

## ENVS\*3180 - Sedimentary Environments

Fall 2023 Course Outline

Section: 01

Credits: 0.50

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### Land Acknowledgement: Guelph

The University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer respect to our Anishinaabe, Haudenosaunee and Métis neighbours. Today, this gathering place is home to many First Nations, Inuit, and Métis peoples and acknowledging them reminds us of our important connection to this land where we work and learn.

### Calendar Description

This course examines the principles of sedimentology and stratigraphy as applied to various ancient and modern sedimentary systems. Students will learn to describe and interpret sedimentary deposits in terrestrial and marine systems as well as the larger forces that control the preservation and evolution of these sedimentary systems over geological time. The course includes several field trips.

**Prerequisite(s):** ENVS\*1050 or ENVS\*2240

**Restriction(s):** ENVS\*2400

**Department(s):** School of Environmental Sciences

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### Lecture Schedule

MonWedFri 9:30am-10:20am in ALEX\*218 (9/7 to 12/15)

### Lab / Seminar Sections

Day	Time	Location
Thursday	2:30-5:20	Alex 024 or field

### Instructor Information

Emmanuelle Arnaud

Email: [earnaud@uoguelph.ca](mailto:earnaud@uoguelph.ca)

Office: Alex 126

Fall 2023 Office Hours:

By appointment via email - please email me to set up a time.

Office Phone: xt 58087

Alyson Brown

Lab coordinator

Email: [alysonb@uoguelph.ca](mailto:alysonb@uoguelph.ca)

Office: Alex 221

Office Phone: xt 53393

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### Additional Support

If at any point you are experiencing difficulty, please reach out for help. I'm here to facilitate your learning and your success this semester and can help to connect you with the right supports.

For more Info: go to [www.wellness.uoguelph.ca](http://www.wellness.uoguelph.ca). or call Good2Talk 24/7 at 1-866-925-5454

## Textbooks

Group	Title	Author	ISBN
Required	Sedimentology and Stratigraphy	G. Nichols	9781405135924

## Learning Resources

### Course Resources

Check the courselink course website for additional in-course resources and information including instructions for labs. Login with your email login and password at: Course link (Website) (<https://courselink.uoguelph.ca/>)

### Campus Resources

If you are concerned about any aspect of your academic program: Make an appointment with a Program Counsellor (<https://www.uoguelph.ca/uaic/programcounsellors/>) in your degree program. If you are struggling to succeed academically: There are numerous academic resources offered by the Learning Commons (<https://www.lib.uoguelph.ca/using-library/spaces/learning-commons/>) including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills.

## Library Course Reserve (Ares)

For this course, you will be required to access course reserve materials through the University of Guelph McLaughlin Library. To access these items, select **Ares** on the navbar in CourseLink. Note that you will need your Central Login ID and password in order to access items on reserve.

For further instructions on accessing reserve resources, visit How to Get Course Reserve Materials (<https://lib.uoguelph.ca/find/course-reserves-ares/how-get-course-reserve-material/>).

If at any point during the course you have difficulty accessing reserve materials, please contact the e-Learning Operations and Reserve Services staff at:

Tel: 519-824-4120 ext. 53621 | Email: [libres2@uoguelph.ca](mailto:libres2@uoguelph.ca) | Location: McLaughlin Library, First Floor, University of Guelph

## Course Learning Outcomes

1. Demonstrate the ability to characterize sedimentary deposits by constructing a stratigraphic log and describing sedimentary deposits using standard terminology
2. Differentiate environments based on typical facies associations and use this information to interpret the origin of sedimentary deposits using a facies approach
3. Demonstrate understanding of stratigraphic relationships by using these to deduce basin/site history
4. Demonstrate the value of detailed observation and the use of different scales in analysis of sedimentary data
5. Create a depositional model or conceptual framework for a site and use it as a predictive tool

## Schedule of Topics and Assignments

Week of	Topic	Activities	Due:
9/8	Introductions, overview	Chapter 1, 2 NO LAB	
9/11	Processes and products	Chapter 4 Lab 1 in Alex 024	
9/18	Processes and Products/Facies Analysis	Chapter 5 Lab 1 in Alex 024	
9/25	Facies analysis and Facies Models	Chapter 5 Lab 2 in the field	Lab 1
10/2	Terrestrial environments	Chapter 9.1-9.4, 10 (skip 10.3 and 10.4) Lab 2 in the field	
10/9	Holiday (No class)		

10/11	Marginal Marine Environments	Chapter 12.1-12.3, 13.1-13.5 NO LAB	Lab 2
10/16	Marine environments	Chapter 14, 16 (skip 16.2.2, 16.3, 16.4) Lab 3 in the field	
10/23	Finish all environments	Midterm Wednesday Lab 3 in the field	
10/30	Stratigraphic concepts	Chapter 19 Lab 4 in Alex 024	Lab 3
11/6	biostratigraphy and dating techniques	Chapter 20-21 No Lab	
11/13	Subsurface sedimentary environments	Chapter 22 Field trip Saturday Lab 4 in Alex 024	
11/20	sea level change and sequence stratigraphy	Chapter 23 No Lab	Lab 4
11/27	Site conceptual model Final exam review	No Lab Final class Friday (makeup for Thanksgiving)	
12/11	Final Exam on Tuesday Dec 12 at 8:30 AM		

## Assessment Breakdown

{NOTE: instructor can add another row by hitting "TAB" button when they are at the end of the row}

Description	Weighting (%)	Due Date
Lab 1	15%	Sept 28
Lab 2	15%	Oct 12
Lab 3	15%	Nov 2
Lab 4	15%	Nov 23
Midterm	15%	Oct 25
Final exam	25%	Dec 12

## Final Exam

Date: Dec 12

Time: Tu 8:30am-10:30am

Location: TBA Please see Web Advisor closer to the date of scheduled final for location.

To understand rules and regulations regarding Examinations students are encouraged to read Student's Responsibilities (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/examinations/>)

If the student is unable to meet the final exam requirements due to medical, psychological or compassionate circumstances they are encouraged to review Student's Responsibilities in the Academic Consideration, Appeals and Petitions (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-consideration-appeals-petitions/>) section of the Academic Calendar.

## Last Day to Drop Course

The deadline to drop Fall 2023 courses without academic penalty is the last day of classes: December 01

After this deadline, a mark will be recorded, whether course work is completed or not (a zero is assigned for missed tests/assignments). This mark will show on the student's transcript and will be calculated into their average.

## Course Grading Policies

### Submission of Assignments

Assignments should be submitted electronically via the online **Dropbox** tool in **courselink**, following the **file naming convention** (**LastName\_assignmentname.doc or PDF**). When submitting your assignments using the **Dropbox** tool, do not leave the page until your assignment has successfully uploaded. To verify that your submission was complete, you can view the submission history immediately after the upload to see which files uploaded successfully.

Be sure to keep a back-up copy of all of your assignments in the event that they are lost in transition. In order to avoid any last-minute computer problems, I strongly recommend you save your assignments to a cloud-based file storage (e.g., OneDrive), or send to your email account, so that should something happen to your computer, the assignment could still be submitted on time or re-submitted.

### Late Assignment

All assignments are to be submitted through Dropbox on the course website by the due date (please check the schedule posted on the course website). If you cannot meet a course requirement, let me know by email as soon as possible and preferably before the due date. Late assignment will be penalized 10% per day and will no longer be accepted a week after the due date. \*Please note that these policies are binding unless academic consideration is given to an individual student.

## Course Standard Statements

*<Optional content block - title and content block fully editable>: Instructors may add additional content if necessary. This content block can be removed by clicking the 'eye' icon.*

### Course Policies

**Unless otherwise instructed by the university and public health, all students are expected to attend lectures/labs** and read the assigned chapters before class. **Please let me know ASAP if you are going to be unable to join us in person for the lectures or the lab so we can discuss a way forward.** I plan to livestream the lectures in case anyone is unable to attend in-class. Video recordings of the lectures will be available within a day or two of the lecture (this will depend on the captioning/transcript creation process) so that you can watch these later if you missed one or want to review the concepts covered. It is the responsibility of the student to obtain class notes if they miss a lecture. All students should check the course website regularly for additional course materials and notices regarding assignments and course information. Students will be able to access their marks on the courselink course website.

### Course Technology Requirements

This course will use a variety of technologies including courselink and Teams (via Office 365). To help ensure that you have the best learning experience possible, please review the list of system and software requirements here (<https://opened.uoguelph.ca/student-resources/system-and-software-requirements/>). For courselink, you can do a systems check here (<https://courselink.uoguelph.ca/d2l/systemCheck/>).

## Standard Statements for Undergraduate Courses

### Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-misconduct/>) is outlined in the Undergraduate Calendar.

### Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability. Use of the SAS Exam Centre requires students to make a booking at least 10 days in advance, and no later than the first business day in November, March or July as appropriate for the semester. Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time. For students at the Guelph campus, information can be found on the SAS website. (<https://www.uoguelph.ca/sas/>)

## Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements.

See the Academic calendar for information on regulations and procedures for Academic Accommodations of Religious Obligations (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-accommodation-religious-obligations/>).

## Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

## Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all undergraduate students except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in the Undergraduate Calendar - Dropping Courses (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/dropping-courses/>).

## Email Communication

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

## Health and Wellbeing

The University of Guelph provides a wide range of health and wellbeing services at the Vaccarino Centre for Student Wellness (<https://wellness.uoguelph.ca/>). If you are concerned about your mental health and not sure where to start, connect with a Student Wellness Navigator (<https://wellness.uoguelph.ca/navigators/>) who can help develop a plan to manage and support your mental health or check out our mental wellbeing resources (<https://wellness.uoguelph.ca/shine-this-year/>). The Student Wellness team are here to help and welcome the opportunity to connect with you.

## Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

## Recording of Materials

Presentations that are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

## Resources

The Academic Calendars (<http://www.uoguelph.ca/registrar/calendars/?index>) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

## When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration. (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-consideration-appeals-petitions/>)