SYLLABUS
ENV 415: ENVIRONMENTAL ASSESSMENT AND MANAGEMENT

CO-INSTRUCTOR: Dr. Hans Williams, Arthur Temple College of Forestry and Agriculture.
INSTRUCTOR OFFICE HOURS: 3:00 to 5:00 pm on MTWRF or By Appointment;
Office: Forestry Room 100
INSTRUCTOR PHONE NO: Office = 468-2313; E-MAIL = hwilliams@sfasu.edu

CO-INSTRUCTOR: Dr. Sheryll Jerez, Arthur Temple College of Forestry and Agriculture.
INSTRUCTOR OFFICE HOURS: 8:00 to 12:00 noon MW, 11:00 to 12:00 noon TR or By Appointment; Office: Forestry Room 119
INSTRUCTOR PHONE NO: Office= 468-6614; E-MAIL = jerezs@sfasu.edu

COURSE MEETING TIMES: Lecture: 9:30 to 10:45 Tuesday and Thursday;
Laboratory 12:00 to 2:50 Friday

CATALOG COURSE DESCRIPTION: Four semester hours, three hours lecture and three hours lab per week. Environmental management and planning in the United States with reference to the principles and procedures for preparing assessments and impact statements. Senior standing or permission of instructor.

PREREQUISITE: Seniors Only. **If you have not successfully completed (minimum “C” grade) FOR 209/BIO 313, ENV 210, ENV 349, GIS 224, GIS 390, you should drop this course and complete these sophomore and junior-level courses before enrolling in ENV 415.** If you have successfully completed BLW 478, ENV 402, ENV 403, ENV 412, ENV 420 and ENV 450, information from these courses will be useful in developing the required environmental assessment document that meets high expectations.

TEXTBOOK: There is no required textbook. Students will be responsible for content in assigned handouts.

PROGRAM LEARNING OUTCOMES:

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<th>B.S. Environmental Science Program Learning Outcomes</th>
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<tr>
<td><strong>Proficiency Levels</strong></td>
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<td><strong>Course</strong></td>
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<td>ENV 415</td>
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<td>N/A – Not Applicable</td>
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STUDENT LEARNING OUTCOMES:
A. Describe the principles and procedures for preparing environmental site assessments and environmental impact statements (All PLOs).
B. Introduce techniques for the assessment of various environmental variables (PLO1).
C. Describe the application of environmental rules and regulations to regulated entities (PLO3).
LECTURE OUTLINE and PERCENT OF SEMESTER ON SUBJECT:
The instructors reserve the right to change topics in order to incorporate new information germane to the course. The percent of time during the semester spent on each topic may change to accommodate pace of instruction.

Dr. Williams
Week 1          Regulatory Framework
Week 2, 3 and 4  NEPA
Week 5          ISO 14000
Week 5          Environmental Audits

Exam 1 – NEPA Concepts and Environmental Audits

Dr. Jerez
Weeks 6 to 9  Air Quality
                -Summary of CAA
                -National Emission Standards for Air Pollutants
                -Emission Inventories and Analysis
                -Air Permitting
                -Pollution Transport
                -Impact Prediction
                -Emission Control Strategies

Weeks 10 to 12 Hazardous Waste Management
                -RCRA
                -CERCLA
                -FIFRA

Exam 2 – Air Quality and Hazardous Waste Management

Dr. Williams
Week 13         Water Quality
                Section 319 Programs (Non-point source control)
                Total Maximum Daily Loads
                -Municipal and Industrial Wastewater Treatment

Week 14          Environmental Ethics
Week 15          Environmental Justice

Water Quality Information, Ethics and Justice will be included on Final Examination

LABORATORY: The laboratory will primarily serve as an independent study period to be used for completion of the EIS (See Below). Because each student has the laboratory scheduled each week, this guarantees that teams can arrange to meet at least one time each week without conflict for field data collection and report preparation. One or two additional scheduled laboratories may occur during the semester in order to accommodate presentations by guest environmental professionals. Students will be notified in advance, if additional scheduled laboratories will occur.
Environmental Assessment Report

Two-person teams will be selected to complete data collection and the Environmental Impact Statement (EIS) document. The instructors will choose the teams. The proposed project site will be determined by the instructors. One formal site visit with the instructors will occur early in the semester. Field equipment needed to conduct environment surveys can be checked out from the ATCOFA equipment room and GIS Lab. Each team shall work independently on field data collection and report preparation. Each team must have their field assessment approach approved before they can begin data collection.

Each team should reference published environmental assessments and EIS's in the library or on the web in order to gain an understanding of report format and content. Some or all of the skills you have learned in previous courses may be applicable to this assignment (Ecology, Soils, GIS and Mapping, Env. Measurements, Hydrology). Thoroughness of Content and Professional Presentation will be important considerations in determining the grade on your document. On the date(s) assigned in the Grading section, each team shall make a 20 minute PowerPoint presentation on the methods and results of their EIS. At that time, each team will turn in two bound copies of their EIS and will be required to provide a digital (pdf) copy of their document.

COURSE POLICIES:
Attendance: Lecture and scheduled laboratory attendance is mandatory. Lectures and scheduled laboratories will start promptly at the assigned time. Tardiness will not be tolerated and may result in you being locked-out of the room and counted as absent. If you have a legitimate reason for being persistently tardy, discuss the issue with the professor. If lectures or laboratories are missed because of a university recognized excused absence, it will be the responsibility of the student to notify the professor and, if necessary, provide appropriate documentation before assistance will be provided on missed information. For lectures only, students will be allowed only two unexcused absences for the semester. Each additional unexcused absence will result in a 5 percent point reduction for each occurrence from the final point total. Refer to the SFASU Policy Manual for details. http://www.sfasu.edu/policies/class_attendance_excused_abs.asp

Acceptable Student Behavior: Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Program: http://www.sfasu.edu/judicial/earlyalert.asp. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Responsible use of technology: It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop for matters unrelated to the course may be grounds for dismissal from class or other penalties.

Cell phones (including text messaging): The use of a cell phone, including text messaging, will not be tolerated in the classroom or during a scheduled laboratory. Make sure that cell phones are turned-off and stowed before entering the classroom. If a cell phone rings during a lecture or laboratory, or I
observe the use of text messaging, I will deduct ten (10) points from the offending student's total point score for each occurrence. The use of cell phones during an exam will be considered cheating. See Course Policy Below.

**Cheating, Plagiarism, Unprofessional Behavior:** Cheating and Plagiarism will not be tolerated. The severest penalty (F for the course) will be awarded if caught cheating or plagiarizing. An excerpt from the SFASU Policy and Procedures Manual below contains further details.

"It is the responsibility of the student to abstain from cheating. Dishonesty of any kind with respect to examinations, written assignments [completed] in or out of class, alteration of records, or illegal possession of current examinations or keys to examinations shall be considered cheating. . . Courtesy and honesty require that any ideas or materials borrowed from another must be fully acknowledged. Offering the work of another as one’s own is plagiarism. The subject matter of ideas thus taken from another may range from a few sentences or paragraphs to entire articles copied from books, periodicals, or the writing of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment is also considered plagiarism. Any student who fails to give credit for ideas or materials taken from another is guilty of plagiarism." A full description on the university policy on academic integrity can be found on-line: http://www.sfasu.edu/policies/academic_integrity.asp

**Grading:**

1. Two, 1-hour exams during semester (100 points each) 200 points
2. Comprehensive Final Exam 150 points
3. **Team** Memos (50 points each) 200 points
   - A. Environmental Description - tables/text Due March 10
   - B. Leopold Impact Prediction Matrix Due March 24
   - C. Impact Assessment for Each Alternative -tables/text Due March 31
   - D. All Figures and Maps Due April 7
4. Environmental Impact Statement (**Team Report**) 400 points
   **Report Content and Scoring**
   - Written Presentation and Professionalism 15%
   - Executive Summary and Conclusions 5%
   - Introduction and Environmental Description 25%
   - Impact Prediction - Leopold Matrix 10%
   - Impact Assessment and Alternatives Analysis 20%
   - Proposed Consultation and Public Participation Plan 5%
   - Proposed Mitigation and Monitoring 5%
   - Literature Cited 15%

5. **Team** Presentation 50 points

**EIS and Presentation Due April 26, 2016**

Total Points Available in Course 1000 points

**Scheduling Exams**

One-hour exam dates will be announced at least 7 working days prior to the exam. Final exam will occur during finals week.
Additional EIS Report Grade Information
Each team member will receive the identical score for their memos, EIS report and presentation. If necessary, the instructors may reduce the score for an individual student that did not meet expectations to complete any of the assignments related to the EIS. The reduced score will be based on the documents referenced below and observations of the instructors.

1. For each major document content item listed above, a team member shall be identified as the lead.
3. A peer-evaluation of your team member’s performance quality and quantity.

Learning Disability
Persons who require special accommodations necessary to complete course requirements must first contact the Disability Services Office at 468-3004. Following notification from the Disability Services Office, all reasonable accommodations will be provided in order to assist the student in successfully completing the course.