

GEOL 100 - PHYSICAL GEOLOGY (Purely Online/Asynchronous - Canvas) – CRN: 90789

3 Lecture Hours: 3 Units; Letter Grade; Student may petition for Credit/No Credit (FT). Associate Degree Credit & transfer to CSU and/or private colleges and universities. UC Transfer Course List.

Online Course Duration: June 21, 2021 through August 13, 2022 - Purely Online and Asynchronous

Instructor: R. Ray Rector

Instructor Contact: e-mail: geoprof@geoscirocks.com

Office Hours: by Appointment

Course Canvas URL: <https://sdccd.instructure.com/login/canvas>

Instructor's Web site: www.geoscirocks.com/

Required, No-Cost Course Textbook: [An Introduction to Geology](#) Authors: Chris Johnson, Matthew D. Affolter, Paul Inkenbrandt, Cam Mosher Publisher: SLCC Text URL: <https://opengeology.org/textbook/>

PREREQUISITES ADVISORY FOR ONLINE COURSE: This being an online course, it is advisable that you are computer literate, with a good working knowledge of the World Wide Web, e-mail, and word-processing. A high-speed Internet connection is most advantageous.

COURSE DESCRIPTION: This course is an introduction to the science of the earth, the materials of which it is composed, and the processes that are acting upon it. Topics include plate tectonics and Earth's internal structure; the formation and classification of minerals and rocks; geologic structures; and geologic processes of the earth's surface and subsurface. This course is intended for students with a general interest in the geological sciences as well as those majoring in geology, earth science, or geological engineering.

STUDENT LEARNING OUTCOME: Upon completion of this course: the successful student will be able to differentiate among the 3 major types of plate boundaries and recognize their characteristic geologic features and associated formative processes.

ACCOMMODATION OF DISABILITY: A student with a verified disability may be entitled to appropriate academic accommodations, including the assistance of a note-taker in the classroom, and/or extended time for taking exams. Students with disabilities who may need academic accommodations should notify their professor immediately. For further information, contact the Disabled Students Program and Services (DSPP) Office.

CLASS ATTENDANCE, AND ENROLLMENT NOTES, AND DEADLINES: ALL STUDENTS registered in this course prior to the start date MUST sign-in into the official Canvas course page sometime on or before the end of the 4th DAY of classes on the first week of the semester – **Friday, June 24, 2022**, in order to stay registered in the course. If you do not log by the above date, then I will drop you and give your seat to a waitlisted student. The last day to withdraw with a refund and with no grade (no "W" placed on permanent record.) is **Sunday, June 26, 2022**. The last day to add or drop the class with no grade (no "W" placed on permanent record.) is **Wednesday, June 29, 2022**. The deadline to file a petition for PASS/NO PASS grade option is **Thursday, July 7, 2022**. The very last day to drop a class with a "W" is **Wednesday, July 27, 2022**, (the official withdrawal deadline). If you fail to withdraw by **7/27/22** and/or you stop participating in class, then a final grade must be assigned to you. It is the student's responsibility to add, drop, or withdraw from classes before the deadlines stated in the class schedule.

Petitions to add, drop, or withdraw after the deadline will not be approved without written proof of circumstances beyond the student's control, which made her/him unable to meet the deadline. Lack of money to pay fees is not considered an extenuating circumstance. Students anticipating difficulty in paying fees before the deadline should check with the Financial Aid Office about sources of funds or other alternatives for which they may be eligible. It is the student's responsibility to drop all classes in which he/she is no longer attending (for on campus classes). Registered students who do not login onto this Canvas course and participate in our virtual classroom over a period of 12 consecutive days will be dropped from this course for lack of participation. Students, who remain enrolled in a class beyond the published withdrawal deadline, as stated above (as listed in the official class schedule) will receive an evaluative letter grade in this class.

STATEMENT OF RETENTION: Students, please discuss your plans to withdraw from class with your instructor. You might have options that may allow you to continue in class.

INSTRUCTOR'S ONLINE COURSE POLICIES:

A. Student Workload Obligations: Independent direction, discipline and motivation of the student are critical to both learning course content and academic success in this online course. It will be up to you, the student, for staying up with homework assignments, quizzes, and exams. Make sure and consult the instructor and/or fellow classmates about anything in this course that you find difficult and/or confusing. There are no make-up exams or accepted late work, unless the student provides proof of some compelling reason for the make-up. It is the student's responsibility to contact me personally to forewarn me of any problem in completing the regular-scheduled exams or other coursework by their due dates. Business, pleasure, or being generally ill, is not a compelling reason. Being deadly sick or having a death in the family is good reason.

B. Instructor-Student Communication This course is taught as a completely on-line course and asynchronous. That is, the communication between the instructor and the students, as well as among students, takes place via electronic means on the Internet. Communication will occur via email, discussion board and Zoom. The instructor will be initiating contact with students on a nearly daily basis, via announcements, discussion board posts, email, Zoom, and by phone. Students are expected to log into the Canvas course page regularly (several time per week) to update communication with instructor and fellow students. Note that there is no mandatory classroom Zoom meetings scheduled for this class. However, non-mandatory, synchronous and recorded Zoom meetings may occur during the course. Also note that the professor has a scheduled office hour set aside every Wednesday evening from 6pm to 7pm that will be done via chat room, email, discussion board, and Zoom.

C. Course Assignments and Testing: Assignments, either for discussion on the bulletin board, or for completion and return to the instructor, will be posted on the Canvas course site. Student contributions will be evaluated on both the quality (intelligent use of scientific terminology learned from using the textbook and other sources) and quantity (frequency and length) of comments. Reports from students, which are submitted directly to the instructor, will be evaluated based on quality (use of appropriate scientific vocabulary, for instance) and on rigor of the analysis. Testing will occur via the Internet, and tests will use a variety of formats (true-false, multiple-choice, matching, short answer, and essay).

D. Deadlines, Computer/Internet Mishaps, and Backing up: Timelines, Deadlines, etc.: Quizzes will be available each week and will appear with a due date. Availability for quizzes and exams prior to the finishing deadline is roughly three to four days. The research writing assignment will not be accepted or submitted following the due date. Note that because it sometimes happens that computer networks (including your own computer) are down or unavailable, it is preferable to get assignments done a day or two earlier, so as to avoid trying to post an assignment on the very last minute of the due date, only to find that one's Internet Service Provider is down, for example. **ALSO**, as with any writing endeavor on a computer, **YOU MUST ALWAYS BACK-UP ALL YOUR WORK** on an external memory device, in timely increments. The excuse that you permanently lost your entire writing assignment file during a computer crash or Internet disruption is not acceptable, because those sorts of mishaps are totally avoidable by doing regular backup. Additionally, you need to make sure to **ALWAYS HAVE A BACK-UP COMPUTER** at your disposal: family members, friends, or library, school, or even your own secondary computer/smart phone. Finally, you must have a **reasonably high speed, solidly consistent, trustworthy Internet connection**, especially for test taking, viewing streaming videos, and assignment submission.

E. Online Netiquette and Student Code of Conduct: This class will be conducted in accordance with the college code of student conduct and basic standards of academic honesty. Students are expected to respect and obey standards of student conduct while interacting online in this course. As your instructor, I have the following expectations of your academic behavior while online: Promote a positive learning environment by exhibiting mutual respect and consideration of the feelings, ideas, and contributions of others, as reflected in your written dialog. Demonstrate a genuine desire to learn, interact, and improve. Cheating, plagiarism, or other forms of academic dishonesty are totally unacceptable and will not be tolerated in this class. Violations of standards of academic honesty will be reported to the school dean for appropriate action. A detailed explanation of academic integrity of students is found below: The academic integrity of the students in this course and Policy 3100, the San Diego Community College District Student Code of Conduct, require that all student work including, but not limited to, discussion postings,

assignments, essays, papers, and exams be free of plagiarism. Students must fully cite any text, graphics, or others' ideas they include in that work. For additional details, please review [AP 3100.3—Honest Academic Conduct](#).

As part of my commitment to academic integrity, student work in this course may be submitted to an online plagiarism checking service.

Any student caught cheating or plagiarizing will be subject to the disciplinary procedures given in District Policy 3100, which may include receiving a failing grade for the assignment. Any cheating or plagiarism will be reported to the Dean of Student Affairs. Specifically, the following behaviors are examples of cheating/plagiarism (this list is not exhaustive).

- Copying directly from the textbook. Note: you're welcome to summarize the information from when completing homework assignments, but please phrase homework answers in your own words!
- Using unauthorized notes while taking an exam or copying another student's work.
- Sharing exam answers or collaborating with another student during an exam.
- Turning in homework that contains large blocks of text that are identical or nearly identical to another student's (both parties will receive zero score).
- Copying from any source (including the Internet) without citing the source.
- Turning in work completed for another class (unless pre-authorized by the instructor).
- Passing off any work as your own that is not. This includes the use of work completed by other students.

To avoid any possibility of someone else plagiarizing your work, I highly recommend that you not share any content-specific material (such as exam answers, homework, or field trip reports) with any other students. Please note that if I receive any course work from two or more students that is identical or strikingly similar, I reserve the right to assign all such students a score of zero for the assignment in question. Please also note that if I suspect academic dishonesty on an assignment or an exam, I reserve the right to schedule a one-on-one Zoom meeting to give you the opportunity to demonstrate that you understand the answer(s) you supplied. If a student is unable to demonstrate their understanding of an exam/assignment answer, I reserve the right to assign the student a score of zero for that exam/assignment.

If you have any concerns regarding plagiarism or cheating, please contact the instructor.

GRADING/EVALUATION: Grading is based on points earned by completing assignments and tests. Final course grades are based purely on point percentages without any type of weighting. The following is the course grading points breakdown based on the assessment activity:

I. Quizzes (10 @ 30 points each) = 300 points. **Note:** You get three (3) attempts per quiz. Untimed/Open book.

II. Exams (2 @ 150 points each) = 300 points. **Note:** You get one (2) attempts per exam. Timed/Open book

III. Assignments (3 @ 15 + 40 + 75 points) = 120 points; Personal greeting assignment (mandatory) = 15 pts; Geology in News assignment (mandatory) = 40 pts, San Andreas Fault Zone assignment (conditional) = 75 pts

SAF Assignment Waiver Note: A student can waive doing the SAFZ assignment if he/she/they gets 100 points or more on their midterm exam.

V. Late Work Policy: No late work accepted.

VI. Extra Credit Policy: Extra credit is available - up to 30 points maximum. Last day to turn in extra credit work is Sunday, August 14, 2022 - **Absolutely no EC work accepted after this date.**

VII. Grading Scale: Your final grade is based purely on total percentage out of possible 720 points (with SAF assignment) or 645 points (without SAF assignment):

100% – 90% = A

89% -- 80% = B

79% -- 70% = C

69% -- 55% = D
Less than 55% = F

Note: *Minor adjustments to the deadlines and total course grade points may be made by instructor during the semester. If changes are made, the instructor will inform the students in a timely manner.*

Course Testing Schedule:

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|------------------------------|------------------------------------|
| 1) Quiz I: Sunday, June 26 | 7) Midterm Exam I: Sunday, July 24 |
| 2) Quiz II: Sunday, July 3 | 8) Quiz VII: Sunday, July 31 |
| 3) Quiz III: Sunday, July 10 | 9) Quiz VIII: Sunday, July 31 |
| 4) Quiz IV: Sunday, July 10 | 10) Quiz IX: Sunday, August 7 |
| 5) Quiz V: Sunday, July 17 | 11) Quiz X: Sunday, August 14 |
| 6) Quiz VI: Sunday, July 24 | 12) Final Exam: Sunday, August 14 |

Extra Credit Deadline: *All extra credit must be turned in by **Sunday, August 14th** for credit. Late extra credit work will not be accepted - no exceptions – period.*

IMPORTANT COURSE DATES: Assessment of student learning outcomes for this class includes 10 quizzes, 2 exams, and 3 assignments. Each assessment activity has a specific submittal due date. Make sure to keep a VERY CLOSE track of the class schedule of activities, so that you stay on track with your coursework, and get all your fully completed work turned in on time. I suggest printing out the class schedule and taping it somewhere around your work area that you can view it regularly. **Besides test dates, below are important deadline dates for this course.**

- 1) Quiz and Exam completion dates are all on Sundays.
- 2) Class Personal Introduction Discussion Assignment due by Wednesday, June 22, 2022
- 3) Last day to drop without a "W" AND get a refund is Sunday, June 26, 2022
- 4) Last day to add or drop class without a "W" is Wednesday, June 29, 2022
- 5) Last day to change grade modality to Pass/No Pass is Thursday, July 7, 2022
- 6) Geology in the News Discussion Assignment due Sunday, July 17, 2022
- 7) Midterm exam completion date is Sunday, July 24, 2022
- 8) Last day to drop class with a "W" (withdraw) is Wednesday, July 27, 2022
- 9) San Andreas Fault Zone Research Assignment due Sunday, August 7, 2022
- 10) Last day to turn in extra credit is Sunday, August 14, 2022 – No late exceptions!
- 11) Final exam completion date is Sunday, August 14, 2022

EXTRA CREDIT: There are several extra credit assignments available: they include virtual fieldtrips, and a couple other research activities. Extra credit assignments are listed in the Extra Credit Folder. Last day to turn in extra credit work is Sunday, August 14, 2022. Absolutely no EC work accepted after this date. Up to 30 points of extra credit is allowed in this course.

STUDY MATERIALS FOR THIS COURSE:

There are several primary sources of information that are available for successfully completing this course - they are: 1) Free, open-source website textbook; 2) Earth Revealed Video Lessons available online from the instructor's personal website; 4) the instructor's PowerPoint lecture slides and lecture notes. 3) Geology video slide tutorial lessons. Carefully read and study all assigned textbook reading prior to completing the associated quizzes, exams, and assignments. Note: the SLCCC e-textbook has additional resources and activities to help master the curriculum, which includes summaries and quizzes.

1) Cost-free E-Textbooks:

Primary text: "Introduction to Geology" E-Textbook: <https://opengeology.org/textbook/>

Supplementary text: "Physical Geology 101": <http://gotbooks.miracosta.edu/geology/index.html>

This geology course uses a no-cost website-accessed e-textbook titled "A Introduction to Geology". Written by Chris Johnson, Matthew D. Affolter, Paul Inkenbrandt, Cam Mosher and published by Salt Lake

Community College, it covers all the course topics, and includes key concepts, practice quizzes and study guides.

2) Earth Revealed Geology Video Series: www.learner.org/resources/series78.html

The Annenberg Media Company has available an excellent geology video instructional series called "Earth Revealed" (a total of twenty-six 30-minute videos). Links to these videos can be accessed from the instructor's personal website. I have listed the Earth Revealed video series number(s) that correspond to the specific topic(s) of study each week within the class schedule next to the textbook chapter reading assignments. Some quiz questions pertain to Earth Revealed content.

3) Instructor's Personal Student Website: www.geoscirocks.com

To compliment the textbook and ER video series learning resources, the professor has a personal educational website for students that include lecture notes and PowerPoint presentations, plus a wealth of additional, useful information. Carefully read and study the lecture notes and view the complimentary PowerPoint presentations prior to completing the associated quizzes, exams, and assignments. The lecture notes and slide presentations can be directly accessed from the instructor's personal website, which includes an even wider variety of other web-based resources that may be of personal interest. Please check out the above URL.

Click on the Miramar Online link to access all information pertaining directly to this course. Browse down the left-hand side menu for pertinent coursework information and resources. Additionally, the site has links to the "Earth Revealed" geology instructional video series – a set of 26 half-hour lessons that requires a high-speed connection to watch. I have listed the "Earth Revealed" video series number(s) that correspond to the specific topic(s) of homework study each week within the class schedule below the textbook chapter reading assignments. Note that information found within the Earth Revealed videos is included in the test questions within the quizzes and exams.

4) Geology Video Tutorials: http://www.geoscirocks.com/intro_to_geology_lectures_slide_videos.htm

Finally, there are a set of geology video slide study tutorials that are designed to help you better learn the course curriculum. These captioned video slide shows were put together by Katryn Wiese, an earth science professor at the City College of San Francisco. These narrated slide shows are very well designed and highly recommended as part of your study plan.

5) Course Study Schedule: http://www.geoscirocks.com/mesa_online_sched.pdf

Below is the course study and test schedule. The course schedule is a very important document that should be checked on daily. The course schedule shows the weekly assigned study materials, tests and assignments due dates, and important course dates/deadlines. The weekly study materials have hyperlinks that will take you directly to the listed study information. The due dates indicate both when the listed course materials need to be studied by, and the last day to take a test or turn in an assignment. Note the listed assigned weekly study materials are the [Introduction to Geology](#) text (ITG), the [Earth Revealed Video](#) series (ERV), Professor [Ray's PowerPoint lecture slides](#) (PPP), and the [Geology Video Tutorials](#) (GVT)

Geology 100 Online Schedule – Summer 2022 – San Diego Mesa College

Weekly Study Topic	Assigned Weekly Homework	Tests and Assignments	Due Date
<u>Week 1</u>			
- 6/21 to 6/26 -			
Introductions to Class	Prof's Welcome Message Prof's Video Welcome Personal Intro assign in Discussion Folder Professor's PowerPoints (PPP) 1	Post Personal Introduction on Discussion Board	Wed 6/22

Course Logistics	Course Syllabus and Schedule		
Intro to Geology & Earth Origins	Intro to Geology (ITG) Chap 1 Professor's PowerPoints (PPP) 1 Earth Revealed Video (ERV) 1 Geol Vidio Tutorials (GVT) 1 - 5	Quiz #1 – Course Syllabus and Intro to Geologic Science	Sun 6/26
Earth Physiology & Plate Tectonic Theory	Intro to Geology (ITG) Chap 2, 8 Earth Revealed Videos (ERV) 2, 3, 4, 5, 6 Prof's PowerPoints (PPP) 2, 3, 4, 5 Geo Vid Tutorials 6 - 17		
<u>Week 2</u> - 6/27 to 7/3 -			
Plate Tectonic Theory Seafloors and Continents	Intro to Geology (ITG) Chap 2, 8 Earth Revealed Videos (ERV) 2, 3, 4, 5, 6 Prof's PowerPoints (PPP) 2, 3, 4, 5 Geo Vid Tutorials (GVT) 6 - 17	Quiz #2 – Earth Origin, Physiology, and Plate Tectonic Theory	Sun 7/3
Minerals and Mineral Resources	ITG Ch 3 ERV - 12 Prof's PowerPoints 6 GVT – 18, 19, 20		
<u>Week 3</u> - 7/4 to 7/10 -			
Minerals and Mineral Resources	ITG Ch 3 ERV - 12 Prof's PowerPoints 6 GVT – 18, 19, 20	Quiz #3 - Minerals and Mineral Resources	Sun 7/10
Igneous Rocks, Magma, and Volcanoes	ITG Ch 4 ERV 13, 14 PPP 7 GVT – 21, 22, 23, 24	Quiz #4 – Igneous Rocks, Magmas and Volcanoes	Sun 7/10
<u>Week 4</u> - 7/11 to 7/17 -			
Sediments and Sedimentary Rocks	ITG Ch 5 ERV 15, 17 PPP 8 GVT – 25,	Quiz #5 – Sedimentary Rocks & Metamorphic Rocks	Sun 7/17
Metamorphism & Metamorphic Rocks	ITG Ch 6 ERV 18 PPP 9 GVT –26		
	Geology-in-the-News Assignment Info in Discussion Folder	Geology-in-the-News Assignment - Post your completed assignment on the discussion board	Sun 7/17

<p>Week 5 - 7/18 to 7/24 -</p>			
<p>Geologic Time/Dating and Earth History</p>	<p>ITG Ch 7, 8 ERV – 10 PPP 10 GVT – 27, 28</p>	<p>Quiz #6 –Geologic Time, Dating Rocks, and Earth History</p>	<p>Sun 7/24</p>
<p>Midterm Exam – Review and Test</p>	<p>Midterm Exam Review – ITG Ch 1-8; ERV 1-6 8-18 PPP 2-10 GVT – 1- 28</p>	<p>Midterm Exam – All course material covered in quizzes 2 through 6. Exam available to take starting on 7/20</p>	<p>Sun 7/24</p>
<p>Week 6 - 7/25 to 7/31 –</p>			
<p>Crustal Deformation and Mountain Building</p>	<p>Withdrawal Deadline</p> <p>ITG Ch 2, 9; ERV 3, 8, 9; PPP 11 GVT – 33, 34, 35, 36</p>	<p>Last day to withdraw with a "W"</p>	<p>Thur 7/27</p>
<p>Earthquakes And Seismic Hazards</p>	<p>ITG Ch 2 ERV 3, 7 and 9 PPP 12 GVT – 33, 32, 34</p>	<p>Quiz #7 – Crustal Deformation and Mountain Building</p>	<p>Sun 7/31</p>
		<p>Quiz #8 – Earthquakes</p>	<p>Sun 7/31</p>
<p>Week 7 - 8/1 to 8/7 –</p>			
<p>Rivers, Mass Wasting and Groundwater</p>	<p>ITG Ch 11, ERV 19, 20, 21 PPP 13, 14 GVT – 37, 38, 39,</p>	<p>Quiz #9 – <i>Rivers and Groundwater</i></p>	<p>Sun 8/7</p>
<p>Shorelines</p>	<p>ITG Ch 12 ERV 16, 23 & 24 PPP 13, 14 and 15 GVT – 38, 40, 41, 42, 46</p>		
<p>SAF Assignment</p>	<p>SAF Research Assignment – See Assignment Folder for info</p>	<p>Submit San Andreas Fault/Earthquake Assignment into the Assignment folder</p>	<p>Sun 8/7</p>
<p>Week 8 - 8/8 to 8/14 -</p>			
<p>Glaciers and Climate Change</p>	<p>ITG Ch 14 and 15 ERV 16, 23 & 24 PPP 13, 14 and 15 GVT – 38, 40, 41, 42, 46</p>	<p>Quiz #10 – <i>Shorelines, Glaciation and Climate Change</i></p>	<p>Sun 8/14</p>
<p>Extra Credit Work</p>	<p>Extra Credit Work – See EC in Assignment folder</p>	<p>Last day to Submit Extra Credit</p>	<p>Sun 8/14</p>
<p>Final Exam – Review and Test</p>	<p>Final Exam Review ITG Ch 2, 9 - 15 ERV 7, 16, 19-24</p>	<p>Final Exam - All course material after the midterm exam (covered in quizzes 7 through 10).</p>	<p>Sun 8/14</p>

Please Note: This schedule is tentative and may be changed or modified by the instructor at anytime during the semester. Students will be notified in a timely basis if changes are made.