

COURSE ID:	GEOL 111: Physical Geology Laboratory
DEPARTMENT:	Geology
SUBMITTED BY:	Matthew Robles
DATE SUBMITTED:	Thursday, 30 <sup>th</sup> April 2020

	DATE SUBMITTED: Thursday, 30 <sup>th</sup> April 2020
	For additional resources on completing this form, please visit the DE Website:
	www.valleycollege.edu/onlinefacultyresources
1	Please select the distance education method that describe how the course content will be delivered.
1.	Check ALL methods that will be used for offering this course, even if previously approved.
	□ PO – Partially Online
	☐ OPA – Online with In-Person Proctored Assessments
	☐ FOMA – Fully Online with Mutual Agreement
	_ · · · · · · · · · · · · · · · · · · ·
2.	In what way will this course, being offered in distance education format, meet the needs of the campus?
۷.	(Ex: Student Access, Campus Strategic Plan, Campus Mission Statement, Online Education Initiative (OEI), Student
	Equity, Student Needs). Please be specific.
	Equity, Student Needs). Please be specific.
	Student Access:
	Until the recent coronavirus pandemic, the GEOL 111 laboratory has never been offered online. Now that
	circumstances have necessitated online delivery, the various issues surrounding student access have materialized
	For those students who have the appropriate technological resources, an online laboratory would allow students
	who may have been previously excluded from Physical Geology Laboratory participation to fully engage and
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.  Campus Mission Statement and Values:
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.  Campus Mission Statement and Values:  By offering the GEOL 111 laboratory class online, this supports the "innovative instruction" portion of the Mission
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.  Campus Mission Statement and Values:  By offering the GEOL 111 laboratory class online, this supports the "innovative instruction" portion of the Mission It also supports the Values by "[providing] students with access to the resources, services, and technological tools
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.  Campus Mission Statement and Values:  By offering the GEOL 111 laboratory class online, this supports the "innovative instruction" portion of the Mission It also supports the Values by "[providing] students with access to the resources, services, and technological tools that will enable them to achieve their educational goals."
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.  Campus Mission Statement and Values:  By offering the GEOL 111 laboratory class online, this supports the "innovative instruction" portion of the Mission It also supports the Values by "[providing] students with access to the resources, services, and technological tools that will enable them to achieve their educational goals."  OEI, Student Equity, and Student Needs:
	participate. This includes students with significant physical, transportation, financial, and scheduling barriers who can now participate when the class is offered in an online format.  Campus Mission Statement and Values:  By offering the GEOL 111 laboratory class online, this supports the "innovative instruction" portion of the Mission It also supports the Values by "[providing] students with access to the resources, services, and technological tools that will enable them to achieve their educational goals."  OEI, Student Equity, and Student Needs: The online GEOL 111 laboratory supports the letter and spirit of the OEI, Student Equity, and Student Needs.

3. Will this course require proctored exams?

⊠ No	
☐ Yes - If yes,	how?



All laboratory exercises, quizzes, and examinations will occur entirely online. If and when necessary, online tools such as the Secure Exam Proctor (*Proctorio*) may be implemented.

4.	How will the design of this course address student accessibility? Are you including any of the following?		
	□ Captioned Videos		
	□ Transcripts for Audio Files		
	☑ Alternative Text for Graphics		
	☐ Formatted Headings		
	$\square$ Other – If other, please explain.		
	When and where possible, the online GEOL 111 laboratory will utilize video and audio caption and transcription		
	services. In other instances, automated caption and transcription services will be utilized. When embedding		
	graphics within the Canvas environment, for example, alternative text (descriptions) will be provided.		



5. Provide a specific example of how the instructor will provide synchronous office hours for distance education students? (Ex: Online Conference Tool, Cranium Classroom, Zoom, Pisces, Skype, etc.)

Synchronous office hours and class meetings will occur primarily through the *ConferZoom* videoconference tool. Office hours will be posted on the course syllabus and announced regularly via Canvas and email throughout the semester. Students may also request individual (one-on-one) office hour meetings. *Pisces* and *NetTutor* may also be implemented as a means to further assist students grappling with difficult topics and concepts. At this time, Pisces and NetTutor do not offer robust Geology tutoring. However, ancillary discipline tutoring offered within these services have the potential to benefit Physical Geology Laboratory students. In addition to "off-the-shelf" online tutorial services, students will have supplemental instruction (SI) and tutorial services available through SBVC Academic Success Centers. At present, all Physical Geology Lecture and Laboratory students have in-house, online tutorial services available to them via SBVC Academic Success Centers. This tutorial support is anticipated to continue during future semesters.

6. Provide a specific example of how this course's design ensures regular and effective instructor-student contact? (Ex: Threaded discussion forums, weekly announcements, instructor prepared materials, posting video and audio files, timely feedback on exams and projects, synchronous online office hours, synchronous online meetings, synchronous online lectures, etc.)

Prior to the beginning of the semester and posted on the laboratory Canvas website, students will receive the following informational documents: (1) Syllabus, (2) Welcome Letter, (3) Rules of the Road, and (4) Online (and face-to-face) Services. These documents will assist students with the challenges associated with an online class.

From the first through final week, students will receive weekly Canvas announcements – at the beginning of each week – detailing the weekly lab exercises, weekly class discussions, and any other weekly assignments (e.g. laboratory quizzes and exams, map quizzes, virtual field trips, etc.). Follow-up email messages will reinforce Canvas announcements. Students will receive clear instructions about how to complete each weekly assignment, including point totals and due dates.

Weekly discussions will oftentimes align with weekly laboratory exercises. For example, students will research, post, and summarize: (1) plate tectonic movement and relation to natural phenomena, (2) analyze various mineral and rock types through interactive video and 3D imagery, (3) natural and anthropogenic causes of global climate change within the context of a Climate System laboratory exercise, and (4) geologic hazards within the context of a Plate Tectonics and Volcanism laboratory exercise. In addition to posting and summarizing news articles and associated videos, students are expected to respond to each other (at least one other students) in a meaningful way.

As a means to assist students in a real-time, synchronous manner, weekly laboratory class and open office hour meetings will occur via ConferZoom. The schedule for these meetings will be posted within the course syllabus and Canvas website. Students will be reminded of and invited to these weekly class and open office hour meetings through weekly announcements and email messages. In addition, tutorial services will be provided through the SBVC Academic Success Centers.

Asynchronous contact and support will occur through posted examples (to solve various laboratory exercise problems), study guides, and videos. Each weekly laboratory class meeting and open office hour meeting will be recorded, archived, and accessible through the course Canvas website. In addition to other topical videos (e.g.



videos related to the weekly laboratory exercise), the archived class meeting and office hour videos will be available through the 3C Media tool on the Canvas website.

The typical timeline for instructor feedback will include the following: (1) 24 hours for email and Canvas message inquiries (with accommodations for weekends and holidays), and (2) up to one week to assess and post scores for assignments (e.g. weekly discussions, weekly laboratory exercises, quizzes, exams, etc.).

https://www.valleycollege.edu/online-classes/faculty-resources/reg-effective-contact.php

Provide a specific example of how this course will ensure regular and effective student-student contact?
 (Ex: Threaded discussion forums, assigned group projects, threaded discussions, Notebowl, peer-to-peer feedback, synchronous online meetings, etc.)

In addition to communicating with each other during weekly laboratory class and open office hour (synchronous) meetings, students will have the opportunity to communicate with each other through weekly discussions. During each weekly discussion, students are expected to respond to each other (e.g. to earn full credit, students must respond to at least one other student). It is anticipated that students will also complete group work from time to time via assigned group projects. Although not required, students will be encouraged to form informal study groups via phone, email, and ConferZoom communication tools.

8. Describe what students in this online version of the course will do in a typical week on this class. Include the process starting after initial log in.

Two important documents are sent via email to registered students, as well as posted on the course Canvas website: Welcome Letter and First Week Guide.

## From the Welcome Letter:

Question: How to find and access this online course via Canvas?

Answer: Go directly to sbccd.instructure.com (you can click on the link) and follow the login instructions. Select Physical Geology Laboratory (GEOL-111) from your Canvas dashboard. This is probably the easiest option!

Answer: Log into the SBVC website at www.valleycollege.edu. Click on the "Log In" link in the upper-right corner of the page and select Canvas from the drop-down menu. Follow the login instructions. Select Physical Geology Laboratory (GEOL-111) from your Canvas dashboard. This is probably the second-easiest option!

## From the First Week Guide:

During this first week, we will read and complete the first online laboratory exercise. Instructions for accessing your online laboratory manual and individual laboratory exercises are provided within the Welcome Letter and Syllabus documents (both are accessible within your Canvas webpage). We will also complete the Student Survey, and Ice Breaker Discussion. These will all be due by 11:59 pm on Sunday. Specific instructions are included within the laboratory exercise, survey, and discussion. All resources are available on your Canvas webpage, and you will submit all assignments and discussions within Canvas. In addition to all weekly assignments being posted within the Home, Announcements, Assignments, and Syllabus sections of your course Canvas website, everything is always



(and conveniently) accessible within the Modules section of your course Canvas website. There is a Module created for each week that contains all assignments and ancillary support material.

Please contact me via email (mrobles@valleycollege.edu) or phone (760-408-9497) with any questions. You can also us the Canvas messaging system. It is convenient and easy to use. All Canvas messages are viewable within Canvas, as well as your SBCCD student email. For more in-depth assistance with course material and technical issues, I will hold face-to-face and online office hours. My physical office is located on the SBVC Campus, room PS 141. It is located on the first floor of the Physical Sciences (PS) Building. The online office hours are accessible through ConferZoom. The link to access ConferZoom is found on the left-hand side of your course Canvas webpage. You will receive weekly invitations to participate in ConferZoom sessions with specific instructions (e.g. logging in via computer or mobile device and connecting via phone).

9. Provide a sample statement that could be included in the syllabus for this course that communicates to students the frequency and timeliness of instructor-initiated contact and student feedback.

Weekly announcements will be posted on your course Canvas website. Announcements will contain links to reading material, PowerPoint slides, videos, study guides, discussions, assignments, quizzes, and exams. Deadlines for discussions, assignments, quizzes, and exams will be clearly posted (typically Sunday of each week by 11:59 pm).

Weekly ConferZoom "virtual office hour" sessions will typically occur on a set day and time so as to establish regular, consistent communication. The office hour schedule is posted within the course syllabus and Canvas webpage.

All discussions, assignments, quizzes, and exams will be scored and posted in a timely manner (typically within 24-72 hours). Please be advised that scoring and posting will be delayed during weekends and holidays.

All student inquiries, via email, Canvas messenger, ConferZoom, and phone will be addressed in a timely manner (typically within 24 hours). Please be advised that scoring and posting will be delayed during weekends and holidays.

10. Provide a specific example of how regular and effective student-student interaction may occur in this online course.

Rather than meeting in person in a traditional classroom, we will communicate and exchange ideas in an online, virtual realm. As with a traditional class, we will complete quizzes, assignments, and exams. We will also ask questions, answer questions, and participate in class discussions. These exercises will be based upon textbook and article readings, videos, and current news items.

Instead of turning in quizzes, assignments, and exams in class, we will submit them within our Canvas website (a sort of learning management system). Rather than raising our hands to ask and answer questions, we will post questions and answers within discussion boards, email and phone messages, and videoconferencing applications.

These online applications accommodate asynchronous and synchronous communication. Asynchronous communication includes discussion board and email postings and messages where responses are delayed. Synchronous communication includes videoconferencing where responses are instantaneous and occur in real time.



Within our Canvas online portal, we will:

- -- Utilize the "Discussions" (discussion board) application to participate in discussions among students and between students and instructor (asynchronous communication),
- -- Utilize the "Inbox" (email) application to send and receive email messages among students and between students and instructor (asynchronous communication), and
- -- Utilize the "ConferZoom" application to participate in real-time, instantaneous (synchronous) office hours, minilectures, and conversations among students and between students and instructor.

First, good communication includes good behavior and manners. The online version of this philosophy is Netiquette. Essentially, Netiquette can be summarized through the following points:

- -- Remember that we are all human,
- -- Behave online as you would in the real world, and avoid provocation (e.g. "flaming"),
- -- Communicate using appropriate and correct spelling and grammar,
- -- Realize that, as valuable and unique as you are, you are not necessarily the center of cyberspace and the universe,
- -- Share your expert knowledge and the knowledge of others, and encourage others to do the same, and
- -- Be empathetic, encouraging, and forgiving of others.

Second, the following ground rules – based somewhat on Netiquette – will truly help you to communicate with your fellow student colleagues so that you get the most out of this online class:

- -- Treat each other with respect and appreciate the diversity of opinions expressed,
- -- Ask for assistance when necessary, and provide assistance whenever you can,
- -- Follow and re-read (if necessary) the rules, guidelines, and deadlines for all quizzes, assignments, exams, and discussions,
- -- Regularly participate in class discussions and online office hours so that you feel invested in and part of the class community (and so that you can earn maximum points), and
- -- Be cognizant that written text is different from spoken text. With written text, we do not have all the non-verbal cues that assist us when communicating face-to-face.
- -- Before you post something, think twice and consider how it may be interpreted by others.
- 11. Provide a specific example of how regular and effective instructor-student interaction may occur in this online course.



In addition to your student-to-student communication guidelines discussed above, professional and timely communication with your instructor is key to your success in this class. Please do not be intimidated when communicating with me, your instructor. Use this as an opportunity to convey your ideas, questions, and concerns in a public or private forum. As with effective and robust student-to-student communication, student-to-instructor communication will help you to get the most out of this class and will better ensure your success. Below is a summary of guidelines, ground rules, and recommendations for your communication with me, your instructor:

- -- Communicate using professional language that adheres to spelling and grammatical rules,
- -- Ask questions in a timely fashion so as to avoid missing deadlines I will typically respond within 12-24 hours Monday through Friday, and responses may be delayed during weekends and holidays and do not wait until moments before an assignment is due to ask questions,
- -- Realize that the discussion board and ConferZoom are public forums, so please send any private correspondence to me via email or voicemail message, and
- -- Know that I am here for you. Please share your thoughts, concerns, and even enthusiasm regarding this class. I take complaints seriously and want this to be a safe, nurturing environment for you. If I am unable to promptly and fully answer a question or concern, then I will do my utmost to connect you with a resource that can resolve the issue.
- **12.** Does this course include lab hours?  $\square$  No  $\boxtimes$  Yes If yes, how are you going to accommodate the typical face to face activities in an online environment?

Because this is a laboratory course and typically incorporates hands-on learning activities, these activities will need to be translated into the online environment. This will be accomplished through the following mechanisms and associated online teaching pedagogies:

- Online Physical Geology Laboratory manual with laboratory exercises that incorporate student research and first-order data collection.
- Synchronous weekly laboratory class meetings.
- Synchronous weekly open office hour meetings.
- Weekly class discussions that incorporate student research and first-order data collection.
- Comprehensive off-the-shelf and instructor-produced study guides and videos.
- Virtual field trips of regional Southern California and other relevant state, national, and global sites.

## 13. How will you accommodate the SLO and Course Objectives in an online environment?

The current GEOL 111: Physical Geology Laboratory SLOs include the following:

- Students will be able to recognize and interpret a variety of topographic and thematic maps.
- Students will be able to recognize and interpret various plate tectonic boundaries and the features they
  produce.
- Students will be able to understand and identify common minerals associated with the field of geology.
- Students will be able to understand and identify the three common rock types associated with the field of geology and the various characteristics of these rocks.
- Students will understand geologic time and apply the Principles of Geology to unpacking geologic events.



The first three GEOL 111 SLOs can easily be accommodated within an online environment. The fourth SLO documenting student collection of data will be translated into the online environment through the following mechanisms:

- Online Physical Geology Laboratory manual with laboratory exercises that incorporate student research and first-order data collection.
- Synchronous weekly laboratory class meetings that explain to students in a detailed manner how to conduct research, collect data, and report data within the online environment.
- Synchronous weekly open office hour meetings that explain to students in a detailed manner how to conduct research, collect data, and report data within the online environment.
- Weekly class discussions that incorporate student research and first-order data collection.
- Comprehensive off-the-shelf and instructor-produced study guides and videos that explain to students in a detailed manner how to conduct research, collect data, and report data within the online environment.
- Virtual field trips of regional Southern California and other relevant state, national, and global sites.

This should also address selected GEOL 111 Course Objectives, including:

- Assess the geologic origin and history of representative rock specimens.
- Synthesize textbook and field observations, including atmospheric, biologic, hydrologic, and geologic elements, into a coherent field report.
- Experiment successfully with a variety of basic geology laboratory equipment, including maps, globes, rulers, calculators, colored pencils, compasses, sling psychrometers, global positioning system devices, and cameras.

τ4.	Aleillo	diffications freeded to 310s of Course Objectives in order to teach this course in the offine modality:
	⊠ No	☐ Yes – If yes, please explain the changes needed.
	/It :	hisad that if you are charging source content or chicatives that you mostly with the Corrientum Co Cha

(It is advised that if you are changing course content or objectives that you speak with the Curriculum Co-Chair or Articulation Officer for guidance moving forward.)

Neither SLO nor Course Objective modification is necessary, as all field trips, laboratory equipment use, and data collection (and synthesis into a report) can be accommodated through virtual fieldtrips, simulated (online) laboratory equipment use, and student-led, first-order data collection. For example, during the current (spring 2020 semester) online Physical Geology Laboratory course, students have been collecting data by taking and posting photos of atmospheric conditions (e.g. clouds), local flora and fauna, rocks, and soil. They have subsequently researched these physical phenomena online and incorporated it into various weekly discussions and laboratory exercises.

## To be completed by a member of the Curriculum Committee Review Team:

CURRICULUM CHAIR REVIEWED:	☐ YES	□ NO
DE REVIEW:	☐ YES	□ NO
CURRICULUM COMMITTEE DIVISION REPRESENTATIVE REVIEWED:	☐ YES	□ NO