

Center for Environmental Resource Management Courses

Courses

ESE 6107. Graduate Seminar.

Graduate Seminar (1-0) Presentation and discussion of topics in environmental science and engineering by graduate students, faculty and visitors.

Prerequisite: Permission of the ESE program director.

Department: Environmental Science & Engr.

1 Credit Hour

1 Total Contact Hour

0 Lab Hours

1 Lecture Hour

0 Other Hours

ESE 6301. Environmental Law and Policy.

Environmental Law and Policy (3-0) Focus on the formulation, implementation, enforcement, and evaluation of environmental policies. A review of the legal and administrative environmental systems of both the United States and Mexico will be included. Questions of environmental risk and equity will be addressed. Prerequisite: Enrollment in the ESE program or permission of the ESE program director.

Department: Environmental Science & Engr.

3 Credit Hours

3 Total Contact Hours

0 Lab Hours

3 Lecture Hours

0 Other Hours

ESE 6307. Interdisciplin Envir Prob Solv.

Interdisciplinary Environmental Problem Solving (3-0) Students with different backgrounds will work in teams to examine interdisciplinary environmental issues specific to the far west Texas border region and prepare a group report with recommendations, which consider scientific, political, economic, and social aspects. Restricted to majors: ESE. Prerequisite: Enrollment in the ESE program and ESE 6306 or permission of the ESE program director.

Department: Environmental Science & Engr.

3 Credit Hours

3 Total Contact Hours

0 Lab Hours

3 Lecture Hours

0 Other Hours

Prerequisite(s): (ESE 6306 w/C or better)

ESE 6320. Adv Topics in Energy Engr.

Contemporary advanced energy topics such as secure and reliable energy supplies, clean power generation, hydrogen economy, energy efficiency, and critical infrastructure assurance. Prerequisite: Departmental approval. Restricted to graduate students.

Department: Environmental Science & Engr.

3 Credit Hours

3 Total Contact Hours

0 Lab Hours

3 Lecture Hours

0 Other Hours

ESE 6396. Doctoral Research.

Doctoral Research (0-0-3) Directed research on topics in environmental science and engineering related to the dissertation or conducted as a component of the student's overall graduate program. Restricted to majors: ESE. Prerequisite: Admission to the ESE program or permission of the ESE program director.

Department: Environmental Science & Engr.

3 Credit Hours

3 Total Contact Hours

0 Lab Hours

0 Lecture Hours

3 Other Hours

ESE 6398. Dissertation.

Dissertation (0-0-3) Taken when preparation of the dissertation is begun. One enrollment required. Restricted to majors: ESE. Prerequisite: Admission to the ESE program and passage of the comprehensive examination.

Department: Environmental Science & Engr.

3 Credit Hours

3 Total Contact Hours

0 Lab Hours

0 Lecture Hours

3 Other Hours

ESE 6399. Dissertation.

Disertation (0-0-3) Taken continuously during preparation of the dissertation. Restricted to majors: ESE. Prerequisite: Admission to the ESE program and ESE 6398.

Department: Environmental Science & Engr.

3 Credit Hours

3 Total Contact Hours

0 Lab Hours

0 Lecture Hours

3 Other Hours

Prerequisite(s): (ESE 6398 w/P or better)

ESE 6402. Environmental Chemistry.

Environmental Chemistry (3-3) Review of classification & properties of chemical materials of environmental interest. Study of chemical principles pertaining to acidity, basicity, redox properties, solubility, partitioning, & transport in the environment. Chemical reactions in aqueous, soil, sediment & atmospheric phases. Environmental analytical techniques. The laboratory emphasizes analytical protocols utilized in environmental laboratories. Restricted to majors: ESE. Prerequisite: One year of introductory work in chemistry. Enrollment in the ESE program or permission of ESE program director.

Department: Environmental Science & Engr.

4 Credit Hours

6 Total Contact Hours

3 Lab Hours

3 Lecture Hours

0 Other Hours