ESCI 2102: Lab for Environmental Practice II – Water

Time and location: May 27, 29, 8am – 5pm, Biology rm. 326; field trip May 28 7am – 7pm

Instructor
Dr. Elizabeth Walsh
Office hours: By appointment
Office location: Bioscience 2.120
Phone: (915) 747-8894 office; (915) 747-6989 lab; (915) 342-7630 cell
Email: ewalsh@utep.edu

Text: None.

Prerequisites: Laboratory fee required.

Objective: This course is designed to expose students to field and laboratory sampling methods for the collection and analysis of water samples including aquatic biota.

Goals for knowledge/skills - At the end of this course students should:
• Be able to effectively design and carry out a field site investigation focused on the collection of water samples including aquatic biota.
• Be able to process and prepare environmental samples for analytical analysis.
• Be able to conduct basic laboratory tests (e.g., nutrients, pH, etc.) to evaluate the bulk chemistry of water samples.
• Be able to synthesize chemical information provided from the samples they collect and apply this to solving real environmental problems (in the form of scenarios presented to the class).

Tentative Schedule:
May 27: Introduction to Course – Safety Lecture, Introduction to Freshwater, Intro to Wetlands, Intro to Balmorhea, Water chemistry review
May 28: Field Sampling Water/Biota
May 29: Data Analysis
May 31: Report Due

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and participation (40% of grade) and lab report (60% of grade), and will be assigned as follows:
Grading rubric for the written paper is attached.

These papers will focus on one of the four scenarios given below. Each group will be assigned a scenario and will need to address impacts to the wetland water quantity and quality and aquatic biota.

Scenario 1: Hydro-fracking impacts on wetlands
Scenario 2: Groundwater mining for El Paso for urban centers
Scenario 3: Climate change impacts on desert wetlands
Scenario 4: Desert waters for wildlife

COURSE POLICIES

POLICY ON CLASS PARTICIPATION: You are expected to come to class prepared to lead a discussion on the assigned topic. You should have a good understanding of the reading and have several questions ready to discuss.

POLICY ON CIVILITY: Please come to class on time. It is disturbing and distracting everybody if people come in late. Please do not hold private conversations during lectures, but feel free to ask questions or start a discussion at any time. Cell phones MUST be turned off during class. DO NOT answer phones or text while in class.

DISABILITY STATEMENT: If a student has or suspects he/she has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at dss@utep.edu or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

MILITARY STATEMENT: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact me no later than Oct 1.
POLICY ON HOMEWORK: All homework assignments are to be individual efforts unless specifically told otherwise. This policy will be strictly enforced.

POLICY ON MAKE-UP EXAMINATIONS: NO make-up exams will be given for reasons other than illness (doctor's note required), absence with the instructor's prior approval, or when a student is on official University business (documentation required BEFORE the absence). Make-up exams will be scheduled on Fridays at 5 pm. The same policy will be followed for missed laboratory work.

POLICY ON ACADEMIC HONESTY: Academic Dishonesty will not be tolerated. All university guidelines will be strictly followed. Please read these guidelines carefully. If you have any questions regarding the university policy please contact the Dean of Students.

POLICY ON ELECTRONIC DEVICES: Use of cell phones or other wireless devices are not permitted.

- Set your phone to mute or silent mode before coming to class.
- Do not use text messaging or web browser features while in class.

If you choose not to comply with these policies you will be ask to leave the classroom.