

Physical Geology, SMCC - Jeff Simpson, jeffrey.m.simpson@southmountaincc.edu / <http://www.softpath.org> - Fall 2018

Lecture - GLG 101 (36775) Tu 9:00 - 11:30 AM | Lab - GLG 103 (36767) Th 9:00 - 11:30 AM

Lecture Textbook: Exploring Geology: Reynolds/Johnson (3rd Ed) - [eBay](#) / [Amazon](#). Save \$. Lab Textbook: None.

See the *updated syllabus* at <http://www.softpath.org> as the general syllabus below will change as discussed in class. Mind the MCCC/S MCC policies, please.

<u>Date</u>	<u>Lecture</u>	<u>Lab</u>
Wk 1	Pretest, Interview, Introduction - Why Geology? Ch 4 - Earth Materials	Lab 0 - Release / Mem Test / Black Boxes / Smashing Granite
Wk 2	Ch 5 - Igneous Environments Ch 5 - Igneous Environments	Lab 1 - Rock-Forming Minerals
Wk 3	Ch 6 - Volcanoes & Volcanic Hazards Ch 6 - Volcanoes & Volcanic Hazards	Lab 2 - Economic Minerals
Wk 4	Ch 7 - Sedimentary Environments & Rocks Ch 7 - Sedimentary Environments & Rocks / Review	Lab 3 - Igneous Rocks
Wk 5	Ch 8 - Deformation & Metamorphism / Review Ch 8 - Deformation & Metamorphism / Exam 1	Lab 4 - Sedimentary Rocks
Wk 6	Ch 9 - Geologic Time Ch 9 - Geologic Time	Lab 5 - Metamorphic Rocks & Lab Review, Rock & Mineral Photos
Wk 7	Ch 10 - Seafloor & Continental Margins Ch 10 - Seafloor & Continental Margins	<i>Lab Exam 1 (Labs 0-5)</i>
Wk 8	Ch 11 - Mountains, Basins, & Continents / Review 2 Ch 11 - Mountains, Basins, & Continents / Exam 2	Lab 6 - Topographic Maps I - Introduction to Topos/Maps
Wk 9	Ch 12 - Earthquakes & Earth's Interior Ch 12 - Earthquakes & Earth's Interior	Lab A - Map Trip
Wk 10	Ch 13 - Climate, Weather, & Their Influence on Geology Ch 13 - Climate, Weather, & Their Influence on Geology	Lab 7 - Topo Maps II - Volcanic Structures
Wk 11	Ch 14 - Glaciers, Shorelines, & Changing Sea Levels / Review 3 Ch 15 - Weathering, Soil, and Unstable Slopes / Exam 3	Lab 8 -
Wk 12	Ch 15 - Weathering, Soil, & Unstable Slopes Ch 16 - Streams & Flooding	Lab 9 - Geologic Maps I
Wk 13	Ch 16 - Streams & Flooding Ch 17 - Water Resources	Lab 10 - Earthquakes - Epicenter & Magnitude
Wk 14	Ch 17 - Water Resources Ch 18 - Energy & Mineral Resources	Lab 11 - Field Trip to North Mountain Park
Wk 15	Ch 18 - Energy & Mineral Resources Ch Review + Evaluation,	Lab 12 - Geologic Maps 2 & Review
Wk 16	<i>Final Exam - Comprehensive</i>	<i>Exam 2 (Labs 6-12)</i>

Attendance - A student is dropped on the fourth missed lecture or the third missed lab. Questions? Read that again.

Cell Phones and Beepers - Put away electronics except when used in class. You probably will live. If you have to be reached during class, inform me prior to class. Do not bring pets, children, or large carnivores to class.

Grades - Points below are subject to change. No rounding - 100-90.0000% = A, 89.9999- 80.0000% = B, 79.9999 - 70.0000% = C, 69.9999-60.0000% = D.

• **Lecture Exams (300 points)** There will be 3 100-point exams. There are no make-up tests. Missed tests receive a zero. Exams usually are thoughtful multiple choice with some essay questions and emphasize evaluation and analysis over memorization.

Final Exam (100 points) The comprehensive final exam **must** be taken by all students. Students with perfect attendance, after taking the final, may drop the lowest exam score of the four exams taken.

Film Reviews/Activities - (180 points±) Each week you will have 2 assignments. One assignment will be a 10-point on-line film review to be completed at home, due at the start of class. The other will be a small 5-point assignment with varying due dates. There are no-make ups.

• **Lab Labs (240 points)** Each lab assignment is worth 20 points. The lowest of the 12 lab scores will be dropped.

Exams (100 points) There will be two 50 point exams as per the schedule. There are no make-up tests. Missed exams earn a zero. Exams are short answer & multiple-choice, emphasizing thinking. Exams are based on the labs.

Posting of Grades & E-Mail - Grades will be posted on Canvas and/or printed & shared with you every 2 weeks in class. Or check with me after class. Your MEID@maricopa.edu e-mail account is the official form of communication with SMCC. You are responsible for reading college messages and responding accordingly. Keep your returned assignments.

Special Arrangements - Students with a specific disability who require accommodation, provide documentation of that disability to me by the second class. For the documentation and/or help in this area, contact the Disability Resource Center.

Concerns & Hours - Bring any concerns to me before class. Please obtain sense of humor. Textbook - any edition will work. Used or rented is fine. I'll use the 5th.

Course Description & Objectives - Study of the kind & arrangement of Earth crust material & the geological processes at work on and within Earth's surface.

1. Describe the scientific foundations of physical geology.
2. Describe the building blocks of matter.
3. Describe the three-part classification of rock processes.
4. Explain the concept of geologic time.
5. Describe geologic structures in crustal rocks.
6. Describe the internal structure of the Earth.
7. Explain the theory of plate tectonics.
8. Describe the process of weathering.
9. Describe coastal processes.
10. Explain the geological processes associated with deserts.
11. Describe glaciation and glacial landforms.
12. Describe the importance of geology to man.
13. Describe the Earth's place in the cosmos.

SYLLABUS RECEIPT / ACKNOWLEDGEMENT

I acknowledge receipt of this syllabus for the GLG 101 and/or 103 and have read understand the contents. I understand I and responsible to SMCC policies as included in the college catalog and student handbook.

Printed Name

Signature

Date

MCCCD Geology Student Field Trip Release Form

I, _____, a student at South Mountain Community college, agree to hold SMCC, The Maricopa Community College District, and its employees, course instructor(s), agents and assigns, harmless from any and all liability resulting form any accident, illness, or injury occurring while I am traveling to or from or participating in any off-campus event relating to the course _____ section number _____.

These events include all field trips and all off-campus course-related activities for the _____ semester that are in any way connect with the above named class regardless of the mode of travel.

Student Signature

Date

For students under 18: I hereby give my permission for _____ to participate in any field trips or off-campus activities relating to the above course.

Signature of Parent or Guardian

Date

Maricopa County Community College District (MCCCD) is an EEO/AA institution and an equal opportunity employer of protected veterans and individuals with disabilities. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin. A lack of English language skills will not be a barrier to admission and participation in the career and technical education programs of the college.

The Maricopa Community Colleges do not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. For Title IX/504 Concerns, call the following number to reach the appointed coordinator: **(480) 731-8499**. For additional information, as well as a listing of all coordinators within the Maricopa College system, visit the following weblink: <https://distict.maricopa.edu/consumer-information/non-discrimination-statements>.

El distrito de Los Colegios Comunitarios de Maricopa (cuyas siglas en inglés son MCCCD) es una institución EEO/AA y un empleador con igualdad de oportunidades para veteranos protegidos y personas con discapacidades. Todos los solicitantes calificados recibirán consideración para empleo sin considerar raza, color, religión, sexo, orientación sexual, identidad de género, u origen nacional. La falta de destrezas del idioma inglés no es un impedimento para admisión y participación en programas de educación Técnica del colegio.

Los Colegios Comunitarios de Maricopa no discriminan con base a raza, color, origen nacional, sexo, discapacidad o edad en sus programas o actividades. Sí tiene preguntas sobre título IX/504, llama al siguiente número para comunicarse con el coordinador designado: **(480) 731-8499**. Para obtener información adicional, así como una lista de todos los coordinadores dentro del sistema de Colegios Comunitarios de Maricopa, visite el siguiente enlace web: <https://district.maricopa.edu/consumer-information/non-discrimination-statements>.