

CEEN 3736 - Fundamentals of Environmental Engineering

Fall 2026 Syllabus, Section 01, CRN 40681,

Credit hours: 3

Instructor

Sahar Ehsani

Email: sehsani@ysu.edu

Public Instructor Information

Instructor Title: Assistant Professor

Instructor Professional Qualifications:

Ph D, University of Nevada, Las Vegas, 2019.

MS, University of Surrey, 2011.

BS, University of Tehran, 2008.

Instructor Office Location: Moser Hall 2430

Instructor Office Phone: (330) 941-1740

Course Description

3736. Fundamentals of Environmental Engineering. Causes and effects of water, air and land pollution; measurements of environmental quality; environmental regulations; introduction to methods of pollution control. Prereq.: CHEM 1515. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Introduction to Environmental Engineering	Davis and Cornwell	ISBN10: 1260241092

6th Edition, McGraw Hill. ISBN10: 1260241092 | ISBN13: 9781260241099

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Textbook	Introduction to Environmental Engineering	
8/31	Textbook	Environmental Laws and Regulations	
9/7	Textbook	Water Quality Parameters	
9/14	Textbook	DO Sag Curve	
9/21	Textbook	Water Quality in Lakes	
9/28	Textbook	Introduction Risk Assessment	
10/5	Textbook	Probability and Risk	
10/12	Textbook	Risk Assessment	
10/19	Textbook	Water Chemistry intro	
10/26	Textbook	Basic Water Properties and Units	
11/2	Textbook	Chemical Reactions	
11/9	Textbook	Water Treatment Softening	
11/16	Textbook	Reactor Design Coagulation/Flocculation	

11/23	Textbook	Water Filtration
11/30	Textbook	Water Disinfection
12/7		Final Week

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.