CASPER COLLEGE COURSE SYLLABUS
GEOL 2010 – Mineralogy and Petrography I

Semester/Year: Spring 2016

Lecture Hours: 3  Lab Hours: 4  Credit Hours: 5

Class Time: 1-3:50  Days: MW  Room: TM 121

Instructor’s Name: Melissa Connely

Instructor's Contact Information: Office Phone: 268-2017  Email: mconnely@caspercollege.edu

Office Hours: MW 9-10, TTH 1-2, or Friday by Appt.

Course Description: Mineralogy and Petrography I is an introduction to the study of rock-forming minerals. It includes an introduction to crystallography, crystal chemistry, physics of light in a crystalline media, and the optical properties of the rock-forming minerals. Also includes the occurrence and identification of common and important minerals, with an emphasis on silicates. Emphasis will be on identification of minerals in hand sample and thin section.

Statement of Prerequisites: GEOL 1100

Goal: Mineralogy and Petrography I is fundamental to further study in geology and other earth sciences. The main objective of this course is to provide the student with a rigorous background in mineralogy in preparation for advanced courses.

Outcomes: Passing Students should:
  • Be able to identify common rock forming minerals by testing the physical and optical properties of hand samples and thin sections
  • Demonstrate their understanding of the chemistry and crystallography of common rock forming minerals
  • Understand the relationships of minerals associated and occurrences with depositional environments
  • Appreciate the importance of minerals by our society and economic interests

General Education Outcomes:
1. Demonstrate effective oral and written communication
2. Use the scientific method
3. Solve problems using critical thinking and creativity
4. Use appropriate technology and information to conduct research
5. Use quantitative analytical skills to evaluate and process numerical data

Course Objectives: See above

Methodology: This course will consist of a series of lectures designed to cover the main facets of mineralogy and an introduction to optical mineralogy. The lectures will explain and expand upon the material in the text, handouts, and reserved references. Since mineralogy is a lab-intensive topic, students will be expected to do considerable work on their own outside of the regularly scheduled meeting time. Students will get an opportunity in lab to examine at first hand minerals, using standard methods of hand sample testing and
petrographic microscopic analysis. Student evaluation will be as objectively as possible through the use of regularly scheduled exams in both the lab and lecture portions of the class, as well as possible surprise quizzes. Students are expected to make every effort to attend class meetings, to carefully read all assigned material, and above all, ask questions when confused or unsure.

**Evaluation Criteria:** Lecture is approximately 50% and lab is approximately 50% of your final grade. Lecture grade consists of quizzes, exams and participation. Your lab grade will be based on lab assignments and lab exams. Although the general grading is based on 90-100% A, 80-89% B, 70-79% C, 60-69% D, <60% F, the percentages may be adjusted to reflect the difficulty of work required. Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

**Required Text, Readings, and Materials:** Mineralogy Science by Klein and Dutrow

**Class Policies:** Last Date to Change to Audit Status or to Withdraw with a W Grade: April 16th

Make-up exams are extremely difficult to arrange in a lab-intensive class. You are expected to make every effort to attend all classes; I may consider make-up exams on a case by case basis, so plan accordingly.

If you must miss an exam, you may be allowed to make it up only if you contact me prior to your absence with a believable, significant excuse.

Late assignments are accepted with a penalty of half grade for each day overdue.

All work must be original. Plagiarism will not be tolerated. Outside help on lab work or assignments will not be allowed without prior approval from the instructor.

**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. This is also, where you will find course evaluation links during course evaluation periods.

**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.

**Calendar or schedule indicating course content**: see next page