Course Title:  
31951: ESCI 5480.001–Selected Topics  
Environmental Site Assessment  
Level: Graduate  
Schedule Types: Lecture/Discussion, & Field/Laboratory - 4 sem. hrs. (3:2)

Semester: Fall 2014  
Instructor: H.A. Tony Wood  
E-mail: tony.wood@tamucc.edu  
Phone: 361-825-3335  
Office: NRC 1105  
Field Study: A mandatory Site Assessment Field Trip at a date, time, and place to be determined  
Office Hours: By Appointment. Generally 9:00-5:30 M-Th

Official Classroom Assignment: EN 104  
Class Hours: Tues 5:30-8:00

Course Description: This course offers an interdisciplinary review of environmental regulations, natural environmental conditions, industrial and pollution history, and the principles of environmental risk assessment as applied to the evaluation of specific parcels of real property.

Laboratory/field sessions will include the actual development of a Phase I Environmental Site Assessment using the USEPA All appropriate Inquiry or the equivalent ASTM E1527-05 and/or the ASTM E1527-13 Standard Practice for Environmental Site Assessments processes.


Prerequisites: Approval by academic advisor. Prior knowledge of United States environmental regulations is assumed. Prior or concurrent completion of Environmental Regulations (ESCI 4301 or ESCI 5302) are recommended.
Student Learning Outcomes: Successful participation and study in this course will enable students to:

1. Understand the regulatory framework for environmental site assessments,
2. Demonstrate how to locate and interpret environmental information pertinent to a specific site,
3. Know the qualifications required to become an Environmental Professional (EP) in accordance with the USEPA definition. Initiate the 5 year calendar for becoming an EP,
4. Demonstrate an understanding of the historical context and the underlying framework of the laws and regulations that sponsored the development of ESAs.
5. Understand the market drivers and develop a marketing concept for ESA work.
6. Analyze, prioritize, and be able to explain the business and economic risks associated with environmental liabilities in property acquisition.
7. Understand the potential liabilities associated with environmental pollution and for EPs performing ESAs.
8. Develop an ESA for a specific site,
9. Engage in and optimize the development of the ESA report by organizing and coordinating a functional group effort.
10. Be able to plan and budget the work effort to complete an ESA.

Course Requirements:
Regular class attendance is expected. Students who must miss a class are responsible for obtaining notes and instructions or assignments from other class members.

1. The textbook will be required reading. One or more chapters of the textbook will be discussed each week of the course. Reading and comprehension of the chapter(s) before each classroom session is expected.
2. One or more websites will be assigned for review each week. These websites should be reviewed and the student should be prepared to discuss them prior to the next class session.
3. There will be three take-home essay or PowerPoint assignments. Each will be due during the next class period unless otherwise specified. These assignments will not be accepted after the due date resulting in a zero score for that assignment.
4. One examination will be given during the semester. Students are expected to complete the exam on the scheduled exam date. Students with an excused absence from the professor must make up the exam. Exam grades will be reduced by 2 points per day. A different and potentially more difficult exam will be given from the regular class exam.
5. Students may work with a consulting firm, regulatory agency, realtor, bank, law firm, or industrial/commercial organization on an environmental assessment project identified by the professor. Students without an affiliated sponsoring organization will work on a
project site identified by the instructor. Specifics of each project will be negotiated between the student, the instructor, and the supervising organization’s representative.

6. Each student is required to write an Environmental Site Assessment (ESA) report based on their work with their assigned agency or organization during the semester. The report must also include a cover page, an executive summary, and a list of sources. The paper will be due by the date of the last regularly scheduled class meeting. Late papers and papers not meeting minimum requirements will receive less than full credit. Late reports will not be accepted. Graduate students will be required to develop a presentation on their ESA and deliver it to the class during the last two classes of the semester or during the period scheduled for the final exam.

7. The course may include guest speakers during the semester representing a variety of expertise and experience in environmental issues. Students will be responsible for material covered by these speakers and it may be included on the exam.

**Evaluation Criteria:**
- ESA Paper 40%
- Class Discussions Participation 10%
- Take-home Assignments (3) 15%
- Exam 35%

**Course Outline:**

**TOPICS AND TENTIVIVE SCHEDULE**

**Week 1**
- Overview of textbook
- Introductions & expectations
- Overview of the course and the reasons for environmental assessments
- How ESA Reports should be organized
- The Importance of the Executive Summary
- Read Chapter 1 & 2 for next week
- Review USEPA websites on ESAs & Brownfields for next week

**Week 2**
- Environmental pollution liabilities
- Standards of practice
- Brownfields
- Historic Overview
- Special focus pollutants and contaminants
- Site selections
- Read Chapter 3 for next week
• Review the USEPA All appropriate Inquiry and ASTM E1527 websites for next week
• Assignment #1: Identify a brownfield or historic site in Texas with contamination from a source more than 60 years old and write a 2-3 page essay about it.

Week 3
• Initiating the ESA
• Information gathering (both ways)
• Mapping
• Title searches
• Read Chapter 4 for next week
• Visit a commercial environmental data search resource for next week
• Assignment #2: Develop a set of historical maps and images for your ESA site

Week 4
• Assessing the physical setting
• Geologic
• Hydrologic
• Read Chapter 5 for next week

Week 5
• Historic uses of the property & surrounding areas
• Read Chapter 6 for next week

Week 6
• Regulatory agency resources & data
• Read Chapter 7 for next week
• Assignment #3: Prepare a report or a PowerPoint on the Physical Setting of your ESA site

Week 7
• Visual inspections of the property
• Indications of possible environmental issues
• Reviewing surrounding properties
• Prepare for the only course exam next week
• Read Chapter 8 for next week

Week 8
• Conducting ESA interviews
• Exam (This is the only exam in this course)
• Read Chapter 9 for next week
• Assignment #4: Research & prepare a PowerPoint presentation on a topic from Ch. 9-10

Week 9
• Building materials & special building hazards
• Read Chapter 10 for next week
• Presentations of Ch.9-10 Power Points
• ESA Site Visit (This visit may be +/- 2 weeks depending on the site availability.)

Week 10
• Industrial & Commercial Activities
• Read Chapter 11 & 12 for next week
• Presentations of Ch.9-10 Power Point

Week 11
• Special Resource Issues
• Developing the Phase 1 ESA
• Reasons for Phase 2+ ESAs
• ESA Report Expectations

Week 12
• Environmental Site Assessments Due
• Presentation of individual Graduate ESAs

Week 13
• Preparation of a Budget to Conduct an ESA
• Presentation of individual Graduate ESAs

General Information and Statutory Requirements:

Academic Integrity/Plagiarism

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a credit of zero points on the assignment or test.

Dropping a Class

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form.
Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class.

**Classroom/professional behavior**

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Statement of Civility**

Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

**Grade Appeals**

As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html), and the College of Science and Engineering Grade Appeals webpage ([http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html)). For assistance and/or guidance in the
grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

**Disabilities Accommodations**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**Statement of Academic Continuity**

In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.