

ENVS 302 — Phase I Environmental Site Assessment Courses Syllabus: Fall, 2019

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Required Text:

Socha, T.M. (2001) A Technical Guide for Performing and Writing Phase I Environmental Site Assessments. San Jose:Writer's Press Club.

Course Description:

Introduce the principle and method for Phase I Environmental Site Assessments; culture students' practical ability to conduct Phase I Environmental Site Assessments.

Instructional Method:

Students do Phase I Environmental Site Assessments and write the final reports.

Course Objective:

Upon completion of this course, you will be able to:

1. conduct a Phase I Environmental Site Assessment;
2. present the results of Phase I Environmental Site Assessment in a professional written report.

Timeline:

Aug 26-Sep 6 finish "unit 1" in D2L and find the first site

Sep 9-13 finish unit 2; Sep 16-Sep 20 finish unit 3;

Se 23-Sep 27 finish unit 4; Sep 30-Oct 4 finish unit 5;

Oct 7-11 finish unit 6; Oct 14-18 finish unit 7 and **submit report 1**;

Oct 21-25 finish unit 8, find the second site;

Oct 28-Dec 8 conduct investigation in the second site and **submit report 2**;

Evaluation:

Finish two reports and **submit to the assignment submission folder in D2L** on time (500 points total):

A $\geq 90\%$ B $\geq 80\%$ C $\geq 70\%$ D $\geq 60\%$ F $< 60\%$

The first report must be turned in before **5 pm on October 21**. Feedback will be given to the first report which can be applied to improve the second report. The second report must be submitted before **5 pm on December 8**. Late reports will receive a "C" or less.

Grades will depend on:

1. Quality and thoroughness of the investigations;
2. Quality, thoroughness, and professional appearance of the ESA reports.

How To Proceed in this Course:

1. Read the book and the assignments in each unit completely, from which you can get basic ideas about how to conduct Phase I ESA and how to write final reports.

2. Phase I ESA will be conducted on two sites during the semester. You must select two project sites by yourself. These sites should be **unoccupied** properties. Sites are typically abandoned **commercial operations**, such as old gas stations, restaurants, laundries, etc.

3. Get permission from the site owner, operator, manager, or managing real estate company before you begin the investigation. Completely explain to the appropriate person why you want to the investigations; the findings will not be used for any legal or financial procedure. Otherwise, the owners may be upset with us. Also, we do not want anything bad happens to the students because of this course. If you have trouble in getting permission, select a different site. Investigations take a lot of time. If you can not find a site talk to me ASAP, **do not wait until the last minute. I would ask you guys not to use sites in Commerce, as our previous students have done investigations on most of the sites in commerce.**

4. During the investigation, you need to determine all of the past uses of the property **and the adjacent properties**, all the past owners, any hazardous chemicals that were used or may have been used on the property **and on adjacent properties**, and the potential for such contaminants to migrate within the subsurface of the property. Your investigation and report **may include but not limited to** (when possible):

(1) Historic and current use of property and Information of environmental settings

(a) A title search, who own it now, who once owned it, when, how long ...**back to 1940**;

(b) Previous environmental assessment record, if applicable;

(c) Building permits;

(d) Street directory and zoning records;

(e) Visits to regulatory agency, such as the fire department, EPA and city offices, that may have record of any hazardous chemicals used on the property or on adjacent properties;

(f) A aerial photos of the site;

(g) Property sketch;

(h) Proximity to population centers; environmentally sensitive areas, etc.

(i) A topographic map which may be obtained from United States Geological Survey (USGS);

(j) Sanborn maps, if possible;

(k) A description of the site's geology, such as soil and rock type, native plants, etc. Information may be gotten from U.S. Department of Agriculture soil survey maps;

(l) A description of the site's hydrology, such as the depth, flow rate, directions of groundwater, information may be gotten from well driller, well maps, soil survey maps and state agency.

(2) Complete description of your site visits and **take photographs** of items of interest. Site visit provides an opportunity to get more information. An inspection of all aspects of the property , such as exterior site conditions and inside of the building. There are many things to look for, depending on the nature of your site:

(a) Type or condition of vegetation, areas where grass doesn't grow because of chemical pollution;

(b) Drain pipes sticking out the back of buildings;

(c) Gullies; pools, or lagoons;

(d) Dead critters;

(e) Pipes sticking out of the ground;

(f) Underground storage tanks;

(g) Stained curbs around the property;

(h) Hauled-in dirt or gravel;

(i) Mounds where something may be buried;

- (j) Odors
- (k) Wells including dry wells, irrigation wells, abandoned wells...
- (l) Transformers and old light ballasts may suggest the presence of polychlorinated biphenyl (PCBs);
- (m) Waste water and other liquid discharges from the site;
- (n) Any other unusual or unnatural features you might observe.

(3) Interviews with the previous and present owner of the property, with owners of adjacent properties, and with neighbors and/or long-term employers to get further information of the sites. Interviews may be conducted prior or during site visit. Always document names, relevance to the property, time, date, form of communication, etc. Questions depend on the characteristics of the sites which may be related to:

- (a) History of the site;
- (b) Nature of the site;
- (c) Waste disposal practices;
- (d) Past environmental emergencies, etc.

5. **Record everything** you do in a “diary” and **turn it in with your report**: when and where you do all of the above, who you talk to, a summary of the information, or if it failed to discover any information.

6. Follow the guidelines of the text book and submit the assignments on time.

7. Other things need to keep in mind: due dates; try your best to do investigations then you will not have “no data available”; share the sources of information with your classmates and save them for future use; grades depend on the quality, thoroughness of the investigations and presentation of final reports (professional looking, tidy, nice format, etc).

Possible Helpful Recourses

Property Assessors:

US Property Assessors
 Collin County
 Dallas County
 Tarrant County
 Denton County

Maps:

Bing.com (use aerial view)
 Topo Maps:
 US Geological Survey
 USGS
 FEMA
 National Wildlife Refuge
 North Central Texas Council of Governments
 National Wetland Inventory
 Texas Well Reports
 US EPA Envirofacts Query
 TCEQ Central Registry
 TCEQ PST Database

Natural Resource Conservation (Soil Information)

USDA Web Soil Survey

Texas Aquifers

TX Railroad Commission

Coastal Barrier Unit Maps

Endangered Species

National Register of Historic Places

Regulatory:

EPA

CFR Title 40-Protection of Environment

OSHA – 29 CFR

Texas Administrative Code (TAC)

TX Drycleaners

TX Drycleaners Database

EPA regions and state links

Texas Asbestos Program

HUD Lead Laws

Environmental Information Association

University Procedures:

Students with Disabilities:

The Americans with Disabilities Act (ADA) prohibits discrimination against people with disabilities in employment, transportation, public accommodation, communications, and governmental activities.

If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services, Texas A&M University-Commerce

Gea Library- Room 132

Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: Rebecca.Tuerk@tamuc.edu

Website: Office of Student Disability Resources and Services

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

TAMUC Attendance:

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01. <http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity:

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

Graduate Student Academic Dishonesty 13.99.99.R0.10

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

Nondiscrimination Notice:

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Student Conduct:

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette <http://www.albion.com/netiquette/corerules.html>

Early Intervention for First Year Students:

Early intervention for freshmen is designed to communicate the University's interest in their success and a willingness to participate fully to help students accomplish their academic objectives. The university through faculty advisors and mentors will assist students who may be experiencing difficulty to focus on improvement and course completion. This process will allow students to be knowledgeable about their academic progress early in the semester and will provide faculty and staff with useful data for assisting students and enhancing retention. Grade reports will be mailed by the end of the sixth week of the semester.

Campus carry rules:

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Technology Requirement:

At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

D2L Access and Log in Information

This course will be facilitated using D2L, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to myLeo, then select Apps, and then select myleo online (D2L Brightspace).

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at

903.468.6000 or helpdesk@tamuc.edu. If you are having technical difficulty with any part of D2L Brightspace, please contact Brightspace Technical Support at 1-877-325-7778.

Interaction with Instructor Statement

If you have questions pertaining to the content of this course, please contact me via email. Generally, emails will be answered within 24 hrs. If I can not answer emails on time, I will let you know in advance.