

UNDERGRADUATE COUNCIL

Request for New Course

Originating unit requesting course: Environmental Sciences

New course title: Environmental Geology

New course number: ENSC 50213

Appropriate computer abbreviation if title is more than 30 spaces: _____

Prerequisites for new course:

Permission of instructor.

Effective date for course (semester and year): Spring 2021

Instructional methodology (Click in box to the left of the name to select a course type.)

(See departmental chairperson or deans for definition of type.):

- | | | | |
|--------------------------------------|-----------------------------------|--|---------------------------------------|
| <input type="checkbox"/> activity | <input type="checkbox"/> clinical | <input type="checkbox"/> directed study | <input type="checkbox"/> internship |
| <input type="checkbox"/> laboratory | <input type="checkbox"/> lecture | <input checked="" type="checkbox"/> lecture w/integrated lab | |
| <input type="checkbox"/> performance | <input type="checkbox"/> research | <input type="checkbox"/> seminar | <input type="checkbox"/> study abroad |

Description of new course (as it will appear in catalog copy):

Prerequisite: Permission of instructor. Two hours per week of lecture, and three hours per week of laboratory work. Geologic processes, earth resources and engineering properties of crustal materials in the activities of society. (Crosslisted as ENSC/GEOL 50213)

1. Submit a representative course syllabus that includes the following:

- a. A concise course description including the course purpose (e.g. fulfill part of university, college, or department mission, discipline requirement, program enrichment, etc.) and course instructional methodology (e.g. lecture, laboratory, lecture and laboratory, clinical, internship, etc.)
- b. the goals of the course;
- c. a clear statement of course expectations - essentially, what students shall be expected to do in order to satisfactorily complete the course at different performance levels (generally speaking, what does it take to get an A, B, C, etc.?);
- d. a statement of the faculty member's policies on attendance, make-up work, missed exams, etc;
- e. information concerning major projects or papers and when these assignments must be completed by the students;
- f. information about the number and dates of the exams;
- g. statements reflecting TCU policy regarding accommodations under Americans with Disabilities Act (ADA) ([this disabilities statement](#) MUST be included *verbatim*) and university policy regarding academic misconduct ([this statement](#), while not required, may be used); and
- h. a statement indicating how the instructor can be reached and how office hour requirements will be met.

A [syllabus template](#), which includes these required elements and others, is available from the Koehler Center.

2. Faculty Resources: How will the unit provide faculty support for this course?

Describe how this course will impact other current departmental listings.

This course is currently a GEOL credit, but is taught by ENSC faculty. These departments are now entirely separate and we wish the catalog entry to more accurately reflect this. It contains both ENSC and GEOL material, which is why a cross-list and not a reclassification is requested. It will not impact any listings as it is already offered.

3. Educational Resources: Will this course require additional resources not currently available (e.g., space, equipment, library)?

Yes

No

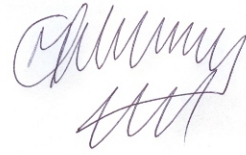
4. If this course affects other units of the University, include a statement signed by chairperson of the affected unit(s).

Support letter provided.

5. If cross-listed, provide evidence of approval of all curriculum committees appropriate to both the originating and cross-listed units.

Support letter provided.

6. If this course is to be delivered online, include a letter from the Koehler Center stating that program administrators and identified faculty are working with the Koehler Center to fulfill TCU Distance Learning requirement.

A handwritten signature in blue ink, appearing to read "Murray" followed by a stylized flourish.

Approval signature of chairperson of originating unit

Revised 11/2013

ENSC/GEOL 50213 ENVIRONMENTAL GEOLOGY
COURSE SYLLABUS
3 HR COURSE, 15 WEEKS

Course schedule is provided at the end of this syllabus

Instructor: Becky L. Johnson, P.G.

Contact Info: No set office hours at this time. Please contact me to schedule an appointment.

SWR 221, 817-257-7271, becky.johnson@tcu.edu
 817-300-6619 (cell)

Two hours per week of lecture and three hours per week of laboratory work. Geologic processes, earth resources and engineering properties of crustal materials in the activities of society.

Course Objective:

At the end of this course, students will be able to identify the regional and local geology and hydrogeology for a specific site, evaluate the characteristics of subsurface materials, conduct laboratory testing of those materials, and assess the suitability of the subsurface for specific societal uses.

Prerequisites: Permission of the instructor

Books: None

Attendance: Attendance, while not required, is expected. If you must miss a class, you should contact me ahead of time to obtain critical information. When a student misses class for any reason other than an Official University Absence, the missed homework and exams cannot be made up. I DO NOT accept late work or give make-up exams.

LAB ATTENDANCE IS MANDATORY. IF YOU DO NOT ATTEND, YOU CANNOT MAKE UP THE LAB ASSIGNMENT.

Teaching Policies:

I provide a pdf of each day's slides via TCUonline. Students may bring computers to class to view and annotate these. Homework is assigned, typically as the last slide of each day's lecture slides and is due before the start of the following class via TCUonline.

Only the official TCU student email address will be used for all course notification. It is your responsibility to check your TCU email on a regular basis.

Disruptive Behavior:

is not tolerated and includes (but is not limited to) using a computer to view anything other than class slides, texting or talking on cell phones, or any other conduct that substantially interferes with or obstructs the teaching or learning process. Personal items, including cell phones and hats will be left with the instructor during exams and will be returned upon completion of the exam. Anyone arriving more than 5 minutes after class begins for an exam or lab will not be allowed to take the exam or participate in lab. Anyone arriving after the appointed departure time for a field trip will be left behind.

Grading:

I DO NOT CURVE. (score of 89.9 = B) Letter grades are assigned as shown. The +/- grading system is not used.

Ugrad
 A (90 - 100)
 B (80 - 89)
 C (70 - 79)
 D (60 - 69)
 F (<60)

Grad
 A (90-100)
 B (80-89)
 C (70-79)
 F (<70)

Item	Percent of Final Grade:	
	UNDERGRADUATE	GRADUATE
Exam - Academic Misconduct	5%	5%
Exam #1	25%	20%
Exam #2	25%	20%
Exercises (3% each for 5)	10%	15%
Labs (6.67% each for 3)	15%	20%
Project	20%	15%
Project leader	N/A	5%
No homework for this class.		

Graduate students enrolled in this course will be required to complete additional work and will be graded separately for such work. Class participation is mandatory for graduate students. In addition, graduate students will be expected to lead the project teams for the course, complete evaluations of project performance for all team members, and track the hours by team member for completion of the project. In addition, the graduate students will present the findings of their team project to the entire class.

This course utilizes TCU Online for communication of assignments, homework submittals, and grade reporting. You MUST submit assignments via TCU Online. No other submittals will be accepted. It is your responsibility to verify that assignments have correctly uploaded and to regularly check your TCU email for course-related communications. (see below for more information on TCU Online). If you have not yet taken the TCU Online Student Tutorial, please do so immediately. To access it, click on the "TCU Online Student Tutorial" on your home page and follow the instructions.

TCU Online

RECOMMENDED APP FOR TCUonline: PULSE

Pulse is a phone app which gives you access to the course calendar, assignments, grades, and announcements. This app provides a graph that can help you manage your time. Based on the number of assignments and events on the course calendar for your classes, the graph will display busy times for class work in the upcoming week. You can use this app to manage your daily workload and includes the ability to view and access course materials offline. Students can download Pulse from the Google Play or Apple Store. Students can learn more and download Pulse here:
<https://www.d2l.com/products/pulse/>

Group Project Grading

If this course includes a group project, the following policy will be used: Each team member will be asked to review their other team members and themselves regarding their project performance. The review questions include, but are not limited to:

1. Did the team member perform the work that they agreed to perform?
2. Was the work completed by the deadlines that they established with the group?
3. Did the team member cause any panics or all-nighters that could have been avoided?
4. Did the team member exhibit any outstanding qualities (please list) or go "above and beyond the call of duty"?
5. Out of a possible 100 points, what grade do you give this team member?

The grades for each team member will be averaged together and then applied to the overall grade for the project to result in the individual's grade for the class. Example: if the project is graded by faculty as a 90, but a team member's average grade (based on reviews) is an 85, then the team member gets a grade in the course that is 85% of the project grade of 90 (76.5 or C). NOTE THAT THE INSTRUCTOR HAS NO INPUT ON THE TEAM'S GRADING AND WILL NOT CHANGE ANY GRADE ASSIGNED BY THE TEAM.

I expect each student to uphold the highest academic standards of honor in accordance with TCU policy. Cheating, plagiarism and collusion will not be tolerated. Academic misconduct of any kind will result in failure of the entire course. All instances of academic misconduct are reported to the Dean's office (CSE).

ACADEMIC MISCONDUCT: Sec. 3.4 from the TCU Code of Student Conduct. Any act that violates the academic integrity of the institution is considered academic misconduct. The procedures used to resolve suspected acts of academic misconduct are available in the offices of Academic Deans and the Office of Campus Life and are listed in detail in the Undergraduate Catalog. Specific examples include, but are not limited to:

CHEATING - Includes, but is not limited to: (A) Copying from another student's test paper, laboratory report, other report, or computer files and listings. (B) Using during any academic exercise, material and/or devices not authorized by the person in charge of the test. (C) Collaborating with or seeking aid from another student during an academic exercise without the permission of the person in charge of the exercise. (D) Knowingly using, buying, selling, stealing, transporting or soliciting in its entirety or in part, the contents of a test or other assignment unauthorized for release. (E) Substituting for another student, or permitting another student to substitute for oneself.

PLAGIARISM - The appropriation, theft, purchase or obtaining by any means another's work, and the unacknowledged submission or incorporation of that work as one's own offered for credit. Appropriation includes the quoting or paraphrasing of another's work without giving credit therefore. Turnitin.com or other programs may be used for plagiarism detection.

COLLUSION - The unauthorized collaboration with another in preparing work offered for credit.

ABUSE OF RESOURCE MATERIAL - Mutilating, destroying, concealing or stealing such materials.

COMPUTER MISUSE - Unauthorized or illegal use of computer software or hardware through the TCU Computer Center or through any programs; terminals; or freestanding computers owned, leased or operated by TCU or any of its academic units for the purpose of affecting the academic standing of a student.

FABRICATION & FALSIFICATION - Unauthorized alteration or invention of any information or citation in an academic exercise. Falsification involves altering information for use in any academic exercise. Fabrication involves inventing or counterfeiting information for use in any academic exercise.

MULTIPLE SUBMISSION - The submission by the same individual of substantial portions of the same academic work (including oral reports) for credit more than once in the same or another class without authorization.

COMPLICITY IN ACADEMIC MISCONDUCT - Helping another to commit an act of academic misconduct.

BEARING FALSE WITNESS - Knowingly and falsely accusing another student of academic misconduct.

STATEMENT ON TCU'S DISCRIMINATION POLICY

TCU prohibits discrimination and harassment based on age, race, color, religion, sex, sexual orientation, gender, gender identity, gender expression, national origin, ethnic origin, disability, predisposing genetic information, covered veteran status, and any other basis protected by law, except as permitted by law. TCU also prohibits unlawful sexual and gender-based harassment and violence, sexual assault, incest, statutory rape, sexual exploitation, intimate partner violence, bullying, stalking, and retaliation. We understand that discrimination, harassment, and sexual violence can undermine students' academic success and we encourage students who have experienced any of these issues to talk to someone about their experience, so they can get the support they need. Review TCU's Policy on Prohibited Discrimination, Harassment and Related Conduct or to file a complaint: <https://titleix.tcu.edu/title-ix/>. Learn about the Campus Community Response Team and Report a Bias Incident: <https://titleix.tcu.edu/campus-community-response-team/>

Statement on Title IX at TCU

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep any information you share private to the greatest extent possible. However, I have a mandatory reporting responsibility under TCU policy and federal law and I am required to share any information I receive regarding sexual harassment, discrimination, and related conduct with TCU's Title IX Coordinator. Students can receive confidential support and academic advocacy by contacting TCU's Confidential Advocate in the Campus Advocacy, Resources & Education office at (817) 257-5225 or the Counseling & Mental Health Center at <https://counseling.tcu.edu/> or by calling (817) 257-7863. Alleged violations can be reported to the Title IX Office at <https://titleix.tcu.edu/student-toolkit/> or by calling (817) 257-8228. Should you wish to make a confidential report, the Title IX Office will seek to maintain your privacy to the greatest extent possible, but cannot guarantee confidentiality. Reports to law enforcement can be made to the Fort Worth Police Department at 911 for an emergency and (817) 335-4222 for non-emergency or TCU Police at (817) 257-7777.

NETIQUETTE: Communication Courtesy Code. All members of the class are expected to follow rules of common courtesy in all email messages, discussions, and chats. If I deem any of them to be inappropriate or offensive, I will forward the message to the Chair of the department and appropriate action will be taken, not excluding expulsion from the course. The same rules apply online as they do in person. Be respectful of other students. Foul discourse will not be tolerated. Please take a moment and read the basic information about netiquette (<http://www.albion.com/netiquette/>).

Participating in the virtual realm, including social media sites and shared-access sites sometimes used for educational collaborations, should be done with honor and integrity. Please review TCU's guidelines on electronic communications (email, text messages, social networks, etc.) from the Student Handbook. (<https://tcu.codes/policies/network-and-computing-policy/e-mail-electronic-communications-social-networks/>)

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OBLIGATIONS TO REPORT

Mandatory Reporters: All TCU employees, except Confidential Resources, are considered Mandatory Reporters for purposes of their obligations to report, to the Coordinator, conduct that raises Title IX and/or VAWA (Violence Against Women Act) issues.

Mandatory Reporters are required to immediately report to the Coordinator information about conduct that raises Title IX and/or VAWA issues, including any reports, complaints or allegations of sexual harassment, discrimination and those forms of prohibited conduct that relate to nonconsensual sexual intercourse or contact, sexual exploitation, intimate partner violence, stalking and retaliation involving any member of the TCU community, except as otherwise provided within the Policy on Prohibited Discrimination, Harassment and Related Conduct.

Mandatory Reporters may receive this information in a number of ways. For example, a complainant may report the information directly to a Mandatory Reporter, a witness or third-party may provide information to a Mandatory Reporter, or a Mandatory Reporter may personally witness such conduct. A Mandatory Reporter's obligation to report such information to the Coordinator does not depend on how he/she received the information. Mandatory Reporters must provide all known information about conduct that raises Title IX or VAWA issues to the Coordinator, including the identities of the parties, the date, time and location, and any other details. Failure of a Mandatory Reporters to provide such information to the Coordinator in a timely manner may subject the employee to appropriate discipline, including removal from a position or termination of employment.

Mandatory Reporters cannot promise to refrain from forwarding the information to the Coordinator if it raises Title IX or VAWA issues or withhold information about such conduct from the Coordinator. Mandatory Reporters may provide support and assistance to a complainant, witness, or respondent, but they should not conduct any investigation or notify the respondent unless requested to do so by the Coordinator.

Mandatory Reporters are not required to report information disclosed (1) at public awareness events (e.g., "Take Back the Night," candlelight vigils, protests, "survivor speak-outs," or other public forums in which students may disclose such information (collectively, public awareness events); or (2) during an individual's participation as a subject in an Institutional Review Board approved human subjects research protocol (IRB Research). TCU may provide information about Title IX rights and available resources and support at public awareness events, however, and Institutional Review Boards may, in appropriate cases, require researchers to provide such information to all subjects of IRB Research.

Relevant reporting phone numbers are: 911 for an emergency and (817) 335-4222 for non-emergency or TCU Police at (817) 257-7777.

TCU CAMPUS RESOURCES FOR STUDENTS: Campus Offices

- Alcohol & Drug Education Center (817-257-7100, Samuelson Hall basement)
 - Brown-Lupton Health Center (817-257-7938 or 817-257-7940)
 - Campus Life (817-257-7926, Sadler Hall 2006)
 - Center for Academic Services (817-257-7486, Sadler Hall 1022)
 - Center for Digital Expression (CDex) (cdex@tcu.edu, Scharbauer 2003)
 - Counseling & Mental Health Center (817-257-7863, Samuelson Hall basement)
 - Mary Couts Burnett Library (817-257-7117)
 - Office of Religious & Spiritual Life (817-257-7830, Jarvis Hall 1st floor)
 - Student Development Services (817-257-7855, BLUU 2003)
 - Center for Writing (817-257-7221, Reed Hall 419)
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COURSE SCHEDULE
ENSC/GEOL 50713 ENVIRONMENTAL GEOLOGY

Date	Week	Topic
01/13/20	1	Intro, syllab, geology of world, US, then TX. Geol 101. EXERCISE 1
01/20/20	2	MLK HOLIDAY
01/27/20	3	Tx Geology – ages and locations, elevations, PLUS Geologic resources – shallow geology versus deep geology. EXERCISE 2
02/03/20	4	LAB 1: at core lab facility - Boring Logs, RQD, Lithology Descriptions
02/10/20	5	Weathering & soils development, soil surveys. EXERCISE 3
02/17/20	6	LAB 2: Soils engineering – wet/dry weights, atterbergs, shear strength, slope stability, USCS, USDA textural classifications, erosion & sediment transport
02/24/20	7	EXAM #1
03/02/20	8	Aquifers 101 EXERCISE 4
03/09/20	9	SPRING BREAK
03/16/20	10	Extra Week of spring break - COVID
03/23/20	11	Tx water use and rights - surface water & groundwater EXERCISE 5
03/30/20	12	Industrial processes and pollutants.
04/06/20	13	LAB 3: Water Lab - groundwater models
04/13/20	14	EXAM #2
04/20/20	15	Project - BFD
04/27/20	16	Project - BFD
05/04/20	17	FINALS Project due