

EVS 5905-Environmental Science Colloquium/Seminar

School of the Environment

Florida A & M University

Spring 2012

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SOE MISSION STATEMENT

The School of the Environment (SoE) strives to produce students and citizens uniquely prepared to address present and future environmental science concerns. ESI fosters the development of students by emphasizing rigorous academic course work; student involvement in faculty research; and student involvement in collaborative research efforts with other universities, community/junior colleges, national laboratories, regulatory local, state, national and international agencies, corporate environmental contractors, utilities, municipalities, and student involvement in community and community issues and environmental public policy issues.

COURSE DESCRIPTION

FAMU catalog description: Discussions will focus on student presentations, seminars and guest speakers.

Prerequisite(s): There are no prerequisites for this course

Core curriculum course: Yes

Availability to non-ESI majors: Yes

COURSE OBJECTIVES

In this course, students will learn how to read, understand and present data from the original science literature. Student will select a research paper of their interest and, following approval by the instructor, make an oral presentation of information contained in the paper to the class. This will be followed by a detailed critique of the research findings including alternate methods or approaches such that the research findings could have been strengthened or further improved.

Class Schedule*: Every Wednesday from 12:20- 1:10 pm:

Detailed Syllabus:

1/09: Overview of Syllabus, Course Organization and Administration, Grading Policy, Topic Assignments, Reading Materials, Expectations etc.

Topics: The objective of this class is to discuss current and emerging research in environmental sciences. Some such topics include, but not limited to:

- Anthropogenic impacts to the environment by emerging contaminants, such as those including personal care and pharmaceutical products, hydrocarbon spills in marine environments, fate and antibiotics released into the environment through human consumption and/or animal farming facilities, nanoparticles released into the environment and their effects, among others.
- Invasive species and their impacts to the environment.
- Other topics of interests may be covered as appropriate such as global climate change and ramifications to the environment.
- Environmental sustainability and technology development

Student Independent Presentations:

1/16: Student #1:
1/23: Student #2:
1/30: Student #3:
2/6: Student #4:
2/13: Student #5:
2/20: Student #6:
2/27: Student #7:
3/6: Student #8:
3/13: No class

Student Group Presentations (Two students in each group):

3/20: Group #1
3/27: Group #2
4/3: Group #3
4/10: Group #4
4/17: Group #5
4/24: Final Review

*** Syllabus and instructor's schedules are subject to change at the discretion of the professor(s).**

LEARNING MATERIALS

Some suggested Dos and Don'ts:

Do's:

1. Spend time to find a journal article that is of interest to you and the class. Please DO NOT google to obtain scientific literature. Google scholar is acceptable. Examples of reliable scientific search engines include Web of Science

(<http://apps.isiknowledge.com/>); PubMed (<http://www.ncbi.nlm.nih.gov/sites/entrez>) or Agricola (<http://agricola.nal.usda.gov/>).

2. Present an adequate review of the background such that the audience will understand the significance of the problem.
3. Consult and read the cited references.
4. Prepare a flow chart to explain the methods.
5. Present and explain, in detail, all tables and graphs including statistical analyses, if any.
6. Complete the presentation within a time that will leave 5 minutes for questions.

Don'ts:

1. You need to be presenting a research article and not a review article. Review articles present a comprehensive survey of the topic being covered and are not appropriate for this class.
2. Read from the paper for your presentation.
3. Wait until the last minute to look up for cited references.
4. Select a paper that is too specific to your own research.

EXPECTED LEARNING OUTCOMES

1. **Foundation skills and knowledge:** Students will demonstrate a basic understanding of various factors that influence the environment, including interactions among biological, chemical, and physical processes integral to the environment.
2. **Effective written and verbal communication:** Students will develop an extensive written and oral vocabulary to communicate effectively with environmental science professionals, as well as with the public at large. Students should also be able to communicate a detailed understanding of the concepts of environmental processes, environmental impacts, environmental change, environmental management, and environmental regulations.
3. **Critical thinking:** Students will demonstrate an ability to comprehend, assimilate and critically evaluate facts and concepts related to their chosen topic in environmental science, and to stimulate discussion and answer questions posed from their peers on this topic.
4. **Integration of learned skills and information:** Students will demonstrate the ability to interpret, synthesize, and analyze information from popular science, research and policy literature.

COURSE ADMINISTRATION

Evaluation: Students will be graded based on the quality of their presentations, their ability to provide a clear and lucid representation of the scope and focus of the research as well as their understanding of the conclusions drawn from the data. Students are expected to attend each presentation.

Journal Article Independent Presentation: 30%

Journal Article Group Presentation: 30%
Class Participation and Discussions: 40%

Discussions and Interactions: Each student is expected to actively participate in class discussions. Participation not only includes discussions on assigned readings but also asking questions following presentations and being respectful and attentive to the professor, classmates, and guest speakers.

Presentations: Students are responsible for selecting and presenting environmental science topics for class discussions. Two individual presentations and 1 team presentation is expected of each student. Presentations will receive critique and grades by both the instructor(s), and by your peers. The selected topic must be pertinent to current environmental issues and examples will be provided in the class. These topics could be from recent newspaper reports, popular science magazines, reputed science journals etc. The professor must approve of the article choice. A typed abstract will be prepared by the student who presents the article and handed out in the class before presentations. Each student is expected to fully participate in the ensuing discussions.

Your final course grades will be determined on the following grade scale:

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = 0% - 59%

Make-up policy:

Missing any exam or deadline is strongly discouraged. Excused absences will be allowed only with advance permission of instructor and for valid hardship. Homework, presentations and projects will not be accepted late; no make-up exams will be given unless proof of an extreme hardship situation is furnished.

Attendance:

Regular and punctual attendance is expected and is fundamental to success in this course. Information presented during class is the responsibility of the student whether present or not. It is up to the student to obtain class material from other students when a session is missed. As stated in the most recent edition of the Florida A & M University handbook ("The Fang", pp 72-73) any student exceeding 3 unexcused absences may be dropped from the course and assigned the grade F".

Cell Phone Policy:

Cell phone use is strictly prohibited during class; no ringing, vibrating, text-messaging, games, pictures, etc. Failure to comply with this rule will result in your dismissal from the class.

Policy Statement on Non-Discrimination

It is the policy of Florida Agricultural and Mechanical University to assure that each member of the University community be permitted to work or attend classes in an environment free from any form of discrimination including race, religion, color, age, disability, sex, marital status, national origin, veteran status and sexual harassment as

prohibited by state and federal statutes. This shall include applicants for admission to the University and employment.

Academic Honor Policy

The University's Academic Honor Policy is located in the FANG Student Handbook, under the Student Code of Conduct- Regulation 2.012 section, beginning on page 55-56.

ADA Compliance

To comply with the provisions of the Americans with Disabilities Act (ADA), please advise instructor of accommodations required to insure participation in this course. Documentation of disability is required and should be submitted to the Learning Development and Evaluation Center (LDEC). For additional information please contact the LDEC at (850) 599-3180.

Statement of Understanding

I, _____ have read and completely understand the
course (PRINT NAME) policies for this class.

Signature

Date