GEOL 101L – Physical Geology Laboratory

AVC | Fall 2014 | 3 Units | CRN: 70674 | Room: HS 259 | Time: Mon., 7-10:05pm

http://avconline.avc.edu/mpesses/geol1011.html

Instructor:

Mike Pesses (661) 722.6300 x6914 mpesses@avc.edu HS 252 Office hours: Mon.-Thurs. 8-9:00am & Tues. 11:00am-12:00pm

Advisory: Eligibility for MATH 102, college level reading, & ENGL 101

Required Text & Materials:

- Rutford, R.H., J.L. Carter. (2014) Zumberge's Laboratory Manual for Physical Geology, 16th edition (New York, NY: McGraw Hill).
- Scientific Calculator
- 180 protractor
- 12" ruler (with metric as well)
- Compass (circle drawing kind)
- Colored Pencils

Course Description:

Physical Geology Laboratory provides students with hands-on introduction to the analysis and identification of common minerals and rocks, the analysis and interpretation of topographic and geologic maps, and recognition of characteristic landforms associated with surface processes and tectonic activity. The students will learn basic analytical and geologic skills that will enable them to interpret geologic histories based on fundamental geologic principles and processes.

Students will be able to:

- 1. Apply the principles of the scientific method in the evaluation and assessment of Earth materials and processes.
- 2. Demonstrate an understanding of Earth processes by categorizing and identifying common rock-forming minerals through their appearance, and physical properties.
- 3. Demonstrate an understanding of Earth processes by categorizing and identifying common igneous, sedimentary, and metamorphic rocks through their appearance, textures, and mineral assemblages.
- 4. Recognize, analyze, and interpret major geologic features associated with surface and tectonic processes.
- 5. Examine and evaluate geologic maps and cross sections to construct a geologic history.
- 6. Interpret and appraise relative ages of geologic strata by applying and comparing fundamental geologic principles.
- 7. Calculate the age of geologic materials using established radiometric age dating techniques.



- 8. Analyze and interpret information presented on topographic maps, and locate areas or map features using standard map grid systems.
- 9. Demonstrate an ability to communicate complex course concepts effectively through writing and diagrams.
- 10. Apply the principles of the scientific method in the evaluation and assessment of Earth's history and the development of life.

Grading Breakdown:

In class lab assignments (lowest score dropped): 100 pts Exam 01: 100 pts Exam 02: 100 pts Exam 03: 100 pts (*A* = 90-100%; *B* = 80-89%; *C* = 70-79%; *D* = 60-69%; *F* = 0-59%)

Policies:

- 1. Appropriate college behavior is expected. If you disrupt those around you with personal conversations during lectures you will be asked to leave. Please respect others in the class.
- 2. Attendance is expected for every class session. Come to class on time prepared to participate. Class ends at 10:05pm.
- 3. Assigned readings must be completed prior to each class. Students should plan on spending at least one to three hours outside of class for every hour of lecture reading & reviewing assigned materials.
- 4. The prerequisites and advisories are important! I will expect college level reading, writing, and thinking throughout the class.
- 5. No make up labs will be given, but the lowest lab assignment score will be dropped at the end of the semester.
- 6. Make-up exams will only be given for emergency situations and must be completed within one week of the exam date. No make ups will be given after the test has been handed back in class.
- 7. Students are expected to adhere to all standards of academic integrity. In particular, failure to submit independent work (i.e. plagiarism or cheating on tests) can be grounds for severe sanction including expulsion from the college. See the AVC College Catalog or Student Handbook for more information on the definition and consequences of plagiarism.
- 8. You must drop the class if you indeed intend to drop it. I may drop students for excessive absences, as defined in the college catalog, but do not rely on me to remove you from the class. You will receive an "F" if you simply stop showing up and fail to successfully complete any assignments or exams.
- 9. If you have a legally protected disability under the Americans with Disabilities Act (ADA) or California discrimination law, and you believe you need reasonable accommodation to participate fully in this class, please make an appointment to see me during my private office hours to discuss your need.

SLOs

The Student Learning Outcomes (SLOs) defined for Geography courses can be found on the AVC website at:

http://www.avc.edu/administration/organizations/slo/msslos.html#geography