

CASPER COLLEGE COURSE SYLLABUS
Geology 2020, Petrology

Semester/Year: Fall 2015

Lecture Hours: 2

Lab Hours: 0

Credit Hours: 2

Class Time: 10:00-11:50 a.m. Days: F

Room: TM 111

Instructor's Name: Dr. Beth Wisely

Instructor's Contact

Information: Office TM 105

Office Phone: ext. 2233

(307) 268-2233

Email:

bwisely@caspercollege.edu

Office Hours: In person, TM 105

Monday: 2:00-3:00 p.m.

Tuesday: 2:00-3:30 p.m.

Wednesday: 11:00 a.m.-1:00 p.m.

Thursday: 2:00-3:30 p.m.

Course Description: Introduces the study of igneous, sedimentary, and metamorphic rocks in hand specimen. Covers textural and mineralogic classification of rocks and the tectonic environments in which they occur.

Goal: The main objective of this course is to provide students with the rigorous techniques of observation and classification of earth material in preparation for advanced petrology courses and entering the workforce as a professional geologist.

Outcomes: Passing students should be able to identify rocks by testing physical properties in hand sample, and demonstrate understanding of the chemistry and conditions of formation of common rock assemblages. Students are also expected to demonstrate understanding of the relationship of tectonics and rock history, and significance of host rocks in the formation of economically important minerals. The Casper College General Education Outcomes that correspond to this course include

- Demonstrate effective oral and written communication
- Use the scientific method
- Use quantitative analytical skills to evaluate and process numerical data

Methodology: This lecture course will consist of readings handed out by the instructor, in-class and independent field/lab analysis of samples, and written reports.

Evaluation Criteria: Student evaluation will be based on the following.

Formal Rock Descriptions and Analysis of Geologic Origin: 60%

2 Quizzes: 40%

TOTAL: 100%

Grade Cutoffs

A: 89%+, B: 80-88%, C: 70-79%, D: 60-69%, F: <60%

Course Materials: In place of a textbook, handouts and technical literature will be provided to the students. Students should purchase a 10x or higher handlens, a rock hammer, protective eyewear, and a mineral testing kit. Other suggested long-term purchases as geology majors include a compass, capable of measuring strike and dip and a handheld GPS. Most of the material above is available for temporary use by enrolled students during the semester. Tate Museum discounts are available for enrolled students as well. See instructor.

Class Policies: Attendance is mandatory, and unexcused absences will reflect negatively in your grade.

It is the students' responsibility to adhere to assignment due dates, and follow up on any work missed due to absence, excused or otherwise.

Last date to Change to audit status or to withdraw with a W Grade: Check the Casper College Academic Calendar.

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty: (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

General Course Schedule: This is a very generalized schedule, and it will remain important that the students attend class and stay in communication with the instructor through the semester.

WEEKS	Topics and Assignments
Week 1	Basic Mineral and Rock Review
Weeks 2-6	Igneous Rock: Classification, Chemistry and Geologic Settings
Weeks 7-9	Sedimentary Rock: Formal Descriptions and Depositional Environments
Weeks 10-13	Metamorphic Rock: Classification, Mineral Assemblages and Facies, and Metamorphic Environments
Week 14	Thanksgiving Break
Weeks 15-17	Final Project