

# Syllabus for Environmental Geology

#### **Course Information**

Semester & Year: Fall 2022

Course ID & Section #: GEOL-10-V3578

Instructor's name: Emily Wright

Course units: 3

#### **Instructor Contact Information**

Office hours: by appointment at WhenIsGood.net/WrightOfficeHour

Email address: Emily-Wright@redwoods.edu

Preferred contact method: Pronto

# **Catalog Description**

An introductory study of earth systems, earth materials and how earth processes impact human activities and how human activities influence the geological environment. Students will investigate geologic hazards, including landsliding, earthquakes, and volcanic activity, and make decisions concerning mitigating action. Students will also learn about water, mineral, and energy resources within the context of earth systems and consider issues of sustainability.

# **Course Student Learning Outcomes (from course outline of record)**

- 1. Describe how the scientific method is used to understand natural phenomena.
- 2. Assess the geologic principles, consequences, and corrective/adaptive options related to specific earth hazards such as earthquakes, floods, and landslides.
- 3. Describe the origin of geologic resources (such as groundwater, fossil fuels, and minerals) and the consequences of resource-management choices.

#### **Accessibility**

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or <u>Disability Services and Programs for Students</u> (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

During COVID19—DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

### **Student Support**

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

### **Evaluation & Grading Policy**

This course uses a *weighted grading system*. The table below shows the categories, their weights, and any special rules for that category. The grading policies in this class are designed to value quality over quantity!

| Category                                   | Weig<br>ht | Special Rules       | # of attempts                                    | Scoring                 | Late Penalty     |
|--|------------|---------------------|--|-------------------------|------------------|
| Lessons                                    | 10%        | 2 of ~30<br>dropped | Usually<br>unlimited                             | Highest score           | No               |
| Discussions and Informal Writing           | 5%         | 2 of ~8<br>dropped  | 1 attempt  | Complete/Incom plete    | Yes – see rubric |
| End of Module<br>Quizzes<br>(Auto graded)  | 35%        | 2 of 7 dropped      | 3 attempts                                       | Average of all attempts | No               |
| End of Module<br>Quizzes<br>(Short Answer) | 30%        | 2 of 7 dropped      | 1 attempt  | First attempt           | No               |
| 2 Essays:<br>Modules 3 and 6               | 20%        |                     | Opportunities<br>to submit<br>multiple<br>drafts | See Essay Rubric        | Yes – see rubric |

Letter grades will be assigned according to the CR grade scheme, after grade weighting is applied:

| Α  | 100 %    | to 94.0% |
|----|----------|----------|
| A- | < 94.0 % | to 90.0% |
| B+ | < 90.0 % | to 87.0% |
| В  | < 87.0 % | to 84.0% |
| B- | < 84.0 % | to 80.0% |
| C+ | < 80.0 % | to 77.0% |
| С  | < 77.0 % | to 70.0% |
| D  | < 70.0 % | to 60.0% |
| F  | < 60.0 % |          |

Assignment Category Descriptions:

*Lessons and other Learning Activities* 

These are online "worksheets" that involve short activities. Activities are scored for points and generally you are allowed unlimited attempts on activities. You will be assigned several lessons each week, with multiple lessons assigned for each due day. Lessons are learning activities, not assessments, and thus they should be low stress. These will comprise the majority of your time in this course. This grading

category also includes practice quizzes and self-assessment activities. Although they do not count for much of your grade, they are essential to success in the other grade categories.

#### Discussions and Informal Writing

Each module contains at least one informal writing assignment. These will either be in the form of a timed "quiz" or a discussion forum. Most discussions will require around 200 words although, there are also shorter "quick check-in" discussions, which are shorter. Some discussions require two posts, and the second post must be made after reading the posts of your classmates as well as instructor comments and feedback. Informal Writing "quizzes" are designed to encourage you to write freely, without researching or overly revising your answer. All informal writing, including discussions will be graded on a complete/incomplete basis with a small penalty for late completion. You will not be graded on scientific accuracy or writing quality, although you are encouraged to practice writing well and to strive for accuracy.

| Discussion Rubric   |                  |               |                  |
|---------------------|------------------|---------------|------------------|
| First Post          | Complete on time | Complete Late | Not Yet Complete |
|                     | 10 points        | 8 points      | 0 points         |
| Response/Reflection |                  | Complete      | Not Yet Complete |
| post(s)             |                  | 5 points      | 0 points         |
| Total 15 points     |                  |               |                  |

#### End of Module (EOM) Quizzes

At the end of each module (seven total in the semester), you will complete two quizzes to assess your learning over that module. These quizzes are designed to be a direct assessment of what you learned in the lessons. These quizzes are comprised of two parts, both accessed through Canvas. The first part will include automatically graded questions such as multiple-choice questions. You will have three attempts on this part of the EOM quiz <u>and your grade is the average of your scores on each attempt</u>. The second part will have short answer questions to be graded by the instructor and you will have just one attempt. Your best five EOM quizzes of each type will count toward your final grade.

#### Essays

There are two essays related to Module 3: Mt. Rainier and Module 6: To Frack or not to Frack. Each essay will summarize what you learned in those modules. After your first draft submission, you will have the opportunity to review additional essay related materials, self-evaluate and submit a second draft. Additional third and fourth drafts are optional for bonus points. Your final score will be based on two factors, the overall merit of your first draft and the improvement of your later drafts.

| Essay Rubric                |   |                             |                                   |   |
|-----------------------------|---|-----------------------------|-----------------------------------|---|
| First draft on time         | On time 1 point                         | Late or missing O points    |                                   |   |
| First draft score           | Exceeds Expectations 6 points           | Meets Expectations 5 points | Approaching expectations 4 points | Not yet approaching expectations 3 points |
| Second draft<br>Improvement | Significant improvement <b>3 points</b> | Minor improvement 2 points  | Second draft submitted 1 point    | No second draft  O points                 |

| Third draft    | Significant   | Minor       |  |  |
|----------------|---|-------------|--|--|
| Improvement    | improvement   | improvement |  |  |
|                | 2 points  | 1 point     |  |  |
| Fourth draft   | Significant   |             |  |  |
| Improvement    | Improvement   |             |  |  |
|                | 1 point   |             |  |  |
| Total Possible | No 3 <sup>rd</sup> or 4 <sup>th</sup> draft bonus awarded above 10 points total |             |  |  |
| 10 points      |   |             |  |  |

#### **Turnitin**

The Turnitin plagiarism check will be applied to essay submissions for the purpose of assisting your instructor in identifying plagiarism.

### **Important Dates**

Summer 2022 Dates

• Classes begin: 8/20/22

• Last day to add a class: 8/26/22

• Last day to confirm your presence in class to avoid "no show" drop 09/02/22 (this class)

• Last day to drop without a W and receive a refund: 09/02/22

Labor Day Holiday (all campuses closed): 09/05/22

• Last day for student-initiated W (no refund): 10/28/22

• Last day for faculty-initiated W (no refund): 07/01/22

• Veteran's Day (all campuses closed): 11/11/22

• Fall Break (no classes): 11/21/22 – 11/25/22

• Semester ends: 12/16/22 (no assignments will be accepted after this date)

#### **Late Work**

Most late work will be accepted with no penalty, until the last day of the semester (see dates above) at 11:59 pm. No work will be accepted after that point, except in the case of an incomplete grade contract.

There is a schedule of "due dates" in Canvas. These dates are generally intended as target dates to provide a guideline to keep you on track. In order to ensure that your grade somewhat reflective of your progress, Canvas will automatically assign zero scores to missing assignments after the target date. These zero scores will be replaced with your grade once the item is graded.

Discussion posts, informal writing, and essay first drafts will be penalized if they are late (see rubrics above). It is important that there are enough discussion posts for your peers to respond to and/or reflect on. However, these late penalties are also intended as a motivational tool to help you stay on track with your assignments. In many cases, the discussions will only unlock when you have completed prerequisite assignments, therefore you will need to stay on track with all your work to not be penalized for late discussions.

I believe that online classes are intended for students who need flexibility. If there are circumstances that make it difficult for you to complete work on time, I am willing to work with you and grant extensions when appropriate, just let me know! If you fall behind, it is important to communicate with

me, the instructor. I would love to help you find strategies to get caught up and communication will help you avoid being dropped for non-attendance.

### **Dropped Scores**

With the exception of the essay category, your two lowest scores in each grade category will be dropped from your final grade. This means that you can either score poorly on two assignments in that category or skip two assignments in that category entirely without penalty to your grade.

### Class participation and Attendance policy

If this class were offered in person, it would meet four times per week. I therefore recommend that you log into this class at a similar frequency. Spacing out studying has been shown to be an effective study strategy! However, assignments will typically be open at least one week prior to the due date, so you can plan your own weekly schedule however you'd like.

Your participation will be tracked through the completion of scored assignments such as lessons and discussions. School policy allows me to initiate a withdrawal for a student who has "excessive absences" prior to the Last day for faculty-initiated W deadline. For this online course "excessive absences" will be defined as missing one week or more of assignment deadlines with no communication with the instructor. I will typically reach out to you prior to dropping you from the course. It is your responsibility to participate in this course on a regular basis. If you intend to withdraw from the class, it is also your responsibility to do so through Web Advisor before the deadline. Do not assume that I will initiate the drop.

### **Contacting your instructor**

The best way to reach me is through Pronto or Canvas messages. Pronto is a chat app linked to Canvas. You can open the Pronto chat in Canvas, or use the app on your smartphone (look for "Pronto Team Communication" by Hitlabs in your app store). You can ask questions in the whole class chat or through a direct message. I am most likely to see and respond to your message immediately if you use Pronto, but I will also check Canvas messages and email. Sometimes I may be away from my computer or involved in other things and might not answer your message right away. Barring exceptional circumstances, such as illness or power outage, I will respond to messages in Pronto, Canvas, or email within at most 24 hours Monday through Friday. If I am available weekends, I will respond to urgent messages, but I cannot guarantee that I will be in internet communication every weekend. If you have not heard back from me within a reasonable time frame, it is possible that I have lost your message, so please resend.

If you want to meet with me over video (or voice), we can also do this in Pronto or set up a Zoom meeting time. If my Pronto status is "online" (green dot) this means that I am most likely available to meet with you. Send me a message asking to meet. If I am not currently available, you can request an appointment using <a href="https://www.whenisgood.net/WrightOfficeHour">whenisgood.net/WrightOfficeHour</a> and I will send you an invitation for a time that works for both of us. This a request form, not an appointment reservation form. The more availability you enter, the more likely I can find a time that works for me.

# **Class schedule**

**Due dates will be every Sunday, Tuesday, Thursday and Friday @11:59 pm**, except on holidays and breaks. Multiple assignments will be due on most due days.

Below is a list of modules and their approximate dates. This is a tentative schedule. Detailed scheduling can be found in Canvas. **Notice that several modules span multiple weeks!** 

| Module   | Topics   | <b>Tentative Dates</b>                    |
|--|--|---|
| Module 0: Welcome to Environmental<br>Geology        | About this class   | 8/20-8/22                                 |
| Module 1: Cascadia Subduction Zone                   | Introduction to Plate Tectonics<br>The Scientific Method<br>Tsunami Hazards  | 8/23-9/12                                 |
| Module 2: It's Our Fault!                            | Faults and Plate Tectonics<br>Earthquake Hazards<br>Relative and Absolute dating   | 9/13-9/29                                 |
| Module 3: Mt. Rainier                                | Volcanoes and Tectonics Igneous Rocks Basics Volcanic Hazards Risk, Vulnerability, and decision making   | 9/30-10/13                                |
| Module 3 Essay and Evaluation                        | Evaluate your own work and the work of your peers  | 10/14-10/27<br>Essay first draft<br>10/20 |
| Module 4: Last Chance Grade                          | Landslide Hazards<br>Hazard Mitigation   | 10/28-11/03                               |
| Module 5: Crops or Craps? Where should the water go? | Groundwater<br>Water rights and water law  | 11/04-11/10                               |
| Module 6: Fossil Fuels                               | Introduction to Energy Resources Sedimentary processes and fossil fuel formation Geologic structures Greenhouse gasses and climate change Comparison of energy sources | 11/11-12/01                               |
| Module 6 Essay and Evaluation                        |  | 12/02-12/08<br>Essay first draft<br>12/05 |
| Module 7: People, Products and Minerals              | Rocks and Minerals Ore and ore grade The process of converting ore into usable products Resource extraction and economics Environmental impacts of mining              | 12/09-12/16                               |

### **Academic dishonesty**

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the College Catalog and on the College of the Redwoods website.

### **Respectful Engagement in this Online Course**

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. There may be times in this class where you may wish to express disagreement with another student. Environmental issues can be complex, and discussing areas where we disagree can be very valuable. It is important to engage in disagreement, and in discussion in general, in a manner that is respectful and inclusive. We all are responsible for ensuring that disagreement remains respectful by not letting challenges to ideas become attacks on personal identity.

In such (rare) cases where the instructor determines that a student's discourse in online discussions, chats or live sessions has disrupted the educational process or violates the student code of conduct in any way, the instructor will remove the offending post(s). In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the College Catalog and on the College of the Redwoods website.

### **Setting Your Preferred Name and pronouns in Canvas**

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact Admissions & Records to request a change to your preferred first name. Your Preferred Name will only be listed in Canvas. This does not change your legal name in our records. See the Student Information Update form.

You can set your pronouns in Canvas in your account settings. If you haven't already, please do, it's very helpful for online classes!

#### **Canvas Information**

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at <a href="https://redwoods.instructure.com">https://redwoods.instructure.com</a>

Password is your 8 digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas Help for students: <a href="https://webapps.redwoods.edu/tutorial/">https://webapps.redwoods.edu/tutorial/</a>

Canvas online orientation workshop: Canvas Student Orientation Course (instructure.com)

### **Community College Student Health and Wellness**

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges Health & Wellness website.

<u>Wellness Central</u> is a free online health and wellness resource that is available 24/7 in your space at your pace.

Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

### **Student Support Services**

The following online resources are available to support your success as a student:

- CR-Online (Comprehensive information for online students)
- <u>Library Articles & Databases</u>
- Canvas help and tutorials
- Online Student Handbook

<u>Counseling</u> offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- <u>Academic Support Center</u> for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- <u>Library Services</u> to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center

Special programs are also available for eligible students include

<u>Extended Opportunity Programs & Services (EOPS)</u> provides services to eligible income
disadvantaged students including: textbook award, career academic and personal
counseling, school supplies, transportation assistance, tutoring, laptop, calculator and
textbook loans, priority registration, graduation cap and gown, workshops, and more!