

GEL 102 Syllabus Scott Valentine

Physical Geology

This course is an introduction to our physical environment, its natural features, distribution, and significance to humans. Primary emphasis will be placed on the tectonic and surface processes that shape the Earth's landscape and the minerals and rocks that form the Earth.

This course fulfills Lake Tahoe Community College's **Area 5 G.E. requirements**. Please feel free to investigate how this course can be used to fulfill a <u>science degree offered at LTCC</u> or any of the other <u>degrees offered at LTCC</u>.

Weekly Topics

Week	Dates	Chapter	Topic Lab				
1	9/16 & 18	<u>1</u> & <u>2</u>	Plate Tectonics & Boundaries	Map & Boundary Identification			
2	9/23 & 25	<u>3</u>	Rocks & Minerals (9/27 - drop deadline)	Rock & Mineral ID			
3	9/30 & 10/2	<u>4</u>	Minerals & Igneous rocks	Bowens Reactions & Igneous Rock ID			
4	10/7	<u>4</u>	Volcanic Rocks	Plutonic & Volcanic Samples			
	10/9	Exam #1					
5	10/14 &16	<u>5</u>	Volcanoes & Weathering	Eruptions & Decomposition			
6	10/21 & 23	<u>5</u>	Sedimentary Rocks & Groundwater	Sedimentary Rock ID & Porosity			
7	10/28 & 30	<u>11</u>	Running Water (11/1 - withdrawal deadline)	Stream Morphology & Erosion			
8	11/4	<u>13</u>	Deserts	Aerial Photos			
	11/6	Exam #2					
9	11/ 11 &13	<u>14</u>	Veteran's Day & Glaciers	Sediment Maturity			
10	11/18 & 20	<u>12</u> & <u>6</u>	Coast & Metamorphic Rocks	Metamorphic Rock ID			
*	11/25 & 27		No Classes During Thanksgiving Week				
11	12/2 & 4	<u>9</u>	Faults & Earthquakes	Seismic Waves & Location			
12	12/9	Final from 6:00 to 7:50					

Contacting Your Instructor

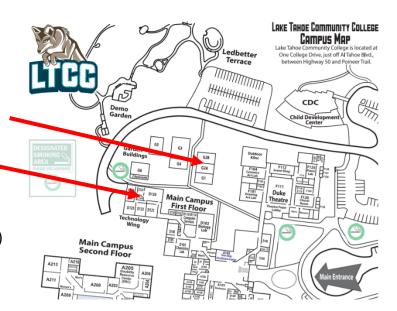
E-mail is also a very efficient way to ask simple questions. <u>valentine@ltcc.edu</u>

During office hours, you can find me in class (G2b) or my office (Room D-124).

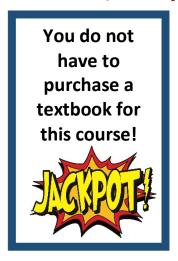
• Monday through Thursday: 1:00-1:30

• Mondays and Wednesdays: 5:00-6:00

Feel free to stop by or call (530-541-4660 ext. 313) during those times to ask questions, discuss your grade, or just to chat. I am also available by appointment.



Textbook/Study Materials



As an instructor, I am committed to lowering the cost of education for my students. There is so much free information readily available via the internet, that forcing students to buy a textbook seems overly harsh. The issue however, is that anything can be published on the internet without review or oversight, and the majority of information obtained from the internet is more opinion than fact. You will have to become critical consumers of information. When collecting information for this course (be it from the library, the internet, newspapers, television, etc.), you will need to be able to identify credible and academic sources of information.

<u>Open Geology</u> is one of many sources I recommend for this course. Students looking for additional information on a particular subject are encouraged to explore this site.

You are also welcome to use other web-based resources in your search for knowledge (i.e. <u>NASA</u>, NOAA, USGS and others.) ...so long as they are academic in origin.

Student Learning Outcomes (a.k.a. What's in it for me?)

When you complete this course, you will be one-step closer to a degree, a great job, social advancement, fame, and glory...well maybe...

This course will definitely give you an opportunity to learn how to evaluate complex situations, use scientific and moral reasoning to make decisions based on observations and evidence...and you will definitely be able to *wow* your friends at parties with your new knowledge.

Upon completion of this course, you will be able to:

- 1. Analyze landforms and natural processes based on scientific observations.
- 2. Communicate scientific principles and processes effectively.
- 3. Apply scientific principles and critical thinking skills to identify issues, understand relationships, and solve problems.
- 4. Evaluate course concepts and the role of science in local and global contexts.

Grading

Grades are a measure of effort...and how you ultimately apply what you have learned. Please use the scale below to see how you will be evaluated.

Exam 1	120 points	FINAL GRADE:	Α	>540 points
Exam 2	120 points		В	480-539 pts
Final Exam	160 points		С	420-479 pts
Quizzes	100 points		D	360-419 pts
Assignments	100 points			
Total	600 points			

Exams

Exams are administered during the week scheduled. If you have a major conflict please discuss it with me well in advance. You have 2 hours to complete each exam...plenty of time really. No breaks though, sorry. Exams will be closed-notes and closed-text. DRC students: Please inform me of your exam needs and/or appointment time the week prior to your appointment.

Quizzes

Quizzes are worth 25 points each. I allow you to drop your lowest score for the quarter so I do not offer make-up quizzes.

Assignments

Labs* are worth 10 points. I provide enough time to do many of these assignments in class, but if you do not finish in class, it becomes homework due the next class. If you miss those deadlines, I encourage you to turn in late work for partial credit. You still learn by doing the assignment, and some points are better than no points. Again, your lowest score for the quarter will be "dropped".

Attendance

Although attendance is not counted as a part of your overall grade, it is very difficult for most students to pass this course unless they attend every class. There are pros and cons to not requiring a textbook. Without a text, the only way to really know what you will be held accountable for is to attend class, take thorough notes, draw diagrams, take pictures of samples, and use the internet or other outside sources to look up topics or concepts that were unclear. Class discussions will cover local examples and topics not covered by outside sources. Missing class means missing an amazing lecture, missing notes, missing labs or other assignments, missing quizzes, and missing out on interacting with your instructor and fellow students (all of which contribute to your success).

Extra Credit

No one likes doing extra work. You don't like doing it, and I don't like grading it. If you are taking notes, doing your assignments and keeping up with the class you won't have an issue, but I understand that life happens and you may accidentally miss an assignment. Please contact me about being able to make up some points (up to 25) by writing a 300-500 word paper that pertains to our studies.

^{*} Most lab exercises are done in groups. Learning to work together is a good life skill, but sometimes there limited lab supplies. Students are encouraged to collaborate on labs, but everyone is required to turn in work based on their own individual efforts.

Need Assistance Keeping Up with the Class?

Your Best Bet If you are having difficulty with any component of this class, let me know as soon as possible. Chances are that other students are having the same problems. This includes asking questions about class content or about technology issues. If you need any other accommodations or assistance, you should notify me immediately. Please communicate with me before you become frustrated.

Other Great Resources Explore the LTCC Library and the Tutoring and Learning Center (530-541-4660 ext. 232) The LTCC Library provides research help, tutoring, and proctoring in one convenient location. Amenities include personalized research and tutoring support; student-centered study and collaborative learning spaces; and access to course-related books, databases, media, and more. Students should contact the Library to schedule a tutoring, research, or exam proctoring appointment.

Ask a Pro The <u>Disability Resource Center</u> (DRC) facilitates accommodations for learning, psychological, hearing, visual and communication disabilities, and health disorders and mobility limitations. Students requesting any special services should contact the DRC directly. Stop by room A-205 or call (530) 541-4660 ext. 249.

Important Dates to Remember

Please refer to <u>LTCC's Academic Calendar</u> to get familiar with the quarter system. Be aware that drop dates and withdrawal dates differ. It is your responsibility to drop this course if you decide to do so. You can contact Enrollment Services (530) 541-4660 ext. 211 for more information.

Lake Tahoe Community College Academic Senate Statement on Tolerance and Diversity

The Lake Tahoe Community College Academic Senate promotes a positive learning environment and culture based on open-mindedness, critical thinking, inclusion, tolerance, equity, and respect. Free speech is at the core of our college, but we will not tolerate racist, sexist, homophobic, or any other forms of discriminatory language or behavior. Hate speech and other such language or behavior, as defined in Lake Tahoe Community College Board Policy 5500 — Standards of Student Conduct, will result in Disciplinary Sanctions/Actions, as stated in Administrative Procedure 5520 — Student Discipline Procedures.

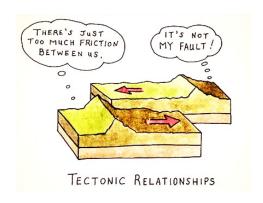
Academic Dishonesty and Plagiarism Policy

There are few offenses more serious in an educational environment than academic dishonesty and plagiarism. Using any method other than your own honest efforts to complete and earn grades for exams, quizzes, or assignments, using another's language, work, or ideas without giving proper credit to the original source, or assisting another student to commit any of the aforementioned infractions is grounds for disciplinary action.

Students will receive a zero on any assignment where dishonesty or plagiarism has been identified. Violations of the Lake Tahoe Community College Academic Dishonesty and Plagiarism Policy may also result in any number of disciplinary actions identified in the "Student Rights and Responsibilities" section of the current LTCC catalog.

Course Content

Course content can be controversial at times. Course topics are rooted in physical processes and theories that are observable and measurable through current scientific methods. I am very openminded and realize that you may have different philosophical beliefs. These types of discussions may not be appropriate for class, but I encourage you to come and talk with me during office hours if you wish to share your thoughts regarding belief and science.



An Important Note from Your Instructor

LTCC courses and programs are based on interactive teaching, learning, and communication. To acquire knowledge and build skills, you are expected to:

- Read and become familiar with the course syllabus and the faculty's expectations.
- Keep up with assignments and readings.
- Ask for clarifications about material or course expectations.
- Analyze assigned readings and provide thoughtful responses on assignments.

As a learner at LTCC, you are a member of a scholarly community. The benefits of this community come in many forms, such as critical dialogue with faculty, collaborative learning with peers and access to academic support resources. While LTCC faculty and staff are here to facilitate this experience, you are expected to play an active role in your scholarly journey, and I expect that you take ownership of your actions so that you can succeed.

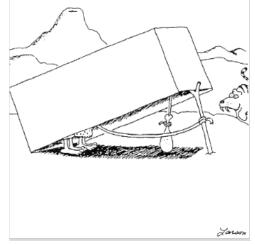
One major factor that contributes to how successful we are in our endeavors, both academic and professional, is our internal beliefs about our own ability and intelligence.

I encourage you to think about the following when faced with new challenges:

- No matter the situation, ask yourself "What can I learn from this?" and "How can I take action on this information to better myself and assist others?"
- Weigh the options for how you approach or react to a challenge. You have a choice in how you respond to feedback or a setback.
- Even if I fail, something is learned from the experience and there is still room to improve.
- When facing a challenge, go into it with an open mind. Focus on the learning process rather than the outcome.

Research Studies Show:

- Our individual ability to learn is not set from birth
- Ability increases with effort
- Intelligence can grow



"Shhhh, Zog! ... Here come one now!"

By incorporating these suggestions, I expect that you will be quite successful in this course and in life.

Good Luck!