### WELD 175 Magnetic Particle Testing Level I

1/2 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)

1/2 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)

1/2 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)1/2 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)
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 $\frac{1}{2}$  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 Nondesructive Testing for Level II.

WELD 182 Ultrasonic Testing Level III	(1,2)
1/2 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)
% or 1 hour lecture - 2 or 3 hours laboratory	

or I hour lecture 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

(1,2)

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 lowerdivision 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 (Sele	ct 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

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.

(4)