ChEE 295E

Careers in Environmental Engineering Colloquium

Fall 2017
University of Arizona

Instructors: Byron Hempel
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Office Hours: By appointment after class
Old Engineering 121

Class time: Wednesdays 3:00-3:50 PM Harshbarger Bldg, Rm 206

Credits: 1

Course Description:

The main course objective is to familiarize students with the possible careers in the environmental engineering field. The course is provided in colloquium style and designed to help students understand career opportunities for Environmental Engineers (EEN). Students will interact with invited speakers and explore various roles of EEN in solving real environmental engineering problems.

Textbook:

None. Required and optional readings will be provided through D2L. Please read the appropriate readings before coming to class.

Schedule:

Class	Date	Topic	Homework Assigned
1*	8/23	Intro to Environmental Engineering	Discussion online
2	8/30	Examples of Environmental Engineering issues and consulting	Resume first draft
3	9/6	Water Pollution	Resumes second draft
4	9/13	Water and Wastewater Treatment	Water Reuse Prep Work
5	9/20	Water Reuse	Optional survey of course
6*	9/27	Westland Speaker Robert Archer	Quiz and report over speaker

7	10/4	Air Pollution	IPCC written report summary
8	10/11	Field Trip to Tres Rios	Optional Survey
9	10/18	Field Trip to TARP	Optional Survey
10	10/25	Solid Waste Management	Find an example of ethically challenging case
11*	11/1	Michele Johnson – Guest Speaker	Quiz and report over speaker
12	11/8	Engineering Ethics	Ethics HW Report Personal Essay - begin
13	11/15	Research Project - Energy	Develop Research Project and peer review
	11/22	Thanksgiving	Eat lots of food
14	11/29	Presentations of Research Project day 1	Review of Presenters
15	12/6	Presentations of Research Project day 2	Review of Presenters; submit final Essay

*Group changes

Course Grading Policies:

In general, any homework or submissions online will be due the Monday night before class the next week. For assignments requiring feedback, I will return suggestions by Wednesday night. Assignments will drop to 50% of the grade if submitted on Tuesday (6 days after assigning), 25% on Wednesday (7 days after assigning), and not accepted after Wednesday (8+ days after assigning). For example, the first discussion is assigned on Wednesday, 8/23. I expect everyone to submit a response by Monday, 8/28. The grade will drop to 50% of the score if submitted on Tuesday, 25% on Wednesday, or will close after Wednesday.

Attendance – 6%

This class uses an active learning environment and attendance is critical for students to be able to learn the material and collaborate with group members. Class participation is therefore a requirement. Please note that the campus health center does not verify illnesses so other means must be used. The instructor will work with students to meet this requirement with email prior to class absenteeism.

Online Discussion Post – 2%

This introductory discussion post will lead off the class with finding out what students want to know or fields they are interested in. We may switch up a few lectures if enough interest would warrant a different topic.

Quizzes and reports of guest speakers – 20%

Quizzes (5% each) will be due on the Friday after the speaker presents; the reports (5% each) will be due on the following Monday.

Resume – 15%

The first draft of the resume will constitute 5% of the 15%, the final draft will be worth 10%

Group homework assignments – 27%

A water treatment, IPCC report summary and ethically challenging case group assignment will be given at the end of class and due the Monday after being assigned.

Personal Essay – 10%

As this course is designed to help expose you to various job opportunities, this essay assignment will be used to help you find a direction towards your career goals. Due on the Monday after being assigned.

Research Project – 20%

Engineering is all about presenting data and projects as a group. Presentations will be on the last two days of class.

Grading Rubric:
This course will be graded on a straight scale as follows:

Total percentage of points earned	Final Grade
90 - 100 %	A
80 - 89 %	B
70 - 79 %	C
60 - 69 %	D
< 60%	E

Course Lectures and Attendance Policies:
This class uses an active learning environment and attendance is critical for students to be able to learn the material. Class participation is a requirement. A variety of measures will be used to ensure students are in class and excuses are not accepted unless they are substantiated by documented and verifiable methods. Some of the methods that may be used to verify attendance include submission of homework, submission of extra credit assignments in class, and visual inspection of the classroom. Please note that the campus health center does not verify illnesses so other means must be used. The instructor will work with students to meet this requirement with email prior to class absenteeism.

Pagers/telephones, or other communication technologies are not to be used during class time. Students who disrupt class or learning activities will be asked to leave the classroom.

Groups will be assigned on the first day of class and will be reassigned on the 6th and 11th class during the semester.

Important Dates:

- 9/18-22/17 – Career Fair Prep
  http://www.career.arizona.edu/events/prepareforthefair
- 9/25-27/17 – Career Fair
  http://www.career.arizona.edu/events/fallfair
- 10/25/17 – Sustainability Career Mixer
  https://app.joinhandshake.com/career_fairs/2971/student_preview
- 11/1/17 – Graduate school day
  https://www.career.arizona.edu/events/ua-graduate-school-day
- 2/15/18- iExpo for Engineering students (register Fall 2017)
  www.escuofa.com/iexpo

Scholastic Dishonesty Policy: Integrity is expected of every student in all academic work. Scholastic dishonesty will not be tolerated. Please refer to the UA Code of Academic Integrity for information about procedures and about what constitutes scholastic dishonesty (http://deanofstudents.arizona.edu/academicintegrity).

Plagiarism: Although this course is not writing intensive, plagiarism is strongly discouraged. The plagiarism policies within the Student Code of Academic Integrity will be strictly followed: http://doc.web.arizona.edu/uapolicies.

Threatening Behavior: The general policies against threatening behavior by students will be followed: http://policy.web.arizona.edu/~policy/threaten.shtml.

SALT Center and Disability Resource Center: Students who are able to use the services of the Strategic Alternatives Technology Center or may have other educational needs may see the professor at any time to discuss accommodations for their needs. However, this should be done at least 1 week prior to the first exam to allow for preparations that may be needed. Students who are registered with the Disability Resource Center must submit appropriate documentation to the instructor if they are requesting reasonable accommodations: http://drc.arizona.edu/teach/syllabus-statement.html.

Accessibility and Accommodations: It is the University's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. You are also welcome to contact Disability Resources (520-621-3268) to establish reasonable accommodations. Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

Special Materials Required for the Class: See online course content. Extra readings will be supplied through D2L.

Changes to the Syllabus: The information contained in the course syllabus, other than the grade and absence policies may be subject to change with reasonable advanced notice as deemed appropriate by the instructor.