



## Introduction to Environmental Science Laboratory Syllabus Fall 2012

**ENVS 1301L.03L – Thursday 1:00 p.m. – 2:50 p.m. Room STC 136**

**Instructor:** Susan Gossett

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**Office Hours:** Tuesday and Thursday  
8:00 a.m. – 9:00 a.m. and 11:00 a.m. - noon

Others by Appointment

### Course Description

ENVS 1301L is the laboratory section designed to complement the lecture materials presented in the core curriculum of the coursework. The laboratory exercises are designed to provide a “hands-on” application to the lecture materials and engage students in conceptual thinking about factors affecting the environment and as good citizens of society how to identify and rectify environmental issues.

### Required Laboratory Textbook



ISBN 13: 9780495560241

The activities in this laboratory manual are both problem-based laboratory activities as well as critical-thinking projects. The goal of problem-based activities is to develop the cognitive abilities of the student rather than memorizing facts. Critical thinking is thinking aimed at well-founded judgment and thus utilizes appropriate evaluative standards as a means to determine the true worth, merit, or value of something. The critical thinker analyzes given information, asks the right questions, and decides what is valuable to keep and what information should be dismissed.

### Student Learning Outcome

An increase in the student’s knowledge of basic terminology dealing with environmental aspects and environmental terminology covered during the coursework of the laboratory protocols.

### Attendance

As in any class, a vital indicator of a student’s success is attendance, therefore, your presence and participation will be essential. Your success in the course will be determined by your presence, your participation in class discussion, and scheduled coursework. Students should read the assigned readings prior to attending class. Students will be asked to comply with laboratory policies and guidelines and should arrive on time (LATE arrivals are disruptive and not acceptable). It is the *student’s responsibility* to maintain contact with the instructor and to inform me of any absences

which may occur that prevent their attendance and participation in coursework, assignments, or exams. In order to create a “learning environment” free of disruptions, students **MUST TURN OFF** their cell phones as well as all other electronic devices.

**Obligatory Statements**

Plagiarism is a criminal activity. The student must cite all sources of information. Unreferenced copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a grade of zero and can result in further disciplinary action.

All students enrolled at Texas A&M University-Commerce shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. This policy is enforced both in traditional and virtual classroom environments. The student should refer to the University’s Student’s Guide Handbook, Polices and Procedures, and Conduct.

The American 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 have a disability requiring accommodation please contact: Office of Student Disability Resources or Services, Texas A&M University-Commerce, Gee Library, Room 132, phone (903) 886-5150 or (903) 886-5835, fax (903) 468-8148, or email StudentDisabilityServices@tamuc.edu.

**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.

**Course Grading**

The laboratory portion counts as 100 points of your total course grade. These points will derive from the following activities:

<b>Grade Determination</b>	
<b>Weekly Laboratory Protocols</b>	<b>65%</b>
<b>Quizzes</b>	<b>10%</b>
<b>Final Exam</b>	<b>25%</b>

**Weekly Laboratory Protocols**

All students ***must*** have a laboratory textbook as the majority of the course grade will be derived from the laboratory protocol questions contained at the end of the laboratory activity. Students should read the protocol prior to attending lab and be informed and prepared for the day’s activity. The laboratory protocols are designed to be an in class activity, thus students must be in attendance for the lab in order to participate in that week’s laboratory protocol.

**Important Notes:**

- (1) Students who do not attend lab forfeit the opportunity to participate in the weekly assignment and will receive a grade of zero for that assignment.
- (2) Students will be permitted to make-up an exam or other assignment, but it will ***require*** an official excuse which the student is to provide to the instructor. It is the ***student’s responsibility*** to schedule a time with the instructor’s to schedule a date and time to complete the make-up assignment.
- (3) Laboratory assignments are due the following laboratory class period. If a student is not in attendance (whether excused or unexcused) for a lab, the assignment is due at the next attended lab time.
- (4) Late laboratory assignments ***will not*** be accepted and will receive a score of zero. You have one week to complete the assignment before the next scheduled laboratory period.
- (5) Students may want to place the returned assignments in a three-ring binder so they have to review in preparation for the final exam.

**Quizzes**

It is imperative students have read and are familiar with the assigned laboratory activity scheduled prior to attending class. Familiarity with the protocol being explored ensures students both understand the topic being investigated and also promotes a better analysis of the results obtained. Periodically throughout the semester, the instructor will have quizzes over the day’s scheduled activity to check for understanding and preparedness. The quizzes will be given at the beginning of class prior to starting the day’s scheduled activity. Students arriving late will **NOT** be allowed to participate in the quiz.

**Laboratory Final Exam**

The coursework consists of only one exam for the semester. The final exam will be composed from all the laboratory activities covered this semester. Students will be provided with a study guide of terminology to study and prepare for the exam.

Week	Date	Class Assignment
1	<b>August 30</b>	Introduction, Syllabus Review, Safety Guidelines and Contract
2	<b>September 6</b>	Laboratory 19—Are We Consuming our Biosphere?
3	<b>September 13</b>	Laboratory 1—Introduction to Experimental Design
4	<b>September 20</b>	Laboratory 8—Allelopathy

- 5    **September 27**    Laboratory 9—Butcher the Biomes
- 6    **October 4**    Laboratory 10—Does Land Use Affect Soil Texture and Permeability?
- 7    **October 11**    Laboratory 21—Why is Your Footprint So Big? (Computer Lab)
- 8    **October 18**    Laboratory 3—Population Growth (Computer Lab)
- 9    **October 25**    Laboratory 16—Human Health Risk Assessment (Computer Lab)
- 10    **November 1**    Laboratory 17—Measuring Total Suspended Particles
- 11    **November 8**    Laboratory 12—Colorimetric Determination of Free Chlorine in Drinking Water
- 12    **November 15**    Laboratory 4—Biomagnification Through a Food Chain  
Laboratory 5—Food Webs

**13                      Thanksgiving Week**

- 14    **November 29**    Final Exam

\* The instructor reserves the right to administer revisions to the schedule if circumstances require.