

### Course Details

**Location and Time:** Monday, Wednesday and Friday 9:00-9:50AM\*

\*Subject to adjustment based on status of the world.

**Course Description:** Introduction to the origin and geologic evolution of ocean basins and the techniques used to study marine Geology. Composition and structure of oceanic crust; marine volcanism; and deposition of marine sediments. Interpretation of geologic history of the ocean floor in terms of sea-floor spreading theory.

#### **Instructor Information:**

**Dr. Claire McKinley (She / Her)**

**Office: To be Determined**

**Office Hours: Drop in** Monday 11:00-11:30 Appointments 11:30-12:00

Contact me using Discord or canvas inbox to schedule an appointment

**About:** Dr. McKinley is from Portland, Oregon and has a PhD in Oceanography from Texas A&M.



#### **Course Goals:**

- Practice applying scientific, quantitative, critical thinking skills to scientific and societal problems
- Build an understanding of how Geological Oceanography is integral to the study of Earth's processes.
- Create links to integrate Geologic processes into our understanding of the Ocean System
- Learn about oneself as a scholar and a citizen of the planet, to build the skills as a lifelong learner and geologist or marine scientist.

#### **Learning Outcomes:**

We are going to work together to map the skills we are building and knowledge we are building in the course on to Fink's taxonomy of significant learning. There will be a google document that we will add to as the course progresses. Here I have laid out each category of the taxonomy and provided an example.

##### **Foundational Knowledge** (*The basic components of Geological Oceanography*)

- **Explain** the theory of plate tectonics and its relationship to the formation of major features on the seafloor

##### **Application** (*How to use scientific, qualitative, critical thinking skills to develop as a scholar*)

- **Interpret** and **compare** graphs or maps, for example cross sections of the Ocean basin

##### **Integration** (*Creating links between concepts, understanding the ocean as an interconnected system*)

- **Describe** the interaction between tectonics and climate

##### **Human Dimension** (*Learning about oneself and the relationship between Geology, Oceanography and Humans*)

- **Develop** an appreciation for the process and work that goes into understanding the Earth

and oceans.

**Caring about The Ocean** (*Developing new feelings, interests and values around Geological Oceanography*)

- **Develop** a lifelong commitment to understanding the world around you.

**Learning how to learn** (*Becoming a Self-directed Learner*)

- **Formulate** study habits that include self-reflection and self-evaluation.

**Course Schedule:** There will be two topics per week, with lectures introducing each topic on Mondays and Fridays, lectures will be recorded via the lecture capture system. There will be two short quizzes every week to make sure we are all keeping up with the material. We will meet synchronously to work through concepts and data explorations together. The goal is for everyone to be able to attend class every day, prioritizing Wednesdays when we do data explorations. The data explorations will be designed so that you can do them on your own if you need to miss a session. Data explorations are designed to be completed within class time, but they will be due the following Wednesday so if you need more time or extra support you will have time to seek it.

**Course Materials**

**Computer:** You will need access a computer or tablet and internet that will allow you to operate basic computer software and access and navigate Canvas, Zoom and other websites including the web version of Google Earth and GeoMappApp. You will need the ability to view lecture materials online, complete quizzes, written assignments and timed exams using Canvas and other basic computer programs. If you do not have access to these resources or lose access to these resources, please see me and we will work together to ensure your success.

**Reading Information:** In the absence of a textbook that is younger than you (or me for that matter) I have compiled a list of readings for each topic in the course. The majority of the material you will be expected to learn will be presented in the lectures and I will let you know if the reading offers an especially useful perspective. Otherwise, it will be available to supplement and help you gain understanding on your own. Some readings are primary literature and others are portions of other textbooks. The PDF of the textbook “The Seafloor” has some good background reading and the Open-Source Introduction to Oceanography textbook, as well as Kathryn Wiess’s Earth Rocks! Lecture Videos will be a good resources for folks who need to quickly get up to speed in the basics of Geology.

## Description of Course Assignments

Assignment	Percentage of Grade	Number of Assignments
Engagement, Colleague & Community Points	10% Opportunity for more points than you need	Need 15 points to earn 100%
Exit Tickets	30% Lowest two Drop	About fifteen Exit Tickets multiple choice and reflection questions.
Data Explorations	30% Lowest two Drop	About Five data explorations
Portfolio	30% Draft with feedback due before full portfolio due	A summation of all of your work that includes reflection about what you have accomplished this quarter.

**Engagement, Colleague & Community Points:** Earn points by engaging in class and working with your colleagues, everything is worth one point you need 15 points to get 100% in engagement points. You can earn points by:

- Taking class notes: Every class, we have two notetakers who post their notes online.
- Timekeeping: I will put the "Agenda" for a class session up with the timing of each, and they help me stay paced & we always end on time two folks can do this everyday
- Participate in making a class contract for shared expectations for how we all want to be treated (this is facilitated in the first two classes) (doing this right now!)
- Write a letter to future students: during the last week you can , write a letter to next year's students with tips and tricks for navigating the course (& my teaching/grading style) they wish they knew at the start
- Any form of mutual aid eg proof-reading, peer review, showing the library, answering questions on the discord etc.

**Quizzes:** For each week's course material (usually two topics) there will be a brief quiz. The quiz will be part traditional quiz part reflection and part feedback for the teaching team. They are designed to help you stay on track with working through the material and help us target what we need to focus on in class. The quizzes will be graded and will be worth 30% of your grade.

**Data Exploration:** Most weeks there will be an in-class data exploration that will enable us to explore real data and geologic features related to the week's material. Each student will present some data (a graph, map or other deliverable depending on the assignment) and answer some brief questions about the data designed to prompt reflection and draw connections between the data and what we have learned so far in the class.

**Portfolios:** The portfolio is the summative portion of the course where you will reflect on your work and what you have learned. It will be part journaling and part compiling other assignments and turning in reflections about them. Portfolios are collections of student work representing a selection of performance. A portfolio should contain a student's best pieces and the student's evaluation of the strengths and weaknesses of the pieces, as well as their evaluation of how their work has progressed.

## Course Expectations and Policies

### Course Expectations

Students in this course will be held to high expectations that will enable them to be successful as students and scientists. You will be introduced to concepts outside of class and work on synthesis and application of that knowledge in class. A large portion of synchronous course time will be used for hands-on studies and working out problems in class, synchronous sessions will be recorded. Below are preliminary responsibilities outlined for you, me (the instructor), and our new community. **We will discuss these briefly on the first day and make additions based on what you would like our course, and community to look like.** Additionally, we will work together to co-construct expectations for Zoom participation and Etiquette.

<b>Student's Responsibilities</b>	<b>Instructor's responsibilities</b>	<b>Community responsibilities</b>
<ul style="list-style-type: none"> <li>- Attend course sessions.</li> <li>- Come to class prepared.</li> <li>- Submit complete work on time.</li> <li>- Participate in course discussions.</li> <li>- Ask questions, ask for help</li> </ul>	<ul style="list-style-type: none"> <li>- Attend all course sessions.</li> <li>- Generate prompt and constructive feedback.</li> <li>- Foster an environment where students feel safe asking questions, and for help.</li> </ul>	<ul style="list-style-type: none"> <li>- Be respectful of every human in the course.</li> <li>- Be willing to work with and learn from everyone.</li> </ul>

### Code of Conduct

In order to facilitate a safe learning environment, it is my expectation no one will discriminate on the basis on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, age, medical condition (cancer related or genetic characteristics), ancestry, marital status, citizenship, sexual orientation, or service in the uniformed services (includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services) status as a Vietnam-era veteran or special disabled veteran.

In Oceanography we all will treat people the way they want to be treated, and work towards a supportive and collaborative environment where everyone feels safe so we can all achieve the course objectives together.

This Code of Conduct applies to all activities related to this class (in-person / virtual meetings, email exchanges, and chatroom discussions).

Expected behavior includes (but is not limited to):

- Treating all participants with respect and consideration.
- Communicating openly with respect for others, critiquing ideas rather than individuals.
- Avoiding personal attacks directed toward others.
- Complying with [UC Davis' Principles of Community](#).
- Abiding by principles of academic integrity and ethical professional conduct.

Harassment or discrimination by or of any meeting participant or of any type will not be tolerated.

**Plagiarism Statement**

As commonly defined, plagiarism consists of passing off as one's own, ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person.

**UC Davis Code of Academic Conduct**

This Code of Academic Conduct exists to support high standards of behavior and to ensure fair evaluation of student learning. Students who violate the Code of Academic Conduct are subject to disciplinary sanctions that include Censure, Probation, Suspension, or Dismissal from the University of California.

See the UC Davis Policy on Student Conduct and Discipline section 102.01.1 for details.

**Accessibility and Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. UC Davis is committed to educational equity in the academic setting, and in serving a diverse student body. I encourage all students who are interested in learning more about the Student Disability Center (SDC) to contact them directly at [sdc.ucdavis.edu](http://sdc.ucdavis.edu), [sdc@ucdavis.edu](mailto:sdc@ucdavis.edu) or 530-752-3184. If you are a student who requires academic accommodations, please submit your SDC Letter of Accommodation to me as soon as possible, ideally within the first two weeks of this course.

**Territorial Acknowledgement**

We acknowledge that the UC Davis campus exists on land that the Wintun/Patwin have thrived on and been in relationship with since time immemorial. It is here that the Wintun/Patwin built their huts from earthen materials to wait out bad weather and carry out traditional dances in elaborate costumes. And, in places across Yolo and Solano counties, bedrock mortar sites still exist that show where the historical inhabitants ground acorns to remove their tannins. Although these communities were disrupted by the arrival of Spanish explorers who enslaved, abused and killed many Wintun/Patwin, their descendants are survived by the Yocah Dehe Wintun Nation.

As settlers, we must recognize how we benefit from colonialism and how it has impacted the Native Peoples whose lands and relatives in this ecosystem we now use. This is especially important in the marine sciences, where early exploration is at the root of much of our discipline, but often excludes the presence, culture and knowledge of Indigenous communities that coexisted and understood those resources and ecosystems before our intellectual forefathers did.

Thus, it is incumbent upon us to dismantle components of settler-colonialism to ensure a more just and equitable future for not only the Wintun/Patwin, but all Indigenous Peoples.

This acknowledgement was written by Priya Shukla with minor edits made by Claire McKinley. The information presented was made possible by [native-land.ca](http://native-land.ca) and [yochadehe.org](http://yochadehe.org). Consider using these resources to learn more about the Native Peoples' whose lands you currently occupy.

**Makeup and Late Work Policy:**

The course is built to allow for leniency and flexibility for students, these details are outlined in the course assignment descriptions. Therefore, there will be no makeups except in cases of university authorized absences. You must notify me in writing prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident, or emergency) you must provide notification by within one week of the last date of the absence.

**Recordings**

Some course sessions are scheduled to run synchronously at our scheduled class time via Zoom. These Zoom class sessions may be recorded. The recording will capture the presenter's audio, video and computer screen. In these cases, student audio and video will be recorded if they share their computer audio and video during the recorded session. The recordings will only be accessible to students enrolled in the course to review materials. These recordings will not be shared with or accessible to the public and will be deleted after the course ends.

The University and Zoom have [FERPA](#) compliant agreements in place to protect the security and privacy of UCD Zoom accounts. Students who do not wish to give consent to being recorded should:

1. Choose a Zoom Profile Name that does not include any personal identifying information like their name or UCD Net ID
2. Not share their computer audio or video during their Zoom sessions

By enrolling in this class, all students agree to not upload the recordings to other platforms.

**Standards of Work****An Excellent student is one who:**

- Attends class regularly and is prompt.
- Comes to class prepared to engage fully in the activities.
- Participates in class and is supportive of the participation of their peers.
- Is willing to ask questions and ask for help from peers and the instructor.
- Completes excellent work and submits it on time.
- Learns to independently generate insightful reflections and self-evaluations on the work being done in the course.
- Solicits and incorporates feedback into their work.

**A Satisfactory Student is one who:**

- Attends some of class.
- Comes to class prepared enough to participate intermittently.
- Does not participate regularly in class, interrupts or ignores the participation of their peers.
- Asks for help both from peers and the instructor occasionally.
- Completes satisfactory work and submits it on time.
- Completes required reflections but is not developing self-evaluation skills.
- Incorporates some feedback into their work.

**A student who needs Improvement:**

- Attends class infrequently.
- Comes to class unprepared and will rarely participate in the activities.
- Does not participate in class, interrupts, or actively shuts down the participation of their peers.
- Will not ask for help from peers or the instructor.
- Completes work that needs improvement or is not on time.
- Does not do reflections, is not developing self-evaluation skills in the context of the work being done in the course.
- Will not incorporate feedback into their work

**Grading Scale**

A+	95.0-100%	An Excellent Student
A	90.0-94.99%	
B+	85.0-89.99%	Working towards being an Excellent Student
B	80.0-84.99%	
C+	75.0-79.99%	A Satisfactory Student
C	70.0-74.99%	
D+	65.0-69.99%	Working towards being a Satisfactory Student
D	60-64.99%	
F	0-59.99%	Needs Improvement

### Resources for Students and Community Members

Resource	Website
<b>Health and Wellness:</b>	
Student Life Health and Wellness Info	<a href="https://shcs.ucdavis.edu/about/shwc">https://shcs.ucdavis.edu/about/shwc</a>
COVID 19 Info for Students	<a href="https://studentaffairs.ucdavis.edu/news/coronavirus-faqs">https://studentaffairs.ucdavis.edu/news/coronavirus-faqs</a>
Student Counseling Services	<a href="https://shcs.ucdavis.edu/counseling-services">https://shcs.ucdavis.edu/counseling-services</a>
UC Davis Crisis Text Line	Text RELATE to 741741
UC Davis Crisis support resources	<a href="https://eachaggiematters.ucdavis.edu/here-are-some-options-immediate-crisis-support">https://eachaggiematters.ucdavis.edu/here-are-some-options-immediate-crisis-support</a>
Public Care Report for distressed or distressing student.	<a href="https://ucdavis-advocate.symplicity.com/care_report/index.php/pid710253?">https://ucdavis-advocate.symplicity.com/care_report/index.php/pid710253?</a>
Sexual Violence and Harassment Resources	<a href="https://sexualviolence.ucdavis.edu/">https://sexualviolence.ucdavis.edu/</a>
<b>Services for Students</b>	
Food Security	<a href="https://aggiecompass.ucdavis.edu/food-security">https://aggiecompass.ucdavis.edu/food-security</a>
Wi-Fi and laptop loaner program	<a href="https://keep-teaching.ucdavis.edu/student-resources/need-wi-fi">https://keep-teaching.ucdavis.edu/student-resources/need-wi-fi</a>

Housing Resources	<a href="https://aggiecompass.ucdavis.edu/housing-security">https://aggiecompass.ucdavis.edu/housing-security</a>
Public Care Report for a distressed or distressing student.	<a href="https://ucdavis-advocate.symplicity.com/care_report/index.php/pid710253?">https://ucdavis-advocate.symplicity.com/care_report/index.php/pid710253?</a>
Student Legal Services	<a href="https://asucd.ucdavis.edu/legal-services/">https://asucd.ucdavis.edu/legal-services/</a>
More Legal Service Info	<a href="https://ucdavisgsa.wordpress.com/resources/legal-services/">https://ucdavisgsa.wordpress.com/resources/legal-services/</a>
Ombudsperson (the Undergraduate Ombuds assists students, faculty, staff, and administrators with resolving academic conflicts for undergraduates on an informal and confidential basis)	<a href="https://ombuds.ucdavis.edu/contact-us">https://ombuds.ucdavis.edu/contact-us</a>
Student affairs list of Community centers, including AB540 and Undocumented Student Center, Native American Academic Student Success Center, Transfer and Reentry center.	<a href="https://studentaffairs.ucdavis.edu/virtual-ucdavis">https://studentaffairs.ucdavis.edu/virtual-ucdavis</a>
Women's Resource Center	<a href="https://wrrc.ucdavis.edu/">https://wrrc.ucdavis.edu/</a>
LGBTQIA Resource Center	<a href="https://lgbtqia.ucdavis.edu/">https://lgbtqia.ucdavis.edu/</a>
Disability services. Note that If you or a student have been injured or are in crisis, they can assist you with temporary accommodations and resources	<a href="https://sdc.ucdavis.edu/">https://sdc.ucdavis.edu/</a>

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