Course Syllabus **Spring 2025** **Gavilan College**

GEOL 1 – Introduction to Geology (Purely Online/Asynchronous - Canvas**) –** CRN: 40227 and 40233

Contact Hours/Week: Lecture and Lab combined; 4.0 Units (3 Lecture Hours and 1 Lab Hour); Letter Grade

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 27 through May 25 - Purely Online and Asynchronous

COURSE CANVAS URL: https://ilearn.gavilan.edu/

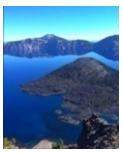
INSTRUCTOR: R. Ray Rector

INSTRUCTOR CONTACT: e-mail: rrector@gavilan.edu or geoprof@geoscirocks.com

OFFICE HOURS: Mondays and Wednesdays: 5:00pm to 6:00pm via Email; and Canvas Zoom by appointment

NO-COST COURSE TEXTBOOKS: There are 2 no-cost, open-source E-texts used in this course:

Title: **Principles of Earth Science** –
Author: **Katherine Solada and K. Sean Daniels**
URL**: HTTPS://OPENOREGON.PRESSBOOKS.PUB/EARTHSCIENCE/**



Title: **Introduction to Earth Science** –
Author: **MiraCosta College**
URL**:** https://gotbooks.miracosta.edu/earth_science/index.html

PREREQUISITES ADVISORY FOR ONLINE COURSE: There are no prerequisites for this course. However, 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 and a large computer screen are most advantageous.

COURSE DESCRIPTION: The course introduces processes at work, changing the Earth today, and it explores the origins of continents and ocean basins, and physical materials including of rocks, minerals, and sediments, faults, volcanoes, and other natural hazards, as well as the action of air, water, ice, wind, and solar energy in sculpting Earth's physical environments.

COURSE OBJECTIVES: By the end of this course, a student should:

1. Explain and apply the principles of the scientific method.
2. Communicate complex course concepts effectively in writing and diagrams and apply critical thinking and problem-solving skills to make informed life decisions.
3. Read and interpret topographic and geologic maps and answer questions pertaining to geologic processes.
4. Identify and evaluate the mineral composition of the Earth.
5. Identify and evaluate the igneous, sedimentary, and metamorphic rocks on Earth.
6. Describe the rock cycle and identify and describe the basic properties of rocks and minerals.
7. Explain the internal and external processes that shape and form the Earth.
8. Explain fundamental concepts, principles, and interactions of Earth's systems applicable to the geological sciences.

STUDENT LEARNING OBJECTIVES: By the end of this course, a student should be able to:

1. Explain the origin of Earth in the solar system, the origin and character of the world's continental landscapes and ocean basins, including their physical geography.
2. Understand information related maps, geologic maps, cross sections, and illustrative diagrams.
3. Explain the theory of plate tectonics and relate it to the occurrence of earthquakes, volcanic eruptions, the nature of igneous rocks and how and where they occur.

4. Explain and evaluate the chemical and physical properties of rocks and minerals.

5. Explain the origin and processes associated with of terrestrial and ocean sediments.

6. Explain and evaluate the character of the global and regional atmospheric and oceanic circulation systems, and their impact on weather, climate, both in the oceans and on land.

7. Explain and evaluate the nature of rivers, streams, and groundwater.

8. Explain and evaluate the nature of glaciers and glaciation.

9. Explain and evaluate the processes associated with shorelines, coastal environments, and coastal erosion.

10. Explain the significant events in Earth history that have influenced evolution of life on Earth.

11. Understand "human impacts" on natural resources and sources of pollution.

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 THIRD DAY of classes on the first week of class - **Thursday, January 30, 2025** 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.

Withdrawal Deadlines: February 9, 2025, is the last day to withdraw with a refund and with no grade (no "W") placed on permanent record.), or **April 25, 2025** (last day to withdraw with a "W" on your transcript). If you stop coming to class, and fail to withdraw by the 4/25/25 deadline, then a final grade must be assigned to you. The last day to change from a letter grade to Pass/No pass is the **February 21, 2025**.

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 difficultly 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.

STATEMENT OF RETENTION: Students, please discuss your plans to withdraw from class with your instructor(s). They may have options for you that may allow you to continue in class.

ACCOMMODATION OF DISABILITY: Students requiring special services or arrangements because of hearing, visual or other disability should contact their instructor, counselor or the Accessible Education Center. If you have a disability, you are encouraged to contact the Accessible Education Center at https://www.gavilan.edu/student/aec/index.php, or visit the AEC office, or email to aec@gavilan.edu. They will help you determine what assistance is available for you. Please submit your learning accommodation paperwork to the instructor in a timely manner.

ONLINE COURSE INFORMATION AND POLICIES:

A. **Canvas Learning Platform:** This course is run purely online and asynchronously on the college's Canvas learning platform. Access to Canvas is through the college's ***iLearn*** at the URL *ilearn.gavilan.edu*. Once logged into Canvas, this course should appear on your Canvas home page. If you need further assistance or information regarding ***iLearn*** and/or Canvas, then please check out the college's Teaching and Learning Center (TLC) at the URL: https://www.gavilan.edu/staff/tlc/canvas_help/index.php

B. 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.

C. Student Academic Expectations You will be expected to complete the following types of tasks:

- Communicate via email and discussion board
- Complete basic internet searches
- Download and upload documents to Canvas
- Read documents online
- View online videos
- Complete tests online

D. 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 are no mandatory classroom Zoom meetings scheduled for this class. However, non-mandatory, synchronous and recorded Zoom meetings may occur during the course.

E. 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).

F. 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.

G. Online Netiquette and Standards of Student 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:

College's Student Honesty Statement: *"Students are expected to exercise academic honesty and integrity. Violations such as cheating, and plagiarism will result in disciplinary action which may include recommendation for dismissal."*

The academic integrity of the students in this course and Gavilan College's Standards of Student 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 Gavilan College's Policies and Procedure's regarding academic honesty. 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 the Gavilan College's Policies and Procedure's 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 assignment. 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.

WEEKLY GEOLOGY LESSON PLANS: Refer to the Canvas course home page's course schedule for pertinent study information for each weekly geology study topic lesson. Lesson activity and assignment details will be explained in within each week's corresponding recorded topic lecture and lab module.

Lesson 1	Introduction to Physical Geology
Lesson 2	Isostasy and Plate Tectonics
Lesson 3	Seafloors and Continents
Lesson 4	Minerals
Lesson 5	Igneous Rocks and Volcanism
Lesson 6	Weathering and Sedimentary Rocks
Lesson 7	Metamorphic Rocks
Lesson 8	Geologic Dating and Earth History

Lesson 9	Mountain Building and Deformation
Lesson 10	Earthquakes
Lesson 11	Surface Waters – Rivers and Lakes
Lesson 12	Groundwater
Lesson 13	Coastal Features and Processes
Lesson 14	Glaciation and Climate Change

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 for the combined lecture and lab components of the course:

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

II. Final Lecture Exam = 150 points. **Note:** You get two (2) attempts at the final exam. Timed/Open book

III. Personal Introduction Assignment = 20 pts; Post on the discussion board during first week of class.

IV. Lab Modules: Fifteen (15) Laboratory Module activity assignments. Labs are worth 40 points each with following points breakdown for the graded lab components of each lab module: lab quiz = 600 points total.

V. Late Work Policy: No late work is accepted unless you have 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 18, 2025 - **Absolutely no EC work accepted after this date**.

VII. Grading Scale: Your final grade is based purely on total percentage out of possible 1070 points:

100% – 90% = A
89% -- 80% = B
79% -- 70% = C
69% -- 55% = D
Less than 55% = F

Note: *Minor adjustments to the graded work 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 Lecture Testing Schedule:

Quiz I: Sunday, February 2
Quiz II: Sunday, February 16
Quiz III: Sunday, February 23
Quiz IV: Sunday, March 9
Quiz V: Sunday March 23
Quiz VI: Sunday April 30
Quiz VII: Sunday April 13
Quiz VIII: Sunday April 20
Quiz IX: Sunday April 27
Quiz X: Sunday May 18
Final Exam: Sunday May 25

IMPORTANT COURSE DATES: Assessment of student learning outcomes for this class includes 10 lecture quizzes, 15 lab module assignments, and a final exam. Each learning 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 seven important deadline dates for this course, not including quiz dates:

1) Tests, Assignments and Lab Module completion dates are all on Sundays.
2) Class Personal Introduction Discussion Assignment due by Thursday, January 30, 2025
3) Last day to drop class without a "W" is February 9, 2025
4) Last day to change grade modality to Pass/No Pass is February 21, 2025
5) Last day to drop class with a "W" (withdraw) is April 25, 2025

6) Last day to turn in extra credit is Sunday, May 18, 2025
7) Final exam completion date is Sunday, May 25, 2025

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. Up to 30 points of extra credit is allowed in this course. ***Extra Credit Deadline:*** *All extra credit must be turned in by* ***Sunday,*** **May 18th** *for credit. Late extra credit work will not be accepted - no exceptions – period.*

LECTURE STUDY MATERIALS FOR THIS COURSE:
This class is a No-Cost class. There are **FOUR** 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; **3)** the instructor's PowerPoint lecture slides and lecture notes; and 4) Geology video slide tutorial lessons.
Below are details of these FOUR learning resources:

1) Cost-Free E-Textbooks:

Primary Textbook: "Introduction to Geology" E-Textbook**:**
https://opengeology.org/textbook/

This geology course uses a no-cost 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.

Secondary 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: http://www.geoscirocks.com/professor_rays_geology_lecture_powerpoint_slide_presentation.htm

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_tutorial 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.

INSTRUCTOR'S PERSONAL STUDENT GEO-RESOURCES 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 Gavilan Geology 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.

LECTURE COURSE STUDY SCHEDULE: At the end of this document is the lecture 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, learning assemment 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).**

Please Note: *The course study and assignment schedule is posted on the Canvas course home page. The Canvas course home page schedule of activities table is the most efficient place to keep track of and access the weekly coursework study materials, assignments and their due dates.*

REQUIRED NO-COST LAB MATERIALS: The following are the optimal technological conditions for success in this online lab course: **1)** a reliable, fast-running computer, with a good-sized monitor screen; **2)** a reliable, fast-speed Internet connection; **3)** a decent-sized thumb drive to back up your entire lab; and 4) a printer.

LABORATORY ACTIVITIES: Worksheets, Quizzes, and Reflection: Each week's ocean lab module includes the following: 1) Lab preparation documents and video links to provide with all the background information that you need for completing the lab activities; 2) activity worksheet with a set of questions to answer (possibly includes an additional pre-lab activity worksheet); 3) post-lab quiz (possibly includes a pre-lab quiz too), and 4) a writing reflection assignment. It is best to print out the worksheet, and then fill it out while working through the module exercises (PDF file). Alternatively, you can fill it out electronically (DOC file). Download the worksheets out of the Canvas course Module folder. Also note that is advised to print out a color copy of the worksheet if there are colored images/illustrations.

IMPORTANT LAB TESTING NOTES: The online lab module quizzes are a means of self-assessment on how successfully you have completed the lab worksheet. Most of the post-lab quizzes have 30 multiple-choice questions that are based straight off the questions and problems in the corresponding worksheet. The post-lab quizzes are open-book/notes and are untimed. Students get three attempts at taking each post-lab module quiz. After the third attempt, the student will get to see the correct answers. Additionally, you will also be required to write a brief post-lab reflection and post it on Canvas on the discussion board. Lastly, you are also required to submit (upload) a copy (DOC, PDF, JPG format) of your completed lab worksheets for a grade (instructions near bottom of lab module folder).

WEEKLY ONLINE LAB PROCEDURES:

I. Accessing/Preparation the Lab Week's Online Lab Activities

1) Go to the Canvas Course Home page and check the Weekly Course Schedule Table

2) Click on the current week's Lab Module. Inside the Lab Module, you will find a list of activity folders to work through, starting with opening the top one, and then down through the list – one by one.

3) For the worksheet folders, download, print-out, and preview the lab exercise worksheet(s). Worksheet comes in both PDF (print and fill out by hand) and DOC formats (fill out electronically). Note some labs have pre-labs too. Preview the worksheet to get a general idea what you will be doing.

4) Make sure to, both, read the associated lab preparatory documentation, and watch listed videos prior to the start of answering the lab worksheet questions. Additionally, study the professor's lab PowerPoint PDF slide show that is URL-linked in the lab worksheet for additional information and guidance.

II. Five-Point Procedure for Completing Your Online Lab Module Activities:

1) Lab Preview, Instructions, and Worksheet: Begin by reading the first page of the lab module for an overview of the lab, the set of lab instructions and downloading of the worksheet and figures.

2) Lab Activities: Begin working on the lab activities by studying the lab module information pages (that follow the first module page), including listed worksheet figures, files, web links, and videos. Complete all parts of the lab worksheet. Again, use the module info pages, worksheet figures and linked resources to help you in answering all the questions. Note that some labs come with pre-lab quizzes that you take prior to starting the main portion of the lab.

3) Post-Lab Quiz: When you have completed the worksheet, go back to the lab module, and take the post-lab quiz (immediately follows the lab worksheet folder in the module). Note that you get three un-timed attempts, with your highest-scoring attempt retained in the grade book. After each of the first two attempts, you get to see what you got right and wrong; after your last attempt, you get to see all the correct answers.

4) Post-Lab Reflection: After you have completed your last post-lab quiz attempt, open the post-lab writing reflection activity and compose and post your lab reflection on the discussion board.

5) Submit Worksheet: Finally, after the post lab quiz and reflection has been completed, you will need to submit a copy of your completed worksheet. Upload a copy of your completed worksheet as either a DOC, PDF, RTF, or JPG file. Do not submit a PAGES file. That completes a weekly lab assignment.

Contact the instructor for help/guidance if you get really stuck on any problem or need clarification on instructions and/or execution of any part of the lab assignment. You can email via either Canvas or instructor's email contact.

Geology 1 Online Schedule – Spring 2025 – Gavilan College

Week	Study Topic	Assigned Weekly Homework	Tests and Assignments	Due Date
Week 1 1/27 to 2/2	**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 1/30**
	Course Logistics	Course Syllabus and Schedule	**Lecture Quiz #1** – Course Syllabus and Intro to Geologic Science	**Sun 2/2**
	Intro to Geology **Earth Origins**	Textbook Chapter 1 Professor's PowerPoints 1 Earth Revealed Video 1 Geo Tutorial Videos 1 - 5	**Lab Module #1 - Science Units and Earth History**	**Sun 2/9**
Week 2 2/3 to 2/9	**Earth Physiology** **Isostasy** **Plate Tectonic Theory** **Earth Physiology**	Textbook Chapter 2, 8 Earth Revealed Videos 2, 3, 4, 5, 6 Prof's PowerPoints (PPP) 2, 3, 4, 5 Geo Tutorial Videos 6 - 17	**Lab Module #2 – Isostasy**	**Sun 2/16**

	Isostasy **Plate Tectonic Theory** **Earth Physiology** **Isostasy** **Plate Tectonic Theory**			
Week 3 2/10 to 2/16	**Plate Tectonic Theory** **Seafloors and Continents**	Textbook Chapters 2, and 8 Earth Revealed Videos 2, 3, 4, 5, 6 Prof's PowerPoints 2, 3, 4, 5 Geo Tutorial Videos 6 - 17	**Lecture Quiz #2** – Earth Origin, Physiology, and Plate Tectonics **Lab Module #3 – Plate Tectonics**	**Sun 2/16** **Sun 2/23**
Week 4 2/17 to 2/23	**Minerals** **Mineral Resources**	Textbook Chapters 3 and 16 Earth Revealed Videos - 12 and 26 Prof's PowerPoints 6 Geo Tutorial Videos– 18, 19, 20	**Lecture Quiz #3** - Minerals and Mineral Resources **Lab Module #4 – Mineral Identification**	**Sun 2/23** **Sun 3/2**
Week 5 2/24 to 3/2	**Igneous Rocks**	Textbook Chapter 4 Earth Revealed Video 13, , 14 Prof's PowerPoints 7 Geo Tutorial Videos – 21, 22, 23, 24	**Lab Module #5 – Magmas and Igneous Rock Identification**	**Sun 3/9**
Week 6 3/3 to 3/9	**Magmas** **Volcanoes and Volcanic Hazards**	Textbook Chapter 5 Earth Revealed Video 15, 17 Prof's PowerPoint 8 Geo Tutorial Videos – 25,	**Lecture Quiz #4** – Igneous Rocks, Magmas and Volcanoes **Lab Module #6 – Volcanoes and Volcanic Hazards**	**Sun 3/9** **Sun 3/16**
Week 7 3/10 to 3/16	**Sediments** **Sedimentary Rocks**	Textbook Chapter 5 Earth Revealed Video 15, 17 Prof's PowerPoint 8 Geo Tutorial Videos – 25,	**Lab Module #7 – Sediments and Sedimentary Rocks Identification**	**Sun 3/23**
Week 8 3/17 to 3/23	**Metamorphism** **Metamorphic Rocks**	Textbook Chapter 6 Earth Revealed Video 18 Prof's PowerPoint 9 Geo Tutorial Videos – 26	**Lecture Quiz #5** – Sedimentary Rocks & Metamorphic Rocks **Lab Module #8 – Metamorphic Rock Identification**	**Sun 3/23** **Sun 3/30**
Week 9 3/24 to 3/30	**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	**Lecture Quiz #6** –Geologic Time, Dating Rocks, and Earth History **Lab Module #9 – Geologic Dating**	**Sun 3/30** **Sun 4/6**

Week 10 3/31 to 4/6	**Mountain Building** **Crustal Deformation**	Textbook Chapters 2, and 8; Earth Revealed Videos 7 and 8 Prof's PowerPoint 11 Geo Tutorial Videos – 35, 36	**Lecture Quiz #7** – Crustal Deformation and Mountain Building **Lab Module #10 – Structural Geology**	**Sun 4/13** **Sun 4/20**
Spring Break Week 4/7 to 4/13				
Week 11 4/14 to 4/20	**Earthquakes** **Seismic Hazards**	Textbook Chapter 9 Earth Revealed Video 3, and 9 Prof's PowerPoint 12 Geo Tutorial Videos – 32, 33, 34	**Lecture Quiz #8** –Earthquakes **Lab Module #11 – Earthquakes and Seismic Hazards**	**Sun 4/20** **Sun 4/27**
Week 12 4/21 to 4/27	**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,	**Lecture Quiz #9** – Rivers & Groundwater **Lab Module #12 – Rivers, Groundwater and Water Resource Management**	**Sun 4/27** **Sun 5/4**
Week 13 4/28 to 5/4	**Shorelines** **Human Impacts on Coastlines**	Textbook Chapter 12 Earth Revealed Video 16, 23 & 24 Prof's PowerPoint 13, 14 and 15 Geo Tutorial Videos – 41, 42, 46	**Lab Module #13 – Coastal Processes and Beach Profiling**	**Sun 5/11**
Week 14 5/5 to 5/11	**Glaciers**	Textbook Chapter 14 Earth Revealed Video 16, Prof's PowerPoint 14 Geo Tutorial Videos – 40	**Lab Module #14 – Sea Level Rise Hazards and Coastal Erosion**	**Sun 5/18**
Week 15 5/12 to 5/18	**Climate Change** **Extra Credit Work**	Textbook Chapter 15 Earth Revealed Video 23 & 24 Prof's PowerPoint 15 Geo Tutorial Videos – 46	**Quiz #10** – Shorelines, Glaciation and Climate Change **Lab Module #15 – Virtual Fieldtrip to the Central Coast** **Last day to Submit Extra Credit**	**Sun 5/18** **Sun 5/18** **Sun 5/18**
Finals Week 5/19 to 5/25	**Final Exam – Review and Test**	**Final Exam Study Guide** Textbook Ch 1 - 15 Earth Revealed Video 1 - 24 Prof's PowerPoint 1- 15 Geo Tutorial Videos 1 - 46 Lab Modules 1 - 14	**Final Exam** – Covers all course material from entire semester Exam available to take on 5/20	**Sun 5/25**

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.