

Course Schedule – Updated 3/20/2020

Subject to change. Changes will be announced in class and via CANVAS in a timely manner.

Week	Lecture Topics	Reading Assignment Ugrad and Grad	Lab Topic
1 Jan 19 -25	Monday: NO CLASS (MLK DAY) Wednesday: Syllabus & Knowledge Survey	-----	NO LAB
2 Jan 26 – Feb 1	M: Intro to sedimentology and stratigraphy W: Origins of sediments - siliciclastic	Week 2 Due January 29, 9 am	1. Siliciclastic Textures
3 Feb 2 – 8	M: Origins of sediments - carbonate W: Fluid Flow	Week 3 Due February 5, 9am	2. Fluid Transport and Sorting
4 Feb 9 - 15	M: Sedimentary Structures W: Sedimentary Structures	Week 4 Due February 12, 9am	3. Siliciclastic Classifications
5 Feb 16 - 22	M: Source to Sink & Sediment Provenance W: Diagenesis 1	Week 5 Due February 19, 9am	4. Carbonate Classifications
6 Feb 23 - 29	M: Diagenesis 2 W: Catch-Up Lecture and Exam Review	Week 6 Due February 26, 9am	5. Siliciclastic Structures 1
7 March 1 - 7	M: Exam 1 (Lecture Week 1 – 6 Topics, Labs 1-4) W: Intro Depositional Systems, Facies, and Walther's Law	-----	6. Siliciclastic Structures 2
8 March 8 - 14	M: Terrestrial Environments 1 (Stef & Chelsea Visit) W: Terrestrial Depositional Environments 2	Week 8 Due March 11, 9am	7. Midterm Activity
SPRING BREAK			
10 March 29 – April 4	Topics: Confined vs. Unconfined Flow, Fluvial Systems, Deltaic Systems, Flow Directions	All Assignments and Labs Due April 5	8. Depo Environments 1: Google Earth
11 April 5 - 11	Topics: Clastic Shorelines, Shallow Carbonate Settings	All Assignments and Labs Due April 12	9. Depo Environments 2: Virtual Outcrop
12 April 12 – 18	Topics: Deep Marine Systems – fines and turbidites	All Assignments and Labs Due April 19	10. Depo Environments 3: Virtual Core/Core Logs
13 April 19 – 25	Topics: Preservation Potential, Intro to Stratigraphy, Seismic Stratigraphy	All Assignments and Labs Due April 26	11. Delta Box Models and Sequences
14 April 26 – May 2	Topics: Sequence Stratigraphy, Seismic Stratigraphy	All Assignments and Labs Due May 3	12. Seismic Stratigraphy
15 May 3 – May 9	Topics: Assignment of Final Project		
EXAM WEEK May 10 – 16	Final Project Due May 15 11:59 PM		

New Course Format

For the rest of the semester, the class will be formatted as an “asynchronous” online course – meaning all the materials (lectures, labs, readings, etc.) will be posted ahead of time and there will be no required “live” course meetings. We (Libby, Eduardo, and Scott) will all be available via email and virtual office hours, and will be giving ample feedback on your work.

The course will be laid out in weekly modules where all the assignments from a module will be due on Sunday before midnight. Late assignments will be accepted, but will be docked points (see **Late Policy**). All course material will be made available no later than the previous Monday. You may complete all material at you own pace as soon as it is available.

Lecture/Reading Assignments

The “lecture” portion of this class will include a series of videos (some by me and some by others) and short readings that will be laid out in a logical and instructive order in a “Page” format, similar to the Exam 1 Study Guide. The time needed to complete these “lectures” will vary in length, will not exceed 120 minutes total for the week, and will often be broken up into multiple modules.

Following the “lecture”, you will be asked to complete:

- **[15 pt] a multiple choice, reading comprehension quiz.** This quiz will highlight key “takeaway” points from the lecture. You will have unlimited opportunities to complete these quizzes and I encourage you to do so until you get 100% of the points. These questions will highlight the “Remember” and “Understand” levels of Bloom’s Taxonomy.
- **[10 pts] a Short Essay.** You will be given a prompt asking you to relate that week’s topic(s) to larger questions in sed/strat in the form of a short, written response (≤ 1 page). The essay will be graded using a strict/specific rubric. The purpose of this exercise is for you to practice higher-order reasoning and scientific writing.
- **[5 pt] a Group Discussion.** You will be randomly assigned to small groups of 4 -5 students. Each participant will have to pose a question related to the week’s lecture topic **[2.5 pts]**, and each student in the group will receive the remainder of the points if each question is answered satisfactorily **[2.5 pts]**. *Sorry, I know these aren’t anyone’s favorites and the answers can be super contrived, but it’s essentially the only way to “think-pair-share” in an online setting.*

Lab

Laboratory exercises for the rest of the semester will utilize “virtual resources”. Assignments will be accompanied by short lecture and/or tutorial videos as necessary. All lab submission must be digitally uploaded through Canvas.

In the lab exercises, you will be asked to write and draw as you have done so throughout this semester. We realize that no everyone has access to digital drawing programs, scanners, printers, etc. We will do our best to make the exercises doable with limited resources, but so long as your figures are clearly labeled and legible, we will accept any kind of submission.

Extra Credit Opportunities

- **Graduate Student Reading Assignments** (10 pts/ea., **No cap**). *Must complete undergraduate reading assignment from the same week to qualify for extra credit.*
- **Online Lecture Series by Nick Zenter** (10 pts/ea., **No cap**).

*Nick Zenter is a lecturer and award-winning geology communicator based at Central Washington University. By watching videos from his public lecture series, you're going to learn a lot about the geology of the Pacific Northwest, but also about geology, generally, from an **excellent** teacher.* Nick has also been livestreaming his new lectures during our period of social-distancing on his youtube channel: <https://www.youtube.com/channel/UC4szl4Ra1ZD3m80wJP40UBA>

Watch the assigned video and write a short summary (<1 page, typed) that directly addresses the following prompts:

1. Summarize the main "story" being told in the presentation. What question is the presenter trying to answer for the audience?
2. What geologic concepts were communicated while telling this story?
3. What types of data and research methods were used to piece this story together?
4. What was your favorite example from this talk of Nick describing a geologic concept you already understood in a new or unique way?

Point Distribution

Undergraduate – 800 Total Points

<u>Lecture</u>	<u>400 Points</u>
Exam 1	150
Reading Assignments (x6)	90 (15/ea.)
Online Lecture & Reading (x5)	150 (30/ea.)
In-class Participation (1 st half)	10
<u>Lab</u>	<u>400 Points</u>
"Regular" Labs (x9)	180 (20/ea.)
Depo. Environ. Labs (x3)	120 (40/ea.)
Final Project	100

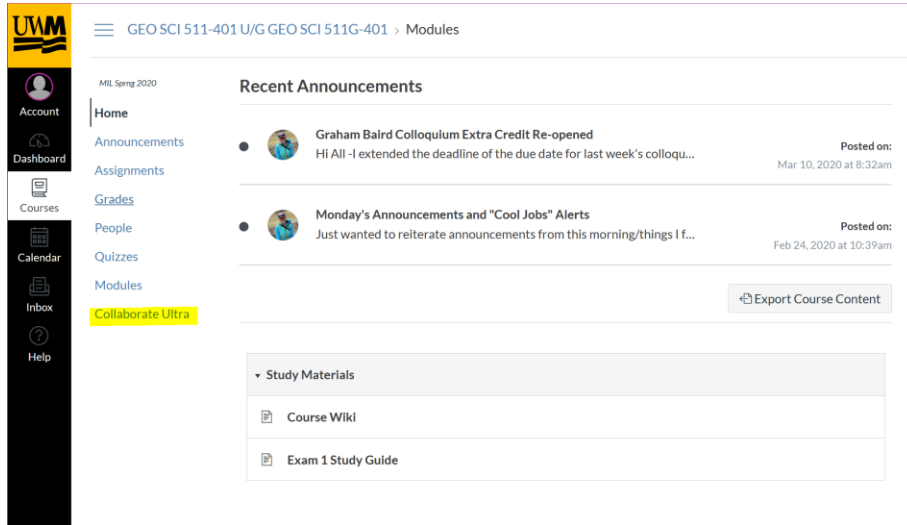
Late Policy

Online Lecture, Reading Assignments, and Labs will be due before midnight on Sunday, on a weekly basis, starting April 5. All course materials and assignments will be available to complete until May 15 at midnight. 5% of the total points for an assignment will be deducted from your grade for every day an assignment is late, unless you contact us (Libby for lecture/reading assignments and Edurado or Scott for lab assignments) asking for an extension. **We do not need you to explain to me why you require any sort of accommodation.** We're all just trying to get through this the best we can. This late policy is simply in place to make sure that we don't get flooded with assignments at the end of the semester.

Office Hours

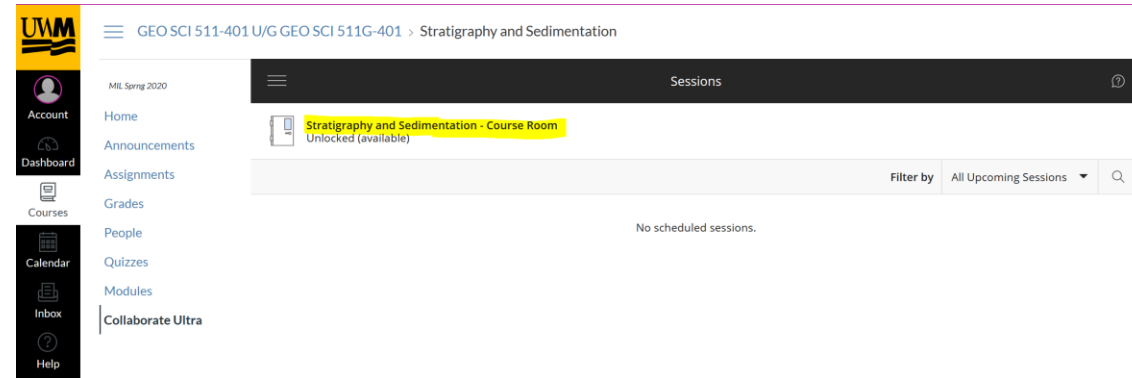
We will be conducting Virtual Office Hours using the default Course Room "Collaborate Ultra" tool in Canvas. Please feel free to attend the office hours of any and all instructors and Tas.

1. Click on the "Collaborate Ultra" Menu Item in Canvas



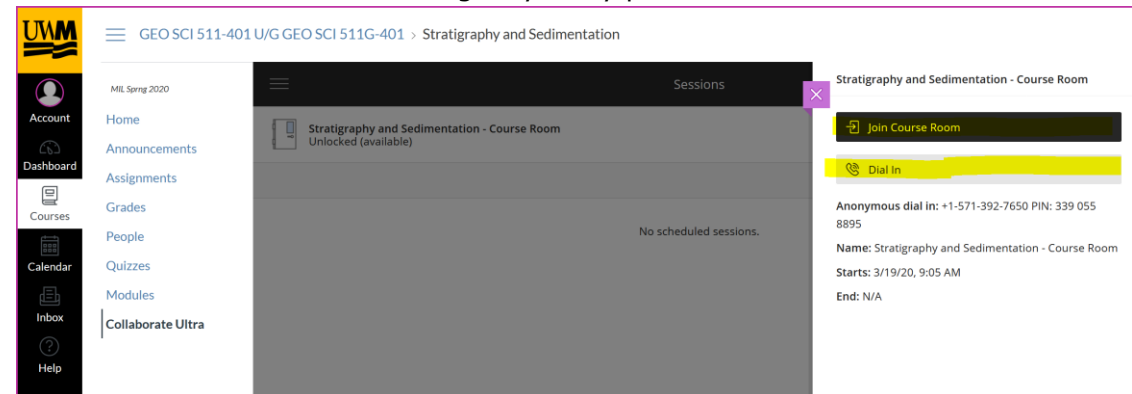
The screenshot shows the Canvas LMS dashboard for a course titled "GEO SCI 511-401 U/G GEO SCI 511G-401". The left sidebar contains navigation options: Account, Dashboard, Courses, Calendar, Inbox, and Help. The "Collaborate Ultra" option is highlighted in yellow. The main content area shows "Recent Announcements" with two entries: "Graham Baird Colloquium Extra Credit Re-opened" and "Monday's Announcements and 'Cool Jobs' Alerts". Below the announcements is a section for "Study Materials" containing "Course Wiki" and "Exam 1 Study Guide".

2. Select the "Stratigraphy and Sedimentation – Course Room"



The screenshot shows the "Sessions" page in Canvas. The "Stratigraphy and Sedimentation - Course Room" is highlighted in yellow in the list of sessions. The page shows "No scheduled sessions." and a search filter set to "All Upcoming Sessions".

3. Join the Course Room either digitally or by phone



The screenshot shows the "Sessions" page with a modal window open for the "Stratigraphy and Sedimentation - Course Room". The modal contains a "Join Course Room" button (highlighted in yellow) and a "Dial In" button (highlighted in yellow). Below the buttons, the dial-in information is displayed: "Anonymous dial in: +1-571-392-7650 PIN: 339 055 8895", "Name: Stratigraphy and Sedimentation - Course Room", "Starts: 3/19/20, 9:05 AM", and "End: N/A".

Virtual Office Hours will be hosted at the following times:

Libby **TBD**
Scott **TBD TR**
Edurado **TBD MW**