

**LECTURE:** Tuesday (9:30- 10:45 AM) Wednesday (8:00-9:15 AM)  
Room 117 Rowan Hall

**INSTRUCTOR:** Kauser Jahan, Rowan Hall, Room 139, Phone: 856-256-5323  
E-mail: [jahan@rowan.edu](mailto:jahan@rowan.edu)

**PRE/COREQUISITE:** CEE 311 : Environmental Engineering I

**TEXT:** *Title: Introduction to Environmental Engineering*  
*Authors: Mackenzie L. Davis and David A. Cornwell*  
*Publisher: McGraw Hill*  
*ISBN 978-0-07-340114-0 (Fifth Edition)*

**OFFICE HOURS:** 8:00-9:30 AM (M-T-F) or any time by appointment

**DESCRIPTION:** This course is designed as an introduction to core environmental engineering concepts. Upon completion of the course, civil engineering students will be able use material and energy balances to solve civil engineering analysis and design problems pertaining to: Sustainable Engineering, Risk Assessment, Groundwater Hydrology, Air Pollution, Solid Waste Management, and Hazardous Waste Management.

**OBJECTIVES:**

1. To present the fundamental physical, chemical, and biological concepts important to the understanding and solution of environmental problems;
2. To introduce the student to significant environmental problems dealing with solid/hazardous waste management and air pollution;
3. To introduce the student to sustainable and green engineering concepts;
4. *To broaden education necessary to understand the impact of engineering solutions in a global/societal context;*
5. *To recognize need for and the ability to engage in lifelong learning;*
6. *To understand contemporary issues.*

**GRADING:**

Homework Assignments	10%
Quizzes	15%
Exams 1, 2 and 3	25%
Final Exam	30%
Team Projects	20%

#### ACCOMODATION

Your academic success is important. If you have a documented disability that may have an impact upon your work in this class, please contact me. Students must provide documentation of their disability to the Academic Success Center in order to receive official University services and accommodations. The Academic Success Center can be reached at 856-256-4234. The Center is located on the 3rd floor of Savitz Hall. The staff is available to answer questions regarding accommodations or assist you in your pursuit of accommodations.

## EXAM AND QUIZ INSTRUCTIONS

*Announced quizzes* will be given through out the semester. No make-up exams or quizzes will be given for unexcused absences (See Attendance Policy Section). **All quizzes and exams are closed book and notes. The final exam will have a duration of 2 hours and will be announced near the end of the semester.**

## HOMEWORK ASSIGNMENT INSTRUCTIONS

**Homework assignments will be given every week. Late homework will not be accepted.** Please use the **Rowan Engineering Homework Format**. To receive full credit for a problem both your method of calculation and the correct answer must appear in a legible and readily understandable form. No hand-drawn graphs will be accepted.

**All assignments are due at the beginning of the class period.**

## ATTENDANCE POLICY

Attendance is **required**. If you know that you will be absent from a class for a valid reason, obtain approval from instructor 24 hours before the class period. The only exception to this rule is a medical emergency.

## PROFESSIONAL BEHAVIOR

As an engineering professional, it is extremely important that you treat people with respect and consideration. It is expected, therefore, that you will maintain good professional conduct throughout this course, in all your interactions with your peers and the instructor. You will earn points for having good professional conduct, and you may lose points for exhibiting poor behavior. Some examples of good conduct and poor conduct are given below.

<b>Good Conduct</b>	<b>Poor conduct</b>
<ul style="list-style-type: none"><li>• Be on time</li><li>• Pay attention</li><li>• Have good attendance</li><li>• Be prepared (read the text, review notes from previous class, read handouts before coming to lab)</li><li>• Respect the office hours</li><li>• Be prepared for office hours</li><li>• Have a good attitude toward learning and problem solving</li><li>• Make constructive comments</li></ul>	<ul style="list-style-type: none"><li>• Arrive late for class frequently / making a conspicuous and disruptive late entrance.</li><li>• <b>Not paying attention in class</b></li><li>• <b>Disruptive behavior in class (side conversations, etc.)</b></li><li>• <b>Be absent from class frequently</b></li><li>• Be unprepared for class</li><li>• Disregard office hours</li><li>• Not being prepared when coming to ask questions during office hours</li></ul>

## DIVERSITY AND INCLUSIVITY

Rowan's Civil and Environmental Engineering Department welcomes individuals of all races, religions, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability – and other visible and nonvisible differences. We want to expand opportunities for all students and strongly believe that we will be better engineers when we embrace diversity.

## TENTATIVE LECTURE SCHEDULE FOR Spring 2017

<b>Date</b>	<b>Topic</b>	<b>Book Chapter</b>
1/17	Introduction	Chapter 13
1/18	Units	
1/24	Fundamentals	
1/25	Solid Waste Management	Chap. 11
1/31	Solid Waste Management	Chap. 11
2/1	Solid Waste Management	Chap. 11
2/7	Solid Waste Management	Chap. 11
2/8	Solid/ Hazardous Waste Management	Chap. 11/12
<b>2/14</b>	<b>Exam # 1</b>	
2/15	Hazardous Waste Management	Chap. 12
2/21	Hazardous Waste Management	Chap. 12
2/22	Hazardous Waste Management	Chap. 12
2/28	Hazardous Waste Management	Chap. 12
<b>3/1</b>	<b>Exam # 2</b>	
3/7	Solid Waste Presentations	
3/8	Hazardous Waste Presentations	
<b>3/14</b>	<b>SPRING BREAK</b>	
<b>3/15</b>	<b>SPRING BREAK</b>	
3/21	Air Pollution	Chap 9
3/22	Air Pollution	Chap 9
3/28	Air Pollution	Chap 9
<b>3/29</b>	<b>Exam # 3</b>	
4/4	Presentations on Air Pollution	
4/5	Risk Assessment	Chap 8
4/11	Risk Assessment	Chap 8
4/12	Sustainability & Green Engineering	Chap 13
4/18	Sustainability & Green Engineering	Chap 13
4/19	Sustainability & Green Engineering	Chap 13
4/25	Presentations Green Engineering	
4/26	Presentations Green Engineering Final Exam Review	
May 2-8	Final Exam	

## Rowan Engineering Homework Format

All homework problems, unless otherwise directed by your instructor, should follow the Rowan Engineering Format. This format is used for most professional engineering work. Unless otherwise directed by your instructor, you should use engineering paper or the equivalent for all homework assignments. Instructions are available on course website. Multiple problems are allowed in one sheet.

### Teamwork

Students will work in teams for their assigned homework and presentations.

### Academic Misconduct

You are encouraged to work together on assignments. However, copying is not acceptable. Copied assignments will receive a zero grade (both original and copies). Cheating on a test will cause the student to receive a zero grade, at a minimum and lead to a departmental hearing. If you are to miss an assignment due date, exam, quiz, field trip, or laboratory session you must have a valid excuse and notify me prior to the event (except in case of emergency).

### Presentations

Teams will have to make multiple presentations on assigned topics throughout the semester. Topics will be assigned in class.

Tips for presentation evaluation

Presentation Component	Ask yourself...	Grade 100 (20 points max, each)
Oral Communication	Did they clearly explain their objectives? Could you hear them? Did they speak at a good rate?	
Visual Communication	Did the visuals help you to better understand the design? Were words and equations legible?	
Professionalism	Did they present in a professional manner? How did they respond to questions?	
Technical Content	Does the team have an adequate knowledge of their assigned research topic?	
Overall	Was the presentation well organized? Did they introduce and summarize?	
	<b>Total</b>	