COURSE INFORMATION

COURSE TITLE
GEY 112—Historical Geology with Lab

COURSE DESCRIPTION
Covers the development of Earth through the vast span of geologic time. Emphasis is on the investigation and interpretation of sedimentary rocks and features; the record of ancient environments; fossil life-forms; and physical events in Earth’s history within the framework of plate tectonics.

This course is one of the Statewide Guaranteed Transfer courses.

- [gtPathways Requirement Course Information Page](#)

CREDIT HOURS
4

SUGGESTED PREREQUISITE KNOWLEDGE
Basic math operational skills are required, including arithmetic, simple equations, percentages, measuring, and averages. As with any online course, students are expected to have basic computer skills including:

- internet research
- document formatting
- import/export of files
- basic skills in, and access to, Microsoft Office software
  - Word
  - PowerPoint
  - Excel basic graphing
- attaching files
The CCCOnline Course Policies page contains information about the student's role in the classroom, grading policies, and rights and responsibilities.
COURSE MATERIALS

All course reading material is available online and linked within the course site. You do not need to purchase any additional materials. However, you will need to purchase lab kits.

MINIMUM COMPUTER REQUIREMENTS

To complete this course, you will need regular access to a computer from which you can access the internet and use email. In order to ensure that your course functions properly, you must run the System Check. This is a critical step, and taking the time to do it now will eliminate a tremendous amount of frustration for you later. To run the System Check, select Tools in the course NavBar, and then select System Check.

REQUIRED eTEXT

MAIN eTEXT


REQUIRED LAB KIT

Your required lab kit will be shipped to you after the drop date for this semester.

- A pop-up window will appear in your course for you to submit your shipping address prior to the drop date.
- The address you provide must be a physical address and not a P.O. Box.
  - This information will be sent to your student.cccs.edu email account (i.e., your student email account). Be sure to check your student email account regularly throughout the semester.
  - For CCCS students, help with your student email account can be found at help.cccs.edu. Click Email – Login to Student Email.
  - Lab kits cannot be delivered to a P.O. Box. Students who live abroad should complete this form by the third day of class.
  - Within approximately seven to ten business days after the drop date for this semester, you will receive tracking information about your lab kit.
- If your tracking email shows that you will not receive your lab kit by to be filled in, contact your instructor and the CCCOnline Bookstore at bookstore@ccconline.org.
- If you do not receive your lab kit due to an old or inaccurate mailing address, there will be no deadline extensions for lab assignments. CCCOnline is not responsible for delays or lost lab kits due to customs or APO processing.
- When you receive your kit please make sure to confirm all content listed (Here). If any items are missing or broken you will want to contact the lab vendor ASAP to obtain replacements.
- Please visit this page for more Lab Kit FAQs
LAB MATERIALS SUPPLIED BY THE STUDENT

Please find the list of materials students must provide in this course. Please make sure to review the list and have the materials available at least a week before the due date of the lab. Additional lab information can be found in the Lab Information section in the Syllabus module. The document also includes the general time you’ll spend on each lab.

THE HAZARDS OF PERFORMING LABS WITH A USED OR EXPIRED LAB KIT:

1. Lab kits acquired prior to this current semester may be out of date and lack appropriate materials due to updates in the lab manual or contents. (If you do not have a complete materials list for a particular lab, your grade for that lab will be adversely affected. You are responsible for ensuring you have all materials required for any particular lab.)
2. Used kits may contain materials that are expired and create a safety hazard.
3. Used kits may contain parts that have been recalled for safety purposes.
4. Used kits are not covered by the Terms and Conditions or User Agreement of the manufacturer; thus, used kits are a liability issue.

You take full responsibility for any hazards from lab experiments performed with a used or expired lab kit.

PHOTO, CAMERA, AND VIDEO REQUIREMENT

This course requires access to a digital camera (cell phone cameras are acceptable) along with the ability to take videos. Access to a scanner for lab work is also required. You will be required to submit photos and sometimes videos as part of specified assignments for this course. Photos submitted for assignments must be in jpg, .tif, or .bmp format, video instructions will be given in lab instructions. Assignments without required photos/videos and proper formatting may result in a zero grade for that lab.
## Course Competencies and Outcomes

### Student Competencies

The competencies you will demonstrate in this course are as follows:

A. Analyze sediments and identify sedimentary rocks based on their notable characteristics.

B. Reconstruct paleo-environment - including paleoclimate, paleogeography, plate setting, and agent of erosion - from the analysis of sedimentary rocks and structures.

C. Interpret modern and ancient depositional settings through the analysis of sediments, sedimentary rocks, and sedimentary structures.

D. Recognize the vastness of geologic time and apply the techniques of relative and absolute dating.

E. List the major divisions of the geologic time scale.

F. Interpret and correlate geologic events and features by means of stratigraphic analysis, including the use of geologic maps and stratigraphic sections.

G. Describe and discuss how fossils form and how they are used as indicators of relative age and ancient environments.

H. Recognize the major fossil groups.

I. Describe and discuss the theory of evolution and correlate major events in the history of life with the geologic events occurring at that time.

J. Identify the major developments in the history of geologic thought.

K. Explain Plate Tectonics Theory.

L. Describe and discuss current research on the origin and development of the Earth, geosphere, hydrosphere, and atmosphere.

M. Delineate major geologic events during the Hadean, Archean, and Proterozoic Eons and the Paleozoic, Mesozoic, and Cenozoic Eras with emphasis on what is now North America.

N. Relate Earth’s features and history to the theory of Plate Tectonics.

O. Describe Earth’s major mass extinctions and lines of evidence for their causes.

P. Demonstrate an understanding of how climate has changed throughout Earth’s history and the evidence for these changes (e.g. stable isotopes).

Q. Describe the major geochemical cycles and their use in determining past conditions and events.

R. Demonstrate an understanding of human evolution as it relates to the geologic record.

The module outcomes that will permit you to demonstrate course competencies are:
MODULE 1

Outcomes

1. Recognize and describe the geologic time scale.
2. Define deep time.
3. Identify the time scale divisions including names and years/span.
4. Summarize the history of geology by comparing pioneering people in the field.
5. Distinguish between relative and absolute dating techniques.
6. Apply relative and absolute dating techniques to virtual samples.
7. Describe the formation of the Earth and major systems.
8. Explain the interaction between Earth systems throughout geologic time.
9. Explore the geologic time scale and concepts that illustrate the vastness of the scale.

Competencies

D, E
D, E
D, E
J
D
L
L, Q
D, E

MODULE 2

Outcomes

1. Classify sedimentary rock types and origin.
2. Identify common sedimentary rocks.
3. Describe the sedimentary cycle/process.
4. Define and distinguish different types of weathering and erosion.
5. Analyze sedimentary properties of rocks to interpret environment of deposition.
6. Outline and describe Steno’s four principles of sedimentation.
7. Apply sedimentary principles to stratigraphic correlation exercises.
8. Describe and give examples of the different processes of fossil preservation.
9. Explain the importance of fossils in the rock record and geologic time scale.
10. Explore concepts related to the Earth’s history and its sedimentary features.

Competencies

A, B, C, F
A, B, C, F
A, B, C, F
A, B, C, F
A, B, C, F
A, B, C, F
A, B, C, F
C, F
G
A, B, C, F

MODULE 3

Outcomes

1. Explain the theory of plate tectonics.
2. Identify the beginnings of life-forms on Earth.
3. Describe the theory of evolution and the evolutionary processes.
4. Give examples of evolutionary change throughout geologic time.
5. Explore terminology and concepts related to plate tectonics, evolution, origins, Hadean and Archean Eons, and Proterozoic Eon.
6. Describe Earth’s systems formation and the evidence for it.
7. Explain the origins of the continents.
8. Identify major geologic events of the Precambrian.
9. Describe plate tectonic movement during the Precambrian and evidence for it.
10. Identify major life-forms of the Precambrian.
11. Identify mass extinctions of the Precambrian and causes for them.
12. Describe the global climates of each Precambrian Period.
13. Identify the time scale divisions including names and years/span.
14. Recognize and describe the geologic time scale.
15. Outline and describe Steno’s four principles of sedimentation.
16. Apply sedimentary principles to stratigraphic correlation exercises.
17. Describe and give examples of the different processes of fossil preservation.
18. Explain the importance of fossils in the rock record and geologic time scale.

Competencies

K
I, O
I
I
I, K, L, O
K, L
K, L
K, L, M, N, O, P, Q
K, N
I, O
I, O
L, P, Q
D, E
D, E
B, C, F
C, F
G
G, H, I
**MODULE 4**

**Outcomes**

1. Define and explain the Cambrian explosion.
2. Identify major geologic events of the Paleozoic.
3. Describe plate tectonic movement during the Paleozoic and evidence for it.
4. Identify major life-forms of the Paleozoic.
5. Identify mass extinctions of the Paleozoic and causes for them.
6. Describe the global climates of each Paleozoic Period.
7. Explore terminology and concepts related to the Paleozoic Era.
8. Use topographic and geologic maps to interpret the geologic history of an area.
9. Identify features, symbols, and codes on topographic and geologic maps.
10. Recognize and describe the geologic time scale.
11. Produce a real-world field trip that demonstrates application of course outcomes.

**Competencies**

1. I, O, P, Q
2. K, L, M, N, O, P, Q
3. K, N
4. I, O
5. I, O
6. L, P, Q
7. I, L, O, P, Q
8. B, C, F
9. F
10. E

**MODULE 5**

**Outcomes**

1. Identify major geologic events of the Mesozoic and Cenozoic.
2. Describe plate tectonic movement during the Mesozoic and Cenozoic.
3. Identify major life-forms of the Mesozoic and Cenozoic.
4. Identify mass extinctions of the Mesozoic and Cenozoic and causes for them.
5. Describe the global climates of each Mesozoic and Cenozoic Period.
6. Explore terminology and concepts related to the Mesozoic and Cenozoic Eras.
7. Produce a real-world field trip that demonstrates application of course outcomes.
8. Use topographic and geologic maps to interpret the geologic history of an area.
9. Identify features, symbols, and codes on topographic and geologic maps.
10. Apply course concepts in a graphic that represents the Earth 200 million years in the future.
11. Describe fossil fuels and how they are formed and converted into energy.

**Competencies**

1. K, L, M, N, O, P, Q
2. K, N
3. I, O, R
4. I, O, R
5. I, O, R
6. L, P, Q
7. I, O, R
8. B, C, F
9. F
10. P, R
11. G
**Grading and Evaluation**

**Methods**
The methods for evaluation include a combination of evaluating discussion participation, labs, and assignments. Rubrics will be provided for the evaluation. Information on accessing rubrics is provided on the *Course Rubrics* page in the *Syllabus* module of course content.

This page summarizes all of the graded assignments for the course. You should print it out and post it somewhere that is easily accessible.

*This course is not self-paced and is not open-exit. All work is to be completed before 11:59 p.m. MST/MDT on the due date listed on the Course Schedule page.*

**Grading Policies**
Mark all module due dates on your calendar for this class. You may submit assignments ahead of schedule, but no activities will be graded until after the due date to prevent cheating. Assignments, discussions, and labs will be given throughout the term, with set due dates. See the *Course Schedule* page for these dates, and make note of them in your calendar. The instructor will communicate any changes to these due dates to the class.

Your final grade in this course will be based on the total points that you earn. The grades are final and non-negotiable. They are a measure of your own aptitude and effort. It is expected that you will accept responsibility for your own performance.

**Plagiarism**
Plagiarism is the act of using words and/or ideas from another person or source without acknowledgment or attribution of that person or source. Plagiarism, cheating, or helping someone else violate reasonable standards of academic behavior will not be tolerated.

- If you have taken this course previously alert your instructor immediately. Work from a previous semester may not be used. Your instructor has the expectation that all work completed will be unique to the current semester. Penalties will be applied if work is reused. Labs must be performed from scratch and new data obtained.
- The instructor may, in any such instances, render a failing grade (zero) for any plagiarized assignment on the first offense, and an F for the entire course on the second offense.
- *All work submitted by a student should be in the student's own words.* This includes discussion posts, lab reports, and quiz answers.
- Any quotes or information used from an outside source must be clearly referenced.
- You may confer with other students about the labs or other assignments in this course, but all work submitted must be your own and unique. If you do work with a classmate on an assignment, please alert your instructor before turning in your work.
  - See "Lab Success Without Plagiarism" in the *Lab Information* section of the *Syllabus* module for more information.
**Deadlines**

If you have an emergency resulting in a missed due date, contact your instructor as soon as possible. No late work is accepted in this course (except in the case of documented emergencies, such as a doctor’s note, military papers, etc.). Due dates will be enforced.

This course is not designed to be self-paced. Within the schedule of the course, though, you have great flexibility with your study time. For the most part, the course is organized according to the week of the semester. Assignments and labs are spread throughout the course, and they have specific deadlines; you must submit each assignment before its deadline expires. Please remember, due to the nature of an online course, it is the student’s responsibility to have access to a functioning computer and scanner in order to complete the coursework.

It is strongly recommended that you do not wait until the last minute to complete or submit assignments. There are many things that can and do go wrong: your internet connection might go down, your computer’s hard drive may crash, or you may get ill. You are welcome (and encouraged) to work ahead of schedule to submit work before it is due. Please contact your instructor if you have any questions about what is being asked in any assignment or discussion question. The goal here is learning. Keep that in mind, and enjoy the course.

**Communicating Difficulties/Absences**

It is your responsibility to contact the instructor in a timely manner if you become ill or have scheduling or computer problems that would keep you from participating in course activities for an entire week. For any technical difficulties you must contact the Help Desk (link on Course Homepage) and provide your ticket number to your instructor.

**Keep a Copy of All Submissions**

Be sure to save copies of everything you send to the instructor, including both emails and assignments. Murphy’s Law of the Computer seems to be that what can go wrong, will.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussions (10 @ 20 points each)</td>
<td>200</td>
<td>20%</td>
</tr>
<tr>
<td>Project (1 @ 100 points)</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes (5 @ 50 points each) Plagiarism Quiz (2 points)</td>
<td>252</td>
<td>25%</td>
</tr>
<tr>
<td>Lab Activities (15 @ 20 points each)</td>
<td>300</td>
<td>30%</td>
</tr>
<tr>
<td>Module Assessments (5 @ 30 points each)</td>
<td>150</td>
<td>15%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,002</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Grading Scale**

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A = 90 to 100%  B = 80 to 89%  C = 70 to 79%  D = 60 to 69%  F = 59% and below

**Final Grades**

Final grades will be determined by the number of points you earn divided by the total number of points available x 100, as a percent.

Example: If your total points are 873, your final grade will be determined from $\frac{873}{1002} \times 100 = 87.1\%$, which will result in a B in this course.

- In order to receive an A in this course, your score needs to be 896 or higher.
- The grades are final and non-negotiable. They are a measure of the assignments completed in this course.

**Discussions**

**General Information**

Due dates for each discussion topic are posted in the *Course Schedule*. Please note that the due dates will not correspond to the open/close dates you see in the topic. This is due to the student needing time to complete the activity. Expect to check the discussion topic throughout that time period in order to check for posts posed to you or additional required posts made by the instructor.

The discussion area is our classroom and your means of participating in the classroom interaction. In this course there will be at least one graded discussion topic per chapter covered, allowing you to research, ponder, and write about/debate with your classmates and instructor. References to relevant outside sources or real life that relate to the discussion questions may be included in your discussions. You will be graded on your participation in this discussion. Unlike exams, labs, and assignments, which you may wait until the deadline to submit, these discussions are not a self-paced activity. These discussions do not work if you only post a summary or initial response and do not interact with your classmates and your instructor. They also do not work if you post late in the discussion period (see more on this in the following section). Imagine going to a debate/discussion meeting and trying to deliver a speech to, and interact with, people—after everyone has left. It would not be a very effective discussion.

Student evaluations of CCCOnline courses reflect the importance of the discussion area to successful online classes. Students tell us: "I felt that the class discussions were interesting;" "[discussions] kept all the students engaged;" and "I really liked the interaction between the people in the discussions. I thought that each person's input really helped give a broad perspective of the subject and helped me learn." In general, there is a correlation between discussion participation and getting a higher grade.

**How You Will Be Graded**

Points earned will be based on the Discussion rubric found under the *Syllabus* module. Note: All of the types of posts listed below are equally important. Make sure you contribute to the discussion in all aspects listed below, or points will be lost.

**Posting to Your Course Discussion Topics**

**Your First Post in a Topic**

When a topic opens, plan to write 150–250 words—no more, no less—in your initial required post (called your *first post*). Make sure to read and follow the instructions for each topic carefully. You should make a unique post. In other words, you should not repeat the same sources or exact topic that has been already posted.
This first post must also include a minimum of one reference—cited using APA Style—even if it is only your textbook. Any material you use to help you formulate any of your posts must be cited using APA Style. Any facts or quotations obtained from any other source should be referenced and cited properly. If you get your material from a web page, please provide the hyperlink as part of the reference information so that the site may be directly accessed (per APA Style). For help with APA Style, please refer to the CCCOnline APA Citation Toolkit.

YOUR POSTS TO CLASSMATES AND INSTRUCTOR

You are expected to post to a minimum of two students' first posts (called your response posts). You are expected to post at least one response post before the due date stated in the Course Schedule. This means that a first response discussion posting by you on the response due date will not be counted. These posts, on which you will be graded, should always be substantive and meaningful posts. Simply writing "I agree" or "I really liked your post" is not a meaningful response; explain why you agree or disagree, for example; add some additional information (always making sure to cite any information taken from another source); or ask a direct question along with your general comments. Encouragement of others is a good thing, but don't make that your only input to the discussion. As stated above, if you use outside material to help you formulate your post, it must be referenced using a hyperlink; otherwise, a reference is not needed for response posts.

ANSWERING CLASSMATES’ RESPONSES TO YOUR OWN POSTS

You will be graded on answering all substantial posts posed to you under your first post up until noon the day before the topic closes (called your reaction posts). As long as a post is more than a "pat on the back" (adding information, asking a question, etc.), please expect to respond to these. Although there isn’t a stated deadline, you are expected to respond in a timely manner: 48 hours after a post is up is a good goal. This means do not wait until right before the topic closes to respond. You will need to participate on at least two separate days, so that the discussion is like an ongoing conversation.

There will be times when your instructor posts additional questions/information for the entire class during the topic period. When this happens, you will be notified by the subject line. Part of your response points will go toward answering these additional posts.

HELPFUL ADVICE

Since this is an asynchronous activity, everyone will be "on" at different times, although we will be on the same timeline. For maximum benefit, and to greatly enhance your learning experience, post early to allow other students to read and respond. Check into the discussion area as often as possible to keep current with the discussions. You do not have to spend hours in the discussion, but spending quality time with the discussions will benefit you and the other members of the group.

OTHER ASSESSMENTS

PROJECT

You will create a term capstone project, demonstrating real-world identification of historical concepts in the field (in your area). This will be presented as a field trip to the class. You will submit your field trip as a PowerPoint presentation.

MODULE ASSESSMENTS

Each module assessment will include a required graphic assignment that showcases your knowledge of a core course concept, presented in a one-page graphic. Then, you will answer three short essay questions that demonstrate your grasp of module concepts (word count is restricted; see instructions).
LABS

Be sure to review the “Lab Kit Requirements and Authentication Instructions” document posted in the Lab Information section of the Syllabus module. You must submit proof once you have received your lab kit. Note that later lab Assignment folders will be hidden until you submit this proof and receive feedback from your instructor. The Lab Information section of the Syllabus module will provide all the specific details of how to complete the labs required in this course. Be sure to print the “Time and Materials Required” page; this page has other important lab requirements. If outside sources were used, be sure they are cited and referenced using APA Style.

QUIZZES

There are five automated quizzes, one in each module, covering the module content. These quizzes include multiple choice, multiple select, true or false, and short answer questions.

Note: You will see your score for the multiple choice & true/false questions upon completion, but will not be able to see answers until after the due date has passed. Also, your instructor must hand-grade all essay questions which you will need to allow time for per the course grading policy.

EXTRA CREDIT

Extra credit is not available for this course.
The schedule is subject to change as needed.

### Module 1

15-week courses: One discussion per week for the first two weeks; labs and quizzes due at the end of the module.

<table>
<thead>
<tr>
<th>Reading/Assignments/Exams</th>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Module 1 Historical Geology Reading Packet</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Exploration of Times and Cycles</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Student Introductions</td>
<td>First Post Due: INSERT</td>
</tr>
<tr>
<td>Discussion 1: Time in a Bottle</td>
<td>First Post Due: INSERT</td>
</tr>
<tr>
<td></td>
<td>Response Posts Due before: INSERT</td>
</tr>
<tr>
<td>Discussion 2: Earth Systems Connections</td>
<td>First Post Due: INSERT</td>
</tr>
<tr>
<td></td>
<td>Response Posts Due before: INSERT</td>
</tr>
<tr>
<td>Census/Drop Date Alert: If you have not completed at least one of these assignments (Discussion 1 or 2 or the Plagiarism Quiz) for credit or have contacted me by email offering your extenuating circumstances, you will be dropped from this course.</td>
<td>Insert date</td>
</tr>
<tr>
<td>Module 1 Assignment: Time and Cycle Assessment</td>
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<tr>
<td>Module 1: Quiz</td>
<td></td>
</tr>
<tr>
<td>Plagiarism Quiz</td>
<td></td>
</tr>
<tr>
<td>Lab Safety Contract (submission allows access to all Assignment Folders)</td>
<td></td>
</tr>
<tr>
<td>Lab 1: Geologic Time (no lab-kit required, video requirement)</td>
<td></td>
</tr>
</tbody>
</table>
This page summarizes all of the graded assignments, exams, and reading assignments for the course. If you want, you can print it out and post it somewhere handy.

All assignments are described in detail on the module assignment pages. If you have questions, check there and/or send the instructor an e-mail.

This course is not self-paced and is not open-exit. All assignments, papers, quizzes, discussions, etc., are to be completed by no later than 11:55 p.m. MST/MDT of the due date.

NOTE: Important CCCOnline semester dates (e.g., drop/withdraw/term end) appear on the CCCOnline Calendar.

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**Module 2**

15-week courses: Discussions run first two weeks; labs and quizzes during the third week of the module.

<table>
<thead>
<tr>
<th>Reading/Assignments/Exams</th>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Module 2 Historical Geology Reading Packet</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Exploration of the Rock Record</td>
<td>ASAP: Review throughout the module</td>
</tr>
</tbody>
</table>
| Discussion 1: Weathering | First Post Due: INSERT  
Response Posts Due before: INSERT |
| Discussion 2: Sedimentary Rock Record | First Post Due: INSERT  
Response Posts Due before: INSERT |
| Module 2 Assignment: The Rock Record Assessments | |
| Module 2: Quiz | |
| Lab 4: Earth Materials | |

Lab 2: Geologic Dating: Absolute (no lab-kit required, note - you will need a bag of about 60 candies such as Skittles, and a cup)

Lab 3: Geologic Dating: Relative (no lab-kit required, need printer access)

Submit photo to Lab Kit Requirements and Authentication folder (submission opens Assignment folders 4-15)

As soon as you receive your kit
Lab 5: Weathering and Sediment Formation (video requirement)

Lab 6: Environments of Deposition

### Module 3

**15-week courses**: Discussions run first two weeks; labs and quizzes during the third week of the module.

<table>
<thead>
<tr>
<th>Reading/Assignments/Exams</th>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Module 3 Historical Geology Reading Packet</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Exploration of the Precambrian</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Discussion 1: The Origins of Earth’s Systems</td>
<td>First Post Due: INSERT</td>
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<tr>
<td></td>
<td>Response Posts Due before: INSERT</td>
</tr>
<tr>
<td>Discussion 2: Life and Evolution</td>
<td>First Post Due: INSERT</td>
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<tr>
<td></td>
<td>Response Posts Due before: INSERT</td>
</tr>
<tr>
<td>Module 3 Assignment: Precambrian Time Assessment</td>
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<tr>
<td>Module 3: Quiz</td>
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<tr>
<td>Lab 7: Stratigraphic Correlations</td>
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<tr>
<td>Lab 8: Fossilization</td>
<td></td>
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<tr>
<td>Lab 9: Fossil Identification</td>
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</tbody>
</table>
Module 4

15-week courses: Discussions run first two weeks; labs and quizzes during the third week of the module.

<table>
<thead>
<tr>
<th>Reading/Assignments/Exams</th>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Module 4 Historical Geology Reading Packet</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Exploration of the Paleozoic</td>
<td>ASAP: Review throughout the module</td>
</tr>
<tr>
<td>Discussion 1: The Cambrian Explosion</td>
<td>First Post Due: INSERT</td>
</tr>
<tr>
<td></td>
<td>Response Posts Due before: INSERT</td>
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<tr>
<td>Discussion 2: Mass Extinctions of the Paleozoic</td>
<td>First Post Due: INSERT</td>
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<tr>
<td>Module 4 Assignment: The Paleozoic Assessments</td>
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<td>Module 4: Quiz</td>
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<tr>
<td>Lab 10: Evolution</td>
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<tr>
<td>Lab 11: Fundamentals of Map Reading</td>
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<tr>
<td>Lab 12: Geologic Maps</td>
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<tr>
<td>Begin working on your Final Project.</td>
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</table>
Module 5

15-week courses: Discussions run first two weeks; labs and quizzes during the third week of the module.

<table>
<thead>
<tr>
<th>Reading/Assignments/Exams</th>
<th>Due Dates</th>
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<tbody>
<tr>
<td>Read Module 5 Historical Geology Reading Packet</td>
<td>ASAP: Review throughout the module</td>
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<tr>
<td>Exploration of Mesozoic and Cenozoic</td>
<td>ASAP: Review throughout the module</td>
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<td>Discussion 1: Maps</td>
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<td>Module 5 Assignment: Future Earth Assessment</td>
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<td>Module 5: Quiz</td>
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<td>Module 5: Field Trip Capstone Project</td>
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<td>Lab 13: Plate Tectonics</td>
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<td>Lab 14: Fossil Fuels</td>
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<td>Lab 15: Transgressions and Regressions</td>
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Last modified 12/3/2019 ace