



Geology 470: Geology Research

Concord University, Department of Physical Sciences
Program in Environmental Geosciences
<http://www.concord.edu/physci/node/3>

This syllabus is subject to change based on the needs of the class. Changes may be announced in class, by e-mail, or online.

<u>Semester Taught:</u>	Spring 2019
<u>Credit Hours:</u>	3 credits, repeatable for credit
<u>CRN:</u>	20806
<u>Course Place & Time:</u>	To be arranged
<u>Course Prerequisites:</u>	Consent of instructor

<u>Professors:</u>	Dr. Stephen C. Kuehn, Associate Professor of Geology	Dr. Joseph Allen, Professor of Geology and Dept. Chair
<u>Offices:</u>	Science 106	Science 401C
<u>Office Hours:</u>	By arrangement (or e-mail)	By arrangement (or e-mail)
<u>E-mail:</u>	sckuehn@concord.edu	allenj@concord.edu
<u>Office phones:</u>	304-384-6322	304-384-5238
<u>Twitter:</u>	@CUGeology	@CU_in_the_field
<u>Department FAX:</u>		304-384-6022

Catalog Description: Independent research in geology. Projects will be developed and completed by the student under direction of a faculty advisor. Course is repeatable for credit.

Course material system: <http://moodle.concord.edu> Log in to Moodle using your MyCU username and password.
Notify your instructor if you have difficulty accessing Moodle materials.

Hardware/Software needed: Computer with internet access; MS Office suite or similar for documents, presentations, & spreadsheets

Required Text: No text is required; A bound lab/field notebook is recommended

Project Development and Assessment: In collaboration with a faculty mentor, students will develop an original research problem for study. In some cases, this project may be completed during a single semester. In other cases, the project may extend over multiple semesters and may include a summer field experience. During the first two weeks of the initial semester, a preliminary research plan will be developed. For projects spanning multiple semesters, this plan will be revisited at the beginning of each semester. The research plan will outline appropriate research goals, research methods, and a timeline with semester objectives. The research expected outcomes should have enough scientific significance to be presented at an undergraduate research session at a scientific conference such as the *Geological Society of America* or an appropriate alternative. For projects not resulting in a published conference abstract and associated conference poster or talk, research results should be submitted as a 20-page paper by the end of the final semester, and a written progress report at the end of each prior semester. Regular progress updates are expected, typically via weekly meetings, via weekly Moodle reports, and/or by email. Assessment will be based upon completion of the proposed objectives. Work that is routinely late, incomplete, or lacking in data quality or sufficiency will result in a reduction of the final grade.

Learning Outcomes: Students completing supervised research will be able to: (1) Develop and write an original research proposal, (2) Collect data, (3) Analyze data, (4) Present data in written form appropriate for submission to a conference at a professional society.

Schedule and Syllabus Changes: Changes to the syllabus or schedule may be announced as needed either verbally (e.g. during student-mentor meetings) or by email.

CU Educational Goals and Mission: The mission of Concord University is to provide quality, liberal arts based education; to foster scholarly and creative activities; and to serve the regional community. The educational programs of Concord University are designed to foster skills, knowledge, and attitudes. (Mission and goals: <http://www.concord.edu/academics/>; Note: Not all CU goals are specifically relevant to this course.) As an upper-level research-based course, Geol 4701/4702/4703 addresses aspects of the following educational goals: Skills (1-7), Knowledge (2, 3, 4, 5, 7), and Attitudes (3, 6, 7).

Department of Physical Sciences Mission: The Department of Physical Sciences challenges students to become interdisciplinary, ethically responsible professionals and scientists. Our degree programs and courses expose students to fundamental scientific content with the aim to transform them into leaders in their discipline and equip them to succeed in future careers and post-graduate studies. Our faculty foster a dynamic learning environment that broadens students' knowledge, skills, and attitudes through active-learning curricula.

Environmental Geoscience Program Goals and Objectives: (Parts of 1A, 1B, 2A, and 3A are relevant to this course.)

Goal 1 – Synthesize and integrate knowledge & experiences to solve problems in the geological sciences

Objective A – Be able to apply fundamental principles of the 5 major subdivisions of the geological sciences (mineralogy, petrology, structural geology, sedimentary geology, field geology)

Objective B – Develop analytical reasoning skills and be able to utilize field studies to answer questions

Goal 2 - Be able to communicate complex scientific concepts for a variety of audiences

Objective A – Students will prepare reports & presentations using relevant technology for a scientific audience

Objective B – Students will design outreach activities that serve and benefit the public

Goal 3 - Conduct their work and report results in an ethical, safe, responsible & professional manner

Objective A – Students will recognize unethical & unsafe research/experimental practices and data and know how to plan an appropriate response

Objective B – Students will work effectively and ethically in groups

Attendance: Regular attendance and participation is essential to performing well in this course. Some of the time commitment may occur as regularly scheduled hours (often at least 3 hours/week) to complete laboratory or analytical work. Some may consist of data synthesis, writing, presentation preparation, etc. which can be more flexible or on your own. Since this is a small class, we will easily notice if you are late or absent frequently.

Privacy Information : Concord follows the federal Family Educational Rights and Privacy Act (FERPA) in regard to student academic records. The CU Moodle learning management system and the LMS administrators follow industry recommendations to keep your personal information private. The Moodle privacy policy is described here: <https://moodle.org/mod/page/view.php?id=8148> Photos from this course may occasionally be posted to Concord geology program Twitter and FaceBook accounts. Please also be advised that e-mail is not a secure form of communication. To best protect your confidential educational information, face-to-face communication is recommended. If you initiate a request via your official Concord e-mail address, I will interpret this as constituting your permission to release the requested information to you via reply to the same address.

Academic Dishonesty: Plagiarism and other forms of cheating are morally unacceptable in an academic and scientific environment, and will result in an F for the course. Additional information is provided in the CU catalog: http://catalog.concord.edu/content.php?catoid=5&navoid=243#Academic_Dishonesty

Mandatory Syllabus Statements Which Apply to All CU Courses:

Accessibility/Accommodations:

Concord University is committed to responding to the needs of students with disabilities as defined by the Americans with Disabilities Act. Please inform your instructor at the beginning of the class semester if you have a disability and are requesting accommodations. It is your responsibility to self-disclose that you are requesting accommodations. The University and instructor will provide you with a reasonable accommodation. You should register with CU's Disability Services Office, located in the Athens campus Jerry and Jean Beasley Student Center, Bottom Floor, across from the Campus Post Office. The Disability Services Office phone is 304-384-6086 or you can email the Director, Nancy Ellison, at nellison@concord.edu for assistance. Website: <https://www.concord.edu/multicultural/node/13>

Concord University Honor Code

A Concord University Honor Code was approved by students, staff, faculty, administration, and the CU Board of Governors. The Code states:

"As a member of the Concord University Community I will act with honesty and integrity in accordance with our fundamental principles and I will respect myself and others while challenging them to do the same."

The Honor Code is intended to unite the Concord community behind a culture of honesty, integrity, and civility.

Class/Online Attendance Policy

Regular class attendance is part of a student's academic obligation at Concord. Irregular attendance may affect academic performance adversely and is detrimental to the atmosphere of a class. (See University Catalog Academic Policies and Procedures.)

Emergency Alert System

In an effort to increase safety and security on our campus, Concord University encourages everyone to register for instant text message alerts. Alerts will only be used for security and safety notices. All students, faculty, and staff are eligible to receive text message alerts on their cell phones or email alerts. Please contact the IT Help Desk for further assistance (304-384-5291).

Emergency Information

Emergency/courtesy telephones are located at the main entrance of each residence hall and at various other locations on campus. Emergency telephones can be identified by the flashing blue light and will provide the user with a direct link to Public Safety at the press of a button. To report an on-campus emergency, call 304-384-5357 or 911. The Office of Public Safety is located on the bottom floor of the Rahall Technology Center. For further emergency information go to: <http://www.concord.edu/administration/office-public-safety>.

Inclement Weather Policy

As a general policy, the University will remain in normal operations during adverse weather conditions. In the event of severe weather conditions, the following may occur:

University Closure

No students or employees are to report.

Classes Cancelled

Students do NOT report BUT employees are expected to report to work at their normal time.

Operating on an Inclement Weather Delay

Under this schedule, all 8 a.m. classes will start at 10 a.m. Students and faculty will follow the Inclement Weather Schedule. (See <http://www.concord.edu/emergency-alerts> for Athens/Beckley Inclement Weather Schedules.)

**Announcements invoking the late schedule or other options referenced above are aired on area radio and television stations and are sent as text and email messages to those enrolled for this service.*

Student Conduct

In classrooms, online, laboratories, and during any activities that are part of course requirements, students are expected to observe reasonable rules of conduct.

Sexual Harassment & Assault

Federal law, Title IX, and Concord University policy prohibits discrimination, harassment, and violence based on sex and gender (Including sexual harassment, sexual assault, domestic/dating violence, stalking, sexual exploitation, and retaliation). If you or someone you know has been harassed or assaulted, you can receive confidential counseling support through the Concord University Counseling Center (304-384-5290). Alleged Violations can be reported non-confidentially to the Concord University Title IX Coordinator at 304-384-6327 or titleix@concord.edu. Reports to Campus Security can be made at (304-384-5357). As an employee at Concord University, I am a mandatory reporter which means I must report any sexual misconduct I am made aware of. This includes verbal or written (such as in an assignment) disclosures of sexual harassment or sexual assault.

Technology Services

Contact the CU Help Desk at extension 5291 from campus or 304-384-5291 off campus. You may also e-mail cuhelpdesk@concord.edu.