

ARIZONA WESTERN COLLEGE
SYLLABUS

EGR 150 INTRODUCTION TO ENVIRONMENTAL ENGINEERING

Credit Hours: 3 Lec 3

PREREQUISITE: MAT 122

COREQUISITES: MAT 151 and CHM 151

COURSE DESCRIPTION

Introduction to the discipline of environmental engineering and the role of technology in environmental protection. Explanation of the principles of conservation and environmental protection with attention to water resources, air contamination, waste management; pollution prevention, multi-media impacts of most contaminants, current perspectives on environmental risks, policies, and ethics.

1. COURSE GOALS

- 1.1 Develop understanding of fundamental concepts and issues associated with the discipline of environmental engineering and the role of environmental engineering in society.
- 1.2 Understand environmental ethics and unit and unit conversion.
- 1.3 Understand water and wastewater treatment technologies; the concept of block diagrams and material balance are introduced.
- 1.4 Understand generation and management of solid, hazardous and nuclear wastes in the industrial society.
- 1.5 Understand common air pollutants, the atmosphere and emissions reduction strategies and technologies.
- 1.6 Examine complex, contemporary environmental issues facing humans and ecosystems on a global scale.

2. OUTCOMES

Upon satisfactory completion of this course, students will be able to:

- 2.1 exhibit knowledge of introductory level fundamentals in the following major focus areas: water resources, wastewater management, pollution prevention, waste management, pollution prevention, atmospheric systems and air pollution control, and environmental and occupational health.
- 2.2 exhibit broader ability to understand contemporary societal issues and engenders an understanding of the interaction of public institutions, the private sector and general society in environmental management.
- 2.3 demonstrate appreciation for thoroughness, accuracy and precision of data.

3. METHODS OF INSTRUCTION

- 3.1 Lecture
- 3.2 Discussions
- 3.3 Audiovisual materials
- 3.4 Printed materials
- 3.5 Demonstrations

4. LEARNING ACTIVITIES

- 4.1 Homework assignments
- 4.2 Portfolio maintenance
- 4.3 Class participation

5. EVALUATION

- 5.1 Homework assignments
- 5.2 Quizzes
- 5.3 Portfolio maintenance
- 5.4 Class participation
- 5.5 Exams

6. STUDENT RESPONSIBILITIES

- 6.1 Under AWC Policy, students are expected to attend every session of class in which they are enrolled.
- 6.2 If a student is unable to attend the course or must drop the course for any reason, it will be the responsibility of the student to withdraw from the course. Students who are not attending as of the 45th day of the course may be withdrawn by the instructor. If the student does not withdraw from the course and fails to complete the requirements of the course, the student will receive a failing grade.
- 6.3 Americans with Disabilities Act Accommodations: Arizona Western College provides academic accommodations to students with disabilities through AccessABILITY Resource Services (ARS). ARS provides reasonable and appropriate accommodations to students who have documented disabilities. It is the responsibility of the student to make the ARS Coordinator aware of the need for accommodations in the classroom prior to the beginning of the semester. Students should follow up with their instructors once the semester begins. To make an appointment call the ARS front desk at (928) 344-7674 or ARS Coordinator at (928) 344-7629, in the College Community Center (3C) building, next to Advising.
- 6.4 Academic Integrity: Any student participating in acts of academic dishonesty—including, but not limited to, copying the work of other students, using unauthorized “crib notes”, plagiarism, stealing tests, or forging an instructor’s signature—will be subject to the procedures and consequences outlined in AWC’s Student Code of Conduct.
- 6.5 Texts and Notebooks: Students are required to obtain the class materials for the course.
- 6.6 Arizona Western College students are expected to attend every class session in which they are enrolled. To comply with Federal Financial Aid regulations (34 CFR 668.21), Arizona Western College (AWC) has established an Attendance Verification process for “No Show” reporting during the first 10 days of each semester.
Students who have enrolled but have never attended class may be issued a “No Show” (NS) grade by the professor or instructor and receive a final grade of “NS” on their official academic record. An NS grade may result in a student losing their federal financial aid.
For online classes, *student attendance in an online class is defined as the following* (FSA Handbook, 2012, 5-90):
 - Submitting an academic assignment
 - Taking an exam, an interactive tutorial or computer-assisted instruction
 - Attending a study group that is assigned by the school
 - Participating in an online discussion about academic matters
 - Initiating contact with a faculty member to ask a question about the academic subject studied in the course