ENVS 589 — Water-quality Based Toxics Control

COURSE SYLLABUS: FALL 2012

Instructor: W. Ray Arnold, Ph.D. – Assistant Professor
Office Location: SCT 215
Office Hours: M: 11:00-12:00, Tu: 10:00-11:30, W: 1:00-2:30 Th: 2:00-3:00
Office Phone: (903) 468-3271
Office Fax: (903) 886-5997
University Email Address: Ray.Arnold@tamuc.edu

COURSE INFORMATION


Course Description: This course is designed to familiarize you with the process and procedures that the EPA uses to regulated discharges of legally permitted wastes to the waters of the U.S.A.

Student Learning Outcomes: Completion of these outcomes does not guarantee that you will pass this course.

1. Students will be able to create an efficient and effective technical PowerPoint presentation.
2. Students will be able to describe the concept of whole effluent toxicity (WET) permit limits.
3. Students will be able to describe the procedures of a toxicity identification evaluations (TIE).

COURSE REQUIREMENTS

Instructional Methods:

Instructor guided development and presentation of PowerPoint lectures of the materials contained in the document. The student will have to field questions related to what he/she presents in the lecture.

Activities:

1. You will have two weeks to read, learn, and develop a PowerPoint presentation for a section of material from the Technical Support Document. There are a total of seven sections.
2. Procedure: Week 1 read and learn the material and be prepared to discuss the materials. Week 2 create the PowerPoint presentation and prepare for the oral presentation.
3. After each presentation you will field questions and receive critiques on the slides. You are then to correct the slides and send a PowerPoint file of the presentation to the
instructor by meeting time the following week.
4. I reserve the right to modify the assignments and schedule.

Assessment:

Minimum expectations:
1. Attend scheduled meetings and be punctual
2. Be attentive
3. Participate in discussions
4. Be respectful to me and anyone who might attend your presentations
5. Complete class assignments on time and on target

Grade basis: Subjective
- Presentation and corrected PowerPoint files 700 points

Grade basis: Subjective
- Presentation and corrected PowerPoint files 700 points

1. Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations)

Grading Scale: The following scale is adhered to strictly.

- 90.0 – 100% = A
- 80.0 - 89.9% = B
- 70.0 - 79.9% = C
- 60.0 – 69.9% = D
- <60.0% = F

TECHNOLOGY REQUIREMENTS
A computer.

ACCESS AND NAVIGATION
Access to a computer with PowerPoint and an internet connection.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:
Contacting Your Instructor: If you have questions pertaining to the content of this course, please contact me via email, phone, or come by my office. Though I am happy to see you anytime (time permitting), it may be easiest to find me during my office hours.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures:

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 computer for matters unrelated to the course may be grounds for dismissal from
University Specific Procedures:

ADA Statement

**Students with Disabilities:**
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 have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services**
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Code of Student Conduct from Student Guide Handbook).

**COURSE OUTLINE / CALENDAR**

Schedule (listed by semester week) is approximate and subject to change

1 – Introduction

2 – Creating PowerPoint presentations

3 – Approaches to Water Quality-based Toxics Control – Discussion

4 – Approaches to Water Quality-based Toxics Control – Presentation

5 – Water Quality Criteria and Standards – Discussion

6 – Water Quality Criteria and Standards – Presentation

7 – Effluent Characterization – Discussion

8 – Effluent Characterization – Presentation

9 – Exposure and Wasteload Allocation – Discussion

9 – Exposure and Wasteload Allocation – Presentation
10 – Permit Requirements – Discussion
11 – Permit Requirements – Presentation
12 – Compliance Monitoring and Enforcement – Discussion
13 – Compliance Monitoring and Enforcement – Presentation
14 – Case Examples – Discussion
15 – Case Examples – Presentation
16 – Turn in final PowerPoint corrections