ESCI Selected Topics - Environmental Site Assessments/Brownfields
ESCI-6480.001/101   CRN 83976/84057
Department of Physical & Environmental Sciences
Spring 2019

COURSE SYLLABUS

A. COURSE INFORMATION

Course number/section:   ESCI 6480.001
Class meeting time:   Tuesdays 1700-2000
Class location:   TBD
Course Website:   83976.201901: [SP-19] ESCI-6480-001 - ENVIRONMENTAL ASSESSMENT
                  https://bb9.tamucc.edu/webapps/blackboard

B. INSTRUCTOR INFORMATION

Instructor: H.A. Tony Wood
Instructor Mailing Address: 6300 Ocean Drive, Unit 5850, Corpus Christi, TX 78412
Instructor Office: 6300 Ocean Drive, NRC Suite 1105, Corpus Christi, TX 78412
Office Hours: By Appointment. 8:00-5:00 M-F
Telephone: (w) 361-825-3335
E-mail: tony.wood@tamucc.edu
Appointments: Students should submit a meeting request using Outlook Calendar. The meeting should not be considered confirmed until it is accepted by the instructor. (Walk-ins are sometimes accepted at the discretion of the instructor.)

C. COURSE DESCRIPTION

Catalog Course Description
This ESCI Special Topics course is designed to prepare the student to develop and conduct Environmental Site Assessments in accordance with USEPA and ASTM protocols.

Extended 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 E1527-13 Standard Practice for Environmental Site Assessments processes.
This course initiates the process to become a USEPA designated Environmental Professional (EP) after they having conducted Environmental Assessments for a period of 5 years.

D. PREREQUISITES AND COREQUISITES

Prerequisites
None

Co-requisites
Knowledge of United States environmental regulations is assumed; ESCI 4301 or ESCI 5302 are recommended.

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook
Environmental Site Assessment Phase I: A Basic Guide (3rd ed.) by Kathleen Hess-Kosa;
ISBN 978-0-8493-7966-6

Optional Textbook(s) or Other References
ASTM E1527-13 Standard Practice for Environmental Site Assessments processes.

Supplies
EDR or Banks report on a target site will be provided to the students in .pdf format.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

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. Develop an ESA for a specific site,
5. Understand the potential liabilities associated with environmental pollution and for EPs performing ESAs.
G. INSTRUCTIONAL METHODS AND ACTIVITIES

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

- 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.
- 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.
- 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.
- 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.
- 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.
- Attendance on a one-day field trip to an off campus location within 50 miles is required.
- 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.
- 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.
- Graduate students will prepare a briefing on a brownfield site in Texas and will present it to the class.
H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>35%</td>
</tr>
<tr>
<td>Class Discussions &amp; Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>15%</td>
</tr>
<tr>
<td>ESA Report</td>
<td>40%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

I. COURSE CONTENT/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

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Attendance/Tardiness
Weekly attendance is mandatory. Attendance may be in the classroom or it may be accomplished by logging into the course website on Blackboard within each week of the semester. Students are expected to be courteous to others.

Late Work and Make-up Exams
Because assignments can be completed and submitted online at any time over the course week, extensions will only be granted for extenuating circumstances. Assignments that are delivered late may be accepted for reduced credit until grading has finished. Make up exams must be completed after the classroom exam but within 2 weeks.

Extra Credit
The baseline information in this course is of such importance that students are encouraged to gain additional knowledge about the core topics rather than seeking extra credit to mitigate substandard grades.

Cell Phone Use – Only permitted for course relevant research and never during exams.

Laptop Use - Only permitted for course relevant research and never during exams.
Participation - Weekly course participation is mandatory. Participation in the classroom may be a function of personality type. In this course participation will be evaluated based on both classroom discussions and Blackboard Discussion Forum postings.

K. COLLEGE AND UNIVERSITY POLICIES

- **Academic Integrity (University)**
  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 failing grade.

- **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.

- **Deadline for Dropping a Course with a Grade of W (University)**
  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 your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. 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. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/calendar/](http://www.tamucc.edu/academics/calendar/)) for the last day to drop a course.
Grade Appeals (College of Science and Engineering)
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, and the College of Science and Engineering Grade Appeals webpage at 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.

Disability Services
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 (361) 825-5816 or visit Disability Services 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.

http://disabilityservices.tamucc.edu/

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.

L. OTHER INFORMATION
• **Academic Advising**
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**GENERAL DISCLAIMER**
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.