Methods in Environmental Science - Spring 2021

ESCI 1310
Monday Class: 1:30-2:50; 100% Virtual & Synchronous
Wednesday Lab: 1:30-4:20; Virtual & Synchronous until Spring Break; TBD after Spring Break

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

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.

Technology requirements:
- A computer or laptop,
- Stable, consistent internet,
- Blackboard,
- Your UTEP email account.

Course content is delivered via the Internet through the Blackboard learning management system (LMS). Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Mozilla Firefox and Google Chrome are the most supported browsers for Blackboard; other browsers may cause complications with the LMS. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

If you encounter technical difficulties beyond your scope of troubleshooting, please contact the [Help Desk](#) as they are trained specifically in assisting with technological needs of students.

Course expectations:
- All course materials will be posted on Blackboard and there will also be synchronous online meetings Content is provided in modules that are released weekly or biweekly.
- The rule of thumb for time planning for any university course is approximately 3 hours for every credit hour taken. So for this 3-credit course you should expect to spend (on average) 9 hours watching/reading online content, participating un synchronous lectures and labs and completing any assigned work.
- We expect you to check your email regularly for course announcements. We will be using the announcement system in Blackboard, so make sure you are checking the email linked to that system.

Netiquette:
- Always consider audience. Remember that members of the class and the instructor will be reading any postings.
- Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professors only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).

Tentative Schedule

Week of	Class (Monday) 100% Virtual & Synchronous	Lab (Wednesday) Virtual & Synchronous until Spring Break; TBD after Spring Break
Jan 18	NO CLASS	Intro & Experimental design (Lougheed)
Jan 25	Statistics (Lougheed) – Using Excel & R	Rio Bosque plant data nugget
Feb 1	Historic Data use	Rio Grande data nugget
Feb 8	GPS and GIS (Tweedie)	GPS activity
Feb 15	Filling out datasheets (Walsh) Organizing data (Lougheed) Incorporate data into lab report (TA)	Using Google Earth in a wetland
Feb 22	Stats Quiz 1; Intro to Rio Bosque (J. Sproul)	Intro to soils (Jin)
Mar 1	Soil (Jin)	Soil virtual field trip (Jin)
Mar 8	Soil (Jin)	Soil virtual lab (Jin)
Mar 15	**Spring Break**	**Spring Break**
Mar 22	Soil (Jin)	Soil virtual lab (Jin)
Mar 29	Soil Quiz 2; Lab report 1 Intro to Water & White Paper	Water field trip 1 TBD (Walsh)
Apr 5	Water Quality and biodiversity	Water field trip 2 TBD (Walsh)
Apr 12	Water quality and biodiversity (Walsh);	Water quality and biodiversity LAB TBD (Walsh)
Apr 19	Water Quiz 3: Reviewing lab report	Lab report 2 Rio Bosque discussion with break-out rooms
Apr 26	Hydrology (Ma & Engle)	Hydrology field trip TBD (Ma & Engle)
May 3	Hydrology (Ma & Engle)	Hydrology (Ma & Engle)
May 10	Exam week (final exam): Wed., May 12, 3h window from 7am-7pm (online)	

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 April 1, 2021. 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 ones' 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.