide legal services directly to the public, except as permitted by law.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Apply the research, analytical skills and college-level writing abilities necessary to assist attorneys in the practice of law.
- Conduct oneself in an ethical and professional manner when confronted with a law office related conflict scenario.

CAREER OPPORTUNITIES
Claim Examiner
Compensation and Benefits Manager
Compliance and Enforcement Inspector
† Contract Consultant
Forms and Procedures Specialist
Freelance Paralegal
* Labor Relations Specialist
Law Clerk
Legal Aide
Legal Assistant
Legal Research Assistant
Legal Technician
Occupational Safety and Health Worker
† Paralegal
Patent Agent
Title Examiner

* Bachelor Degree or higher required
† Bachelor Degree normally recommended

It is recommended that incoming students complete C grade or higher in ESL 2B or placement into ENGL 120 or equivalent prior to taking any Paralegal Studies classes.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BOT 120-121	Comprehensive Word Levels I–II	2
BOT 122	Comprehensive Word, Level III	1
or		
BOT 151	Using Microsoft Outlook	1
or		
BOT 115	Essential Excel	1
BUS 125	Business Law: Legal Environment of Business	3
PARA 100	Introduction to Paralegal Studies	3
PARA 110	Civil Litigation Practice and Procedures	3
PARA 130	Legal Research and Writing	3
PARA 132	Computer Assisted Legal Research (CALR)	3
PARA 135	Bankruptcy Law	3
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Select at least six units from the following:

PARA 120	Introduction to Administrative Law	2
PARA 121	Social Security Law – Practice and Procedure	1
PARA 125	Business Organizations	1

PARA 140	Criminal Law and Procedures	3
PARA 145	Estate Planning	2
PARA 146	Probate and Administration of Estates	1
PARA 150	Family Law (Divorce, Separation, Nullity, and Paternity)	2
PARA 151	Family Law (Custody, Visitation, and Support)	1
PARA 160	Personal Injury	1
PARA 170	Worker's Compensation	1
PARA 175	Electronic Discovery: Fundamentals and Procedure	1
PARA 176	Electronic Discovery: Advanced Practice	2
PARA 250*	Internship	1-3
		6
	Total Required	27
	Plus General Education Requirements	

*Student must complete 18 units within the major to be eligible for this course.

Recommended Elective: BUS 128

GENERAL EDUCATION REQUIREMENTS FOR THE PARALEGAL STUDIES DEGREE:
AREA A–LANGUAGE AND RATIONALITY
(Minimum of 6 semester units)
One course from each area:

1. **Written Communication**
   ENGL 120

2. **Oral Communication and Analytical Thinking**
   COMM 120, 122, 137, 145
   ENGR 100
   MATH 110, 120, 125, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284
   PHIL 125, 130
   PSY 215

AREA B–NATURAL SCIENCES
(Minimum of 4 semester units)
A course that includes a laboratory (laboratory courses are underlined):

ANTH 130
ASTR 110, 112
BIO 112, 115, 122, 130, 131, 140, 152, 230, 240
CHEM 102, 115*, 120*, 141
GEOG 120, 121
GEOL 104, 110, 111
OCEA 112, 113
PHYC 110, 130, 131, ~~190, 200~~, 201, 202, 203 ~~210~~

*Students will not receive credit for more than one of the following courses: CHEM 115, 120.

AREA C–HUMANITIES
(Minimum of 3 semester units)
One of the following courses:

ARAM 120, 121, 220
ARBC 120, 121, 145, 220, 221, 250, 251
ART 100, 120, 124, 129, 140, 141, 143, 144, 145, 146, 148
ASL 120, 121, 140, 220, 221
ENGL 122, 201, 202, 214, 217, 221, 222, 231, 232, 270, 271
HIST 100, 101, 105, 106
HUM 110, 115, 116, 120, 140, 155
MUS 110, 111, 115, 116, 117
NAKY 120, 121, 220
PHIL 110, 115, 117, 140, 160, 170
RELG 120, 130, 160, 170
SPAN 120, 121, 141, 145, 220, 221, 250, 251
THTR 110

AREA D–SOCIAL AND BEHAVIORAL SCIENCES
(Minimum of 3 semester units)
One of the following courses:

ANTH 120
CD 115, 125, 131, 145
COMM 110, 124
ECON 110, 120, 121
GEOG 106, 130
HED 120, 201
HIST 108, 109, 118, 119, 122, 123, 124, 130, 131, 132, 133, 180, 181
POSC 120, 121, 124, 130, 140
PSY 120, 125, 134, 138, 140, 150, 170, 220
SOC 120, 125, 130

AREA E- CULTURAL DIVERSITY GRADUATION REQUIREMENT
(Minimum of 3 semester units)
One of the following courses:
ART 151
COMM 124
ENGL 236, 238
ETHN 107, 111, 114, 118, 119, 130, 131, 132, 133, 150, 166, 180, 236, 238
HIST 107, 114, 115, 118, 119, 130, 131, 132, 133, 148, 180, 181
HUM 111
POSC 165, 166
PSY 125, 132
SOC 114, 120, 125, 150

ADDITIONAL REQUIREMENTS:
(Minimum 6 semester units)
Two additional courses from two different areas:

- Area B - Natural Sciences
- Area C - Humanities
- Area D - Social and Behavioral Sciences

DEGREE REQUIREMENTS:
Cuyamaca College will confer the Degree of Associate in Science in Paralegal Studies upon students who successfully complete the following requirements:

1. A minimum of 60 semester units of college work.
2. Competency Requirements
   A. Completion of ENGL 120 with a grade of "C" or better or "P"*.
   B. Completion of MATH 110 or a higher numbered mathematics class, or a statistics course from another discipline that has intermediate algebra as a prerequisite, with a grade of "C" or better or a grade of "P"* or completion of assessment placing into a class higher than MATH 110.
3. Exercise Science Degree Requirements
   Two activity courses in exercise science are required for graduation from Cuyamaca College. These courses are marked with an asterisk in the Course Descriptions section.
   A. If medical reasons necessitate exclusion from exercise science, a medical statement must be on file with the Admissions and Records Office. Adaptive exercise science classes are available.
   B. Veterans who have completed at least one year of honorable active service will receive up to three units of credit for exercise science which will satisfy the activity requirement for graduation. To receive credit for military service, a DD-214 and appropriate military records must be submitted to the Admissions and Records Office.
4. Achievement of a "C" average (2.0 GPA) in all college work counted toward general education requirements.
5. Achievement of a "C" grade or better in all courses counted toward the major. (P/NP grading not accepted for the major.)
6. A maximum of 12 "P"* semester units taken in regular course work at this institution may be counted toward the 60 semester units required for graduation but shall not be included as part of the requirements for the major.
7. A minimum of 12 semester units of Legal Specialty courses must be completed at Cuyamaca College.

*A grade of "P" (Pass) represents a "C" grade or better.
For more information regarding degree requirements, see Degree Requirements and Transfer Information section.