

ENE 200
FORMERLY ENE 400

Environment Engineering Principles

3 Units

USC | SONNY ASTANI DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

ABET Course Syllabus

Course Information, Textbook and Supplementary Materials

Capstone Course

Course Description: Analysis of water, air, and land pollution, including hazardous waste and engineering of mitigation measures. Water and waste water treatment analysis.

Required for: BSCE Environmental, and BSENE

Prerequisites: CHEM 105*bL* General Chemistry or CHEM 115*bL* *Advanced General Chemistry*;

MATH 226 Calculus III; PHYS 152L Fundamentals of Physics II: Electricity and Magnetism

Co-Requisite: None

Required Textbook: *Environmental Science and Engineering*, Glynn Henry and Garry Heink, 2nd edition 1996, Prentice-Hall, Inc.

Reference: None

Topics Covered	Learning Outcomes
Environmental engineering basics	1. The Nature and Scope of Environmental Problems
	2. Population and Economic Growth
	3. Energy Growth, and Natural Environmental Hazardous
	4. Human Environmental Disturbances
	5. Physics and Chemistry
	6. Atmospheric Sciences
	7. Microbiology and Epidemiology
	8. Ecology
Environmental engineering technology: <ul style="list-style-type: none"> • wastewater treatment • objectives and influent characteristics 	9. Water Resources, Water Supply, and Water Pollution
	10. Air Pollution
	11. Solid Wastes
	12. Hazardous Wastes

Lecture and Lab Schedule

Lecture		Lab	
Sessions per Week	Duration per Session	Sessions per Week	Duration per Session
1	3 hours	n/a	

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Relation of Course

Objectives to Program Outcomes

The Civil Engineering program is designed to teach beyond the technical content of the curriculum and prepare the students to utilize what they learn in a professional setting.

This course contributes to the program outcomes as outlined in the adjacent table.

Course Contribution to Program Outcomes (a-k)	✓ Key
e. An ability to identify, formulate and solve engineering problems.	
i. Recognition of the need for, and an ability to engage in life-long learning.	
j. Knowledge of contemporary issues.	

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