

WELD 175 Magnetic Particle Testing Level I (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Note:** May be taken 2 times**Transfer acceptability:** CSU

Principles of magnets and magnetic fields and laws of magnetism and their effects on discontinuities. Methods of Magnetic Particle Inspection and types of discontinuities will be taught.

WELD 176 Magnetic Particle Testing Level II (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Note:** May be taken 2 times**Transfer acceptability:** CSU

Provides theory lectures and practical training on magnetic particle testing, performing calibrations, measuring samples, and performing non-destructive testing using magnetic particle theory. Encourages group discussions around practical problems and provides field expertise on how to resolve them. Meets or exceeds requirements for ASNT Magnetic Particle Testing Level II.

WELD 177 Magnetic Particle Testing Level III (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Note:** May be taken 2 times**Transfer acceptability:** CSU

Provides basic knowledge into how to effectively perform magnetic particle inspection. Emphasis is placed on the properties of electricity and magnetism, understanding longitudinal and circular magnetism, use of central conductor, coil and direct magnetization equipment, and the use of yokes and prods. In addition to covering the theoretical aspects of this method, provides demonstrations and practical hands-on laboratory time on both portable and stationary equipment. Meets or exceeds ASNT Magnetic Particle testing Level III.

WELD 180 Ultrasonic Testing Level I (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in WELD 100**Note:** May be taken 4 times**Transfer acceptability:** CSU

Provides knowledge and skills in the setup, calibration, and inspection of materials using ultrasonic testing equipment. Fundamental concepts and terminology of ultrasonics and mathematical relationships that exist between them. Meets or exceeds the content recommended by the American Society for Nondestructive Testing for Level I.

WELD 181 Ultrasonic Testing Level II (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in WELD 180**Note:** May be taken 4 times**Transfer acceptability:** CSU

Provides knowledge and skills in the setup, calibration, and inspection of materials using ultrasonic testing equipment. Fundamental concepts and terminology of ultrasonics and mathematical relationships that exist between them. Meets or exceeds the content recommended by the American Society for Nondestructive Testing for Level II.

WELD 182 Ultrasonic Testing Level III (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Note:** May be taken 2 times**Transfer acceptability:** CSU

Advanced topics and training in ultrasonic testing of materials.

WELD 183 Ultrasonic Phased Array Inspection (1, 2)
½ or 1 hour lecture - 2 or 3 hours laboratory**Note:** May be taken 2 times**Transfer acceptability:** CSU

Provides training in advanced ultrasonic inspection of welds using straight-beam, angle-beam, and phased array ultrasonic testing.

WELD 196 Special Problems in Welding (1, 2, 3)
3, 6, or 9 hours laboratory**Prerequisite:** A minimum grade of 'C' in WELD 100, or concurrent enrollment in WELD 100**Note:** May be taken 4 times**Transfer acceptability:** CSU

Designed to provide enrichment of an area of concentration in welding, generally research in nature. Content to be determined by the need of the student under signed contract with the instructor.

WELD 197 Welding Technology Topics (.5 - 3)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 4 times**Transfer acceptability:** CSU

Topics in Welding Technology. See Class Schedule for specific topic offered. Course title will designate subject covered.

Women's Studies

Contact the Behavioral Sciences Department for further information.

(760) 744-1150, ext. 2329

Office: MD-241

Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).

- Women's Studies

PROGRAM OF STUDY

Women's Studies

This major offers the student an opportunity to study women and their contributions from a female perspective. It also provides intensive, interdisciplinary lower-division preparation necessary for pursuing advanced coursework in Women's Studies. Transfer students should consult the four-year college or university catalog for specific requirements.

A.A. DEGREE MAJOR

Program Requirements		Units
SOC 115	Introduction to Women's Studies	3
Electives (Select a minimum of 15 units)		
AIS 165	Native Women in the Americas	3
COMM 105	Race, Gender and Media Effects	3
ENG 280	Women and Literature	3
HIST 130	Women in United States History	3
PSYC/SOC 125	Human Sexuality	3
PSYC 130	Psychology of Women	3
SOC 135	Gender and Society	3
PSYC/SOC 145	Psychology and Sociology of Aging	3
TOTAL UNITS		18

Recommended Electives: ENG 100 and 202 with emphasis in Women's Studies issues.

Zoology (ZOO)

Contact the Life Sciences Department for further information.

(760) 744-1150, ext. 2275

Office: NS-207A

COURSE OFFERINGS

ZOO 100 General Zoology (4)

3 hours lecture - 3 hours laboratory

Note: Not open to students with prior credit in ZOO 101 or 101L**Transfer acceptability:** CSU; UC - No credit if taken after ZOO 101/101L

Principles of animal life and body organization. Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. This is a general education course intended for non-science majors.

- ZOO 101 Animal Kingdom** (3)
3 hours lecture
Note: Not open to students with prior credit in ZOO 100
Transfer acceptability: CSU; UC – No credit if taken after ZOO 100
Structural and functional adaptations of major groups of the animal kingdom from protozoans through mammals. ZOO 101L laboratory optional.
- ZOO 101L Animal Kingdom Laboratory** (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in ZOO 101, or concurrent enrollment in ZOO 101
Note: Not open to students with prior credit in ZOO 100
Transfer acceptability: CSU; UC – No credit for ZOO 101/101L if taken after 100
Investigations upon living and preserved specimens representative of the major groups of the animal kingdom. This is a general education course intended for non-science majors.
- ZOO 120 Animal Behavior** (3)
3 hours lecture
Transfer acceptability: CSU; UC
Biological basis of behavior including behavior genetics, operation of evolutionary processes on species typical behaviors, behavioral ontogeny, functional organization of nervous systems, animal senses, motivation including hormonal effects on drive, and biorhythms; behavioral ecology including social behavior and social living, reproductive behaviors, homing and migration, antipredatory defenses, feeding strategies, and communication.
- ZOO 135 Biology of Marine Mammals** (3)
3 hours lecture
Note: Cross listed as BIOL 135
Transfer acceptability: CSU; UC
The fundamentals of marine mammal biology are explored. Topics include comparative anatomy, evolution, cladistics, mammalian physiology, ecology and zoogeography, behavior and conservation as they apply to the study of marine mammals.
- ZOO 145 Introduction to Anatomy and Physiology** (3)
3 hours lecture
Note: Not open to students with prior credit in ZOO 200, 203 and 205
Transfer acceptability: CSU; UC – ZOO 145/145L and BIOL 106 or BIOL 105 combined: maximum credit, 4 units; UC – No credit for ZOO 145/145L if taken after ZOO 203, or 200
Introduction to the structure and function of human body systems in health and disease. Not recommended for those intending to take BIOL 105, 106, ZOO 200 or 203.
- ZOO 145L Introduction to Anatomy and Physiology Laboratory** (1)
3 hours laboratory
Prerequisite: A minimum grade of 'C' in ZOO 145, or concurrent enrollment in ZOO 145
Transfer acceptability: CSU; UC – ZOO 145/145L and BIOL 106 or BIOL 105 combined: maximum credit, 4 units; UC – No credit for ZOO 145/145L if taken after ZOO 203, or 200
Introduction to the structure and function of human body systems. Includes study of cells, tissues, and human organ systems. Not recommended for those intending to take BIOL 105, 105L, 106, ZOO 200 or 203.
- ZOO 195A Field Study of Marine Invertebrates** (1, 1.5, 2, 2.5, 3)
½-1 hours lecture - 1½-7½ hours laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses
Extended field study of the fauna of marine intertidal and subtidal habitats of selected geographic regions, with emphasis upon field identification, observation and interpretation of behavioral and ecological interrelationships of animals to their environment and to one another. See Class Schedule for locality to be visited.
- ZOO 195B Field Study of Marine Vertebrates** (1, 1.5, 2, 2.5, 3)
½-1 hours lecture - 1½-7½ hours laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses
Extended field study fishes and marine reptiles and mammals, with emphasis upon identification, behavior, and adaptations. See Class Schedule for locality to be visited.
- ZOO 195C Field Study of Terrestrial Vertebrates** (1, 1.5, 2, 2.5, 3)
½-1 hours lecture - 1½-7½ hours laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses
Extended field study of terrestrial mammals, reptiles, and amphibians, emphasizing identification, behavior, adaptations, and ecology. See Class Schedule for locality to be visited.
- ZOO 195D Field Study of Birds** (1, 1.5, 2, 2.5, 3)
½-1 hours lecture - 1½-7½ hours laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses
Extended field study of terrestrial and aquatic avifauna of selected habitats, emphasizing identification and observation of native and migratory birds, their behavior, and adaptations. See Class Schedule for locality to be visited.
- ZOO 195E Field Study of Terrestrial and Aquatic Invertebrates** (1, 1.5, 2, 2.5, 3)
½-1 hours lecture - 1½-7½ hours laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses
Extended field study of the land and freshwater invertebrate life of selected areas, emphasizing taxonomic identification, behavior, and ecological relationships. See Class Schedule for locality to be visited.
- ZOO 195F Field Studies in Animal Ecology** (1, 1.5, 2, 2.5, 3)
½-1 hours lecture - 1½-7½ hours laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU; UC – ZOO 195A-F combined: maximum credit, 2 courses
Extended field studies of the fauna of selected ecosystems, emphasizing identification of animal species and observations upon their interspecific and conspecific interactions and ecological relationships with flora. See Class Schedule for locality to be visited.
- ZOO 197 Zoology Topics** (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus
Topics in Zoology. See Class Schedule for specific topic offered. Course title will designate subject covered.
- ZOO 200 Anatomy** (4)
2 hours lecture - 7 hours laboratory
Prerequisite: A minimum grade of 'C' in BIOL 102; or BIOL 200; or BIOL 100; or BIOL 101 and 101L; or BIOL 105
Transfer acceptability: CSU; UC
Designed to provide a basic understanding of the structure of the human body. Laboratory includes a study of anatomy through cat and organ dissection, skeletal study, use of models and other visual aids.

2 hours lecture - 7 hours laboratory

Transfer acceptability: CSU; UC

Principles of human physiology including laboratory exercises. Deals with physiology of muscle, nerve, circulation, respiration, excretion, digestion, the endocrines and exercise.

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by department chairperson

Note: May be taken 4 times

Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus

Independent study for students who have demonstrated skills and/or proficiencies in Zoology subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.