ENGL 497. Internship 3 cr.
Supervised technical and professional communication internship in business, industry, government, or the university. Prerequisite: consent of instructor. May be repeated for a total of 6 credits.

### • English as a Second Language

*See* **SPCD—Speech/English as a Second Language.**

### • ENGR—Engineering

ENGR 198. Special Topics in Engineering 1-3 cr.
Directed individual study of topics in engineering. Written reports covering work required. Prerequisite: consent of academic dean. May be repeated for a maximum of 6 credits. Restricted to engineering majors. Graded S/U.

### • ENGR—Co-op Courses

ENGR 291. Engineering Industrial Internship I 1 cr.
Introduction to industry and the application of engineering principles. Registration in one course allowed per work phase having a minimum of 15 work weeks with consent of department head. Graded S/U.

ENGR 391. Engineering Industrial Internship III 1 cr.
Continuation of ENGR 291 and ENGR 292. Graded S/U.

### • ENVE—Environmental Engineering
### Department of Civil and Geological Engineering

ENVE 455. Solid and Hazardous Waste Systems Design 3 cr.
Design of processes and facilities used in the transport, storage, treatment, and disposal of solid and hazardous wastes. Prerequisite: C E 356 or consent of instructor.

ENVE 456. Environmental Engineering Design 3 cr. (2+3P)
Design of chemical, physical and biological operations and processes involved in water and wastewater treatment. Prerequisite: C E 356.

ENVE 462. Sampling and Analysis of Environmental Contaminants 3 cr. (1+6P)
Theory, application, methodology, and instrumentation used in the sampling and analysis of environmental contaminants. Prerequisites: C E 256 and E S 256. Same as E S 462.

ENVE 487. Air Pollution Control Systems Design 3 cr.
An introduction to sources and nature of air pollution, regulations, and risk analysis. Detailed study of air pollution control technologies and design of air pollution control equipment. Prerequisite: senior or graduate standing. Restricted to C E, CH E, or M E majors. Main campus only.

### • EPWS—Entomology, Plant Pathology, and Weed Science

EPWS 100. Introduction to Pest Management (f) 3 cr.
Introduction to applied biology including recognition and control of major pest problems of crops, livestock, native vegetation, and homes. One-hour lab is optional.

EPWS 100L. Pest Management Lab (f) 1 cr.
Laboratory to study and observe insect, disease, and weed problems in various agricultural and horticultural environments. Corequisite: EPWS 100.

EPWS 111. Freshmen Orientation 1 cr.
Orientation to university life, including available resources and methods to promote success at NMSU. General exposure to fields in agriculture and home economics. Open to all freshmen and transfer students. Graded S/U.

EPWS 200. Special Topics 1-4 cr.
Specific subjects and credits to be announced in the *Schedule of Classes*. Maximum of 4 credits per semester and a grand total of 9 credits.

EPWS 300. Special Topics 1-4 cr.
Specific topics and credits to be announced in the *Schedule of Classes*. Maximum of 4 credits per semester and a grand total of 9 credits.

EPWS 301. Agricultural Biotechnology 3 cr. (2+2P)
The principles of molecular biology will be introduced and used to explore the past, present, and future applications of biotechnology in agriculture. Specific topics include methodologies for making transgenic plants with increased pest resistance, the use of biotechnology in pest detection, and improving nutritional value. The laboratory will provide students with hands-on experience with equipment used for biotechnology research. Prerequisites: CHEM 112, BIOL 111G, or BIOL 211G.

EPWS 303. Economic Entomology (s) 4 cr. (3+2P)
Identification and life cycles of insects of economic significance, their relationship to humans and agriculture including biological interactions and controls. Prerequisite: either BIOL 111G, BIOL 211G, or BIOL 190.

EPWS 310. Plant Pathology (f) 4 cr. (3+2P)
Causes and methods of prevention and treatment of diseases in plants. Prerequisite: either BIOL 111G, BIOL 211G, or BIOL 190.

EPWS 311. Introduction to Weed Science (f) 4 cr. (3+2P)
Principles of weed science, with emphasis on characteristics of invasive plants, methods of integrated weed management, and current issues impacting weed management. Identification of local weeds. Prerequisites: junior standing or consent of instructor; and CHEM 111, and either BIOL 190 or BIOL 211G. Same as AGRO 311.

EPWS 314. Plant Physiology 3 cr.
Overview of photosynthesis, respiration, water relations of plants, minerals and organic nutrition, growth and development. Prerequisites: BIOL 211G and CHEM 112. Same as BIOL 314.

EPWS 314L. Plant Physiology Lab 2 cr.
Examination of and laboratory techniques for measurement of plant-water relations, solute transport, mineral nutrition, photosynthesis, enzyme activity, gene expression, nitrogen metabolism, hormone content and function, and growth/development. Prerequisite: BIOL/EPWS 314 or concurrent enrollment recommended. Same as BIOL 314L.

EPWS 325G. Humans, Insects, and the Environment 3 cr.
Overview of the interactions of the world's largest group of organisms with humans. Emphasizing the role of insects in the development of human cultures, including health, food and fiber production, art, music, and environmental issues; with discussions of historic, present day, and future impacts in underdeveloped, developing, and developed civilizations.

EPWS 373. Fungal Biology 3 cr. (2+2P)
Introduction to the taxonomy, morphology, physiology, and ecology of fungi. Prerequisites: EPWS 310 or BIOL 311, or consent of instructor. Same as BIOL 373.

EPWS 390. Internship 1-3 cr.
Professional work experience under the joint supervision of the employer and a faculty member. A written report is required. Maximum of 3 credits. Prerequisite: consent of instructor. Graded S/U.

EPWS 420. Environmental Fate of Pesticides 3 cr.
Mechanisms of pesticide movement, degradation, behaviors, and persistence in soil, water, and plants. Experimental and analytical techniques discussed. Prerequisites: CHEM 211, EPWS 311, EPWS 314.

EPWS 435. Aquatic and Immature Insects (s) 4 cr. (3+3P)
Life histories, adaptations, ecology, and identification of immature insects, with emphasis on aquatics. Prerequisite: BIOL 433 or EPWS 303 or consent of instructor.

EPWS 447. Seminar (f, s) 1 cr.
Review of current literature.

EPWS 449. Special Problems (f, s) 1-3 cr.
Individual investigation in specific areas of entomology, plant pathology or plant physiology. Maximum of 3 credits per semester and a grand total of 6 credits.

EPWS 451. Special Topics (f, s) 1-4 cr.
Specific subjects and credits to be announced in the *Schedule of Classes*. Maximum of 4 credits per semester and a grand total of 9 credits. Prerequisite: consent of instructor.

EPWS 452. Applied Pesticide Toxicology (f) 3 cr.
Classification, mode of action, and use of insecticides and related pesticides.

EPWS 455. Advanced Integrated Pest Management 3 cr.
Examination of factors affecting the biology and ecology, population evaluations, and control of insect, disease, and weed pests with an emphasis on integrating management practices. Credit can not be given for both EPWS 455 and EPWS 505. Prerequisite: either EPWS 303, EPWS 310, EPWS 311, or consent of instructor.

EPWS 456. Biological Control 3 cr.
Principles of plant and animal suppression using living organisms. Interaction of biological control organisms with biotic and abiotic factors will be stressed. Credit can not be given for both EPWS 456 and EPWS 506. Prerequisite: introductory course in entomology.

EPWS 462. Parasitology 3 cr.
Classification, biological effects, and management of animal parasites of man, domestic animals, and wildlife. One-hour lab is optional.