

GEOL 100 - PHYSICAL GEOLOGY (Purely Online/Asynchronous - Canvas) – CRN: [53308](#)**3 Lecture Hours:** 3 Units; Letter Grade; Student may petition for Credit/No Credit (FT).**Credit Transferability:** Credit - Degree Applicable; Transfer Credit: UC, CSU; CSU GE: B1. Physical Science; DIST GE: B2. Physical Sciences; IGETC: 5A. Physical Science**Online Course Duration:** January 29, 2024 through May 25, 2024 - Purely Online and Asynchronous**Instructor:** R. Ray Rector**Instructor Contact:** e-mail: geoprof@geoscirocks.com**Office Hours:** Thursdays: 6:00pm to 7:00pm Email/Discussion Board/Chat Room/Zoom and 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:** Pursuit of understanding the physical characteristics of the earth as a whole and its past, present and future evolutionary process. Unifying concepts such as plate tectonics, uniformitarianism, and geologic time will be studied. The causes of natural geologic hazards and their effects on people, society, and the environment will also be explored.**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.**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 FOURTH DAY of classes on the first week of the semester – **Thursday, February 1, 2024**, 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 **Friday, February 10, 2024**. The deadline to file a petition for PASS/NO PASS grade option is **Friday, April 12, 2024**. The very last day to drop a class with a "W" is **Friday, April 12, 2024**, (the official withdrawal deadline). If you fail to withdraw by **4/12/24** and/or 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 also 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 PRIOR to withdrawing. You might have options that may allow you to continue in class.**ACCOMMODATION OF DISABILITY:** If you have a disability, you are encouraged to contact Disabled Students Programs & Services at 619-388-2780, email mesadsps@sdccd.edu or stop by I-405 in the Student Services Building. They will help you determine what assistance is available for you. Current students who have received services from Mesa DSPPS within the last year you can request an accommodation letter for the

current or upcoming semester through the MyDSPS Portal. Please submit your DSPS paperwork to the instructor in a timely manner.

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.

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.

Instructor's Artificial Intelligence Policy: The use of AI for help in doing coursework is prohibited in this class. The use of generative AI tools (such as ChatGPT, Bard, etc...) is not allowed in this course for any part of a graded Miramar College. Violations could result in failure of the assignment and further appropriate action with the Dean's office.

If you have any concerns regarding plagiarism, cheating, or using AI, please contact me, 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 two (2) attempts per exam. Timed/Open book

III. Research/Discussion Assignments: = 150 points; Personal greeting assignment = 20 pts; Volcano assignment = 50 pts; Geology in the News assignment = 30 pts; Earthquake assignment = 50 pts

V. Late Work Policy: No late work accepted, unless with a verifiable, legitimate excuse.

VI. Extra Credit Policy: Extra credit is available - up to 35 points maximum. Last day to turn in extra credit work is Sunday, May 19, 2024 - **Absolutely no EC work accepted after this date.**

VII. Grading Scale: Your final grade is based purely on total percentage out of possible 750 points:

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, February 4 | 7) Quiz VI: Sunday, April 14 |
| 2) Quiz II: Sunday, February 25 | 8) Quiz VII: Sunday, April 21 |
| 3) Quiz III: Sunday, March 3 | 9) Quiz VIII: Sunday, April 28 |
| 4) Quiz IV: Sunday, March 10 | 10) Quiz IX: Sunday, May 5 |
| 5) Quiz V: Sunday, March 24 | 11) Quiz X: Sunday, May 19 |
| 6) Midterm Exam I: Sunday, March 24 | 12) Final Exam: Sunday, May 26 |

Extra Credit Deadline: *All extra credit must be turned in by **Sunday, May 19th** 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 4 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.

Below are ten important deadline dates for this course, not including quiz dates:

- 1) Class Personal Introduction Discussion Assignment due by Thursday, February 1, 2024
- 2) Last day to drop without a "W" AND get a refund is Friday, February 10, 2024
- 3) Volcano Research Assignment due Sunday, March 17, 2024
- 4) Midterm exam completion date is Sunday, March 24, 2024
- 5) Geology in the News Discussion Assignment due Sunday, April 7, 2024
- 6) Last day to change grade modality to Pass/No Pass is Friday, April 12, 2024
- 7) Last day to drop class with a "W" (withdraw) is Friday, April 12, 2024
- 8) Earthquake Research Assignment due Sunday, May 12, 2024
- 9) Last day to turn in extra credit is Sunday, May 19, 2024 – No late exceptions!
- 10) Final exam completion date is Sunday, May 26, 2024

EXTRA CREDIT: There are numerous extra credit assignments available: they include virtual fieldtrips, video documentaries, and other research activities. Extra credit assignments are listed in the Extra Credit Folder. Last day to turn in extra credit work is Sunday, May 19, 2024. 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:

This class is a No-Cost class. However, there are several primary, cost-free 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. Below are details of these learning resources:

1) Cost-Free E-Textbooks:

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

This geology course uses a **no-cost** website-accessed e-textbook titled "A Introduction to Geology". Authored by Chris Johnson, Matthew D. Affolter, Paul Inkenbrandt, Cam Mosher; Published by Salt Lake Community College; The text covers all the course topics, and includes key concepts, practice quizzes and study guides.



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

This geology course also uses an additional no-cost e-text that you can use to supplement the main text. This text has a very different chapter format, but with similar content.



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) Professor's Recorded Lectures and PowerPoints: Professor's PP Slides

The professor's recorded lectures and PowerPoint slide presentations provide a wealth of useful information that closely align with the textbook, ER videos, and test questions. Watch the professor's lectures and view the complimentary PowerPoint presentations prior to completing the associated quizzes, exams, and assignments. The professor's recorded lectures and PowerPoints can be accessed from the Canvas course site, and specific lectures and PowerPoints are listed for each week of class in the course schedule.

4) Geology Topics Tutorial Videos:

http://www.geoscirocks.com/intro_to_geology_lectures_slide_videos.htm

Finally, there are a set of geology topics slide show tutorial videos 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) 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. 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.

6) Course Study Schedule:

Below is the course study and test schedule. The course schedule is a very important document that should be checked several times a week. 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 – Spring 2024 – San Diego Miramar College

Weekly Study Topic	Assigned Weekly Homework	Tests and Assignments	Due Date
<u>Week 1</u> - 1/29 to 2/4 -			
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	Thur 2/1
Course Logistics	Course Syllabus and Schedule	Quiz #1 – Course Syllabus and Intro to Geologic Science	Sun 2/4
Intro to Geology	Textbook Chapter 1 Professor's PowerPoints 1		
Earth Origins	Earth Revealed Video 1 Geo Tutorial Videos 1 - 5		
<u>Week 2</u> - 2/5 to 2/11 -			
Earth Physiology	Textbook Chapter 2, 8 Earth Revealed Videos 2, 3, 4, 5, 6		
Plate Tectonic Theory	Prof's PowerPoints (PPP) 2, 3, 4, 5 Geo Tutorial Videos 6 - 17		
<u>Week 3</u> - 2/12 to 2/18 -			
Plate Tectonic Theory	Textbook Chapters 2, and 8 Earth Revealed Videos 2, 3, 4, 5, 6	Quiz #2 – Earth Origin, Physiology, and Plate Tectonics	Sun 2/25
Seafloors and Continents	Prof's PowerPoints 2, 3, 4, 5 Geo Tutorial Videos 6 - 17		
<u>Week 4</u> - 2/19 to 2/25 -			
Minerals	Textbook Chapters 3 and 16 Earth Revealed Videos - 12 and 26	Quiz #3 - Minerals and Mineral Resources	Sun 3/3
Mineral Resources	Prof's PowerPoints 6 Geo Tutorial Videos– 18, 19, 20		
<u>Week 5</u> - 2/26 to 3/3 -			
Igneous Rocks	Textbook Chapter 4 Earth Revealed Video 13, , 14	Quiz #4 – Igneous Rocks, Magmas and Volcanoes	Sun 3/10
Magmas	Prof's PowerPoints 7		
Volcanoes	Geo Tutorial Videos – 21, 22, 23, 24		

Week 6 - 3/4 to 3/10 -

Sediments

[Textbook Chapter 5](#)
[Earth Revealed Video 15, 17](#)
[Prof's PowerPoint 8](#)
[Geo Tutorial Videos – 25,](#)

Sedimentary Rocks

Week 7 - 3/11 to 3/17-

Metamorphism
Metamorphic Rocks

[Textbook Chapter 6](#)
[Earth Revealed Video 18](#)
[Prof's PowerPoint 9](#)
[Geo Tutorial Videos –26](#)

Volcano Research Assignment
Assignment Info in Module Folder
Deadline to submit assignment

Sun
3/17

Quiz #5 – Sedimentary Rocks &
Metamorphic Rocks

Sun
3/17

Week 8 - 3/18 to 3/24 -

Midterm Exam Week
Make-ups
Review and Test

Midterm Exam Review –
[Textbook Chapters 1-8;](#)
[Earth Revealed Video 1-6 8-18](#)
[Prof's PowerPoints 2-10](#)
[Geo Tutorial Videos – 1- 28](#)

– **Take Midterm Exam** –
Exam available on 10/18
Exam deadline 3/24

Sun
3/24

Spring Break Week
- 3/25 to 3/31 -

Week 9 - 4/1 to 4/7 -

**Geologic Time, Geo-Dating
and Earth History**

[Textbook Chapters 7, and 8](#)
[Earth Revealed Videos – 9 and 10](#)
[Prof's PowerPoint 10](#)
[Geo Tutorial Videos – 27, 28](#)

**Geology-in-the-News
Assignment** - Post completed
assignment on discussion board

Sun
4/7

Quiz #6 –Geologic Time, Dating
Rocks, and Earth History

Sun
4/14

Week 10 - 4/8 to 4/14 -

Mountain Building
Crustal Deformation

[Textbook Chapters 2, and 8;](#)
[Earth Revealed Videos 7 and 8](#)
[Prof's PowerPoint 11](#)
[Geo Tutorial Videos – 33, 34, 35, 36](#)

Withdrawal and P/NP Deadlines
Last day to withdraw with "W"

Fri
4/12

Quiz #7 – Crustal Deformation and
Mountain Building

Sun
4/21

Week 11 - 4/15 to 4/21 -

Earthquakes
Seismic Hazards

[Textbook Chapter 9](#)
[Earth Revealed Video 3, and 9](#)
[Prof's PowerPoint 12](#)
[Geo Tutorial Videos – 33, 32, 34](#)

Quiz #8 – Earthquakes

Sun
4/28

Week 12 - 4/22 to 4/28 -

Mass Wasting Rivers Systems Groundwater	Textbook Chapters 10 and 11 , Earth Revealed Video 19, 20, 21 Prof's PowerPoints 13, 14 Geo Tutorial Videos – 37, 38, 39 ,	Quiz #9 – Rivers & Groundwater	Sun 5/5
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Week 13 - 4/29 to 5/5 -

Shorelines	Textbook Chapter 12 Earth Revealed Video 16, 23 & 24
Human Impacts on Coastlines	Prof's PowerPoint 13, 14 and 15 Geo Tutorial Videos – 41, 42, 46
Quake Assignment	EQ Research Assignment – See Module Folder for info

Week 14 - 5/6 to 5/12 -

Earthquake Research Assignment **Sun
5/12**
Deadline to submit assignment

Glaciers	Textbook Chapter 14 Earth Revealed Video 16 , Prof's PowerPoint 14 Geo Tutorial Videos – 40
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Week 15 - 5/13 to 5/19 -

Climate Change	Textbook Chapter 15 Earth Revealed Video 23 & 24 Prof's PowerPoint 15 Geo Tutorial Videos – 46
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Quiz #10 – *Shorelines, Glaciation and Climate Change* **Sun
5/19**

Extra Credit Work	Extra Credit Work – Find EC in the Assignment folder
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Last day to Submit Extra Credit **Sun
5/19**

Finals Week

- 5/20 to 5/26 -

**Final Exam –
Review and Test**

Final Exam Study Guide
[Textbook](#) Ch 2, 9 - 15
[Earth Revealed Video](#) 7, 16, 19-24
[Prof's PowerPoint](#) 11-15
[Geo Tutorial Videos](#) – 29-46

Final Exam - All course material
after the midterm exam (covered in
quizzes 6 through 10).

Exam available to take on 5/20

**Sun
5/26**

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.