

Methods in Environmental Science - Spring 2024

ESCI 1310

Monday lecture: 1:30-2:50 (CRN 24888), LART 108

Wednesday (CRN 24890) OR Thursday lab (CRN24892) Lab: 1:30-4:20, B309

Instructors:

Dr. Vanessa Lougheed, email: vlougheed@utep.edu

Dr. Lixin Jin, email: ljin2@utep.edu

Dr. Elizabeth Walsh, email: ewalsh@utep.edu

Guest instructor:

Dr. Mark Engle, email: maengle@utep.edu

Dr. Lin Ma, email: lma@utep.edu

Dr. Craig Tweedie, email: ctweedie@utep.edu

Teaching assistants:

TBD

Office hours: by appointment only

For general questions, you can also post on Q/A discussion board, and we will respond daily

Required Textbook: NONE

Goals:

In this sophomore-level course, team projects will be designed to understand water quality and quantity, an important regional concern. Through hands-on experiences, students will be trained to carry out field work, including collecting data using state-of-the-art instruments and techniques, analyze their own data as well as larger, more complex datasets. Through these experiences, students will be involved in environmental outreach activities to the local community.

The objectives are to:

1. Increase awareness of specific environmental issues;
2. Demonstrate how new scientific knowledge is established and hypotheses are tested;
3. Encourage team work and group discussion; and
4. Improve analytical, writing and oral skills.

Grades:

Reports and In-class assignments (50%).

Quizzes (3 @ 5% each) (15%).

Final exam (comprehensive) (20%).

Attendance, participation (15%).

Lecture notes, instructions, rubrics for reports and grades will be posted on Blackboard.

Tentative Schedule

Week of	Class (Monday)	Lab (Wed or Thurs)
Jan 15	None	None
Jan 22	Intro & Experimental design (Lougheed)	Experimental design & Data organization (Lougheed)
Jan 29	Statistics (Lougheed) – Using Excel & R	Rio Bosque plant data nugget
Feb 5	Historic Data use (Lougheed)	Rio Grande data nugget
Feb 12	GPS and GIS (Tweedie)	GPS activity
Feb 19	Stats & GPS Quiz 1 Intro to soils (Jin)	Intro to soils (Jin)
Feb 26	Soil (Jin)	Soil field trip TBD (Jin)
Mar 4	Soil (Jin)	Soil lab (Jin)
Mar 11	Spring Break	Spring Break
Mar 18	Soil (Jin)	Soil lab (Jin)
Mar 25	Soil Quiz 2; Lab report 1 Intro to Water (Walsh)	Water field trip 1 TBD (Walsh)
Apr 1	Water Quality and biodiversity (Walsh)	Water field trip 2 TBD (Walsh)
Apr 8	Water quality and biodiversity (Walsh);	Water quality and biodiversity (Walsh)
Apr 15	Water Quiz 3: Reviewing lab report (Walsh)	Lab report 2 (Walsh)
Apr 22	Hydrology (Ma & Engle)	Hydrology field trip TBD (Ma & Engle)
Apr 29	Hydrology (Ma & Engle)	Hydrology (Ma & Engle)
May 6		Exam week (final exam): Wed., May 8, 4:00-6:45 (LART 108)

Course policies:

ONLINE ASSIGNMENT SUBMISSION. All assignments will be due Fridays by 5pm and must be uploaded on Blackboard.

DROP DATE. Students may drop the class and receive a W (withdrawal) on their transcript prior to March 30th, 2023. You must consult the Instructor prior to dropping. Due to the University's six-drop rule, dropping the course may not be in your best interest. After March 29th, a drop will result in an F on your transcript. Receiving either a W or an F in any course may prevent you from meeting the satisfactory Academic Progress requirements necessary to receive financial aid.

Student Conduct: Each student is responsible for notice of and compliance with the provisions of the Regents' [Rules and Regulations](#), available at <http://www.utsystem.edu/bor/rules/homepage.htm>. All students are expected to behave as courteous, responsible adults. We will have frequent discussions and students are expected to tolerate and respect the opinions of others.

Cellular and electronic devices: In the event of in-person activities, cell phones and other electronic and recording devices must be turned off during class time to minimize classroom disruptions and protect the integrity of test-taking situations. This means you cannot make calls, send text messages, or use social media during class. You may use your laptop or tablet to take notes in class, but this privilege will be revoked if the devices are used inappropriately. Students who fail to follow this rule may incur disciplinary action up to and including dismissal from the class and upon repeated offenses, the course.

POLICY ON MAKE-UP EXAMINATIONS or ASSIGNMENTS: No make-up quizzes, exams or assignments 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). Make-up exams and assignments will be scheduled at the Instructor's convenience.

All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. Although UTEP will allow a maximum of one year to complete this contract, the College of Science requests it be limited to one month based upon completion data. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

POLICY ON ACADEMIC HONESTY:

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more [HOOP: Student Conduct and Discipline](#).

ACCOMMODATIONS POLICY

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#).

MILITARY STATEMENT: If you are a military student with the potential of being called into military service and/or training during the course of the semester you are encouraged to contact the instructor regarding these matters.

Student Resources:

UTEP provides a variety of student services and support:

- [UTEP Library](#): Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- [Help Desk](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.
- [University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- [Math Tutoring Center \(MaRCS\)](#): Ask a tutor for help and explore other available math resources.
- [History Tutoring Center \(HTC\)](#): Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- [Military Student Success Center](#): UTEP welcomes military-affiliated students to its degree programs, and the Military Student Success Center and its dedicated staff (many of whom are veterans and students themselves) are here to help personnel in any branch of service to reach their educational goals.
- [RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.