

Department of Earth Sciences

Method of Course Delivery, Winter 2021

Course(s)	Lecture Delivery	Lab Delivery	Office Hours	Other Info
EASC 1000 Earth Systems	Offered asynchronously with narrated PowerPoint slides as streaming video on Brightspace, sometimes accompanied by supplementary learning videos	Labs will be posted in advance and include asynchronous components such as narrated power point presentations, videos, and photo arrays. The synchronous components of labs will mostly occur during the scheduled lab section and will offer additional explanations and guidance through exercises via WebEx through Brightspace. Additional synchronous support will be offered via WebEx in the weeks preceding the midterm and final lab exams.	By appointment and/or fixed hours per week, run via WebEx live meetings and Brightspace discussion board exchange	Laboratory exams will be administered during the scheduled laboratory time slots (but some exceptions may be made)
EASC 1002 Concepts & Methods in Earth Sciences	Lectures will be posted for asynchronous watching, and the synchronous tutorial over each topic will be scheduled just before the related lab.	Synchronous labs	By request.	Midterm 1 15% Midterm 2 15% Lab Final 25% Field book Exercises (5 items) 10% Final Exam 35%
EASC 2031 Mineralogy	Lectures will be delivered synchronously in WebEx and recorded and available to stream afterwards. Lecture notes (without audio) as PDFs will also be posted in Brightspace.	Labs will be introduced synchronously, and lab materials will be provided through Brightspace. TA will be available to help with labs and answer questions.	By appointment and/or fixed hours per week after class for an hour (12-1 pm on Tuesdays and Thursdays), run via WebEx live meetings.	Lecture mid-term exam: 25% (Feb 16th) Lecture final exam: 25% Lab mid-Term exam 25% Lab final exam 25%

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EASC 2401 Structural Geology	Lectures will be asynchronous and available in D2L as video files before the actual “lecture”. Each lecture will consist of one video or multiple short videos. Copies of PowerPoint slides will also be available as PDF files.	Five laboratory exercises, scheduled and due every two weeks. Exercises and supporting material, including a short introductory video explaining the assignment, will be available in D2L. The instructor and TA will be available through D2L or Webex at 2pm every week to answer questions about the assignments.	Via Webex: weekly open sessions at 11 am on Fridays, or by appointment	Mid-term Exam: 20% (Feb 12th) Final Exam: 20% Lab Assignments: 50% - 10 each Google Earth Project: 10%
EASC 2919 Intro to Marine Geology	Synchronous lectures, which will also be recorded with D2L. PDFs of lectures will be posted after each class.	There is no associated lab section with this course.	Please request an appointment.	100% of the grade will be based on the best 4 out of 5 online quizzes in 2DL over the course of the semester.
EASC 3054 High-Temp Geochem & Igneous Petrology	Asynchronous lectures, with weekly synchronous discussion in one of the lecture slots. Lecture materials will be available in Brightspace.	Labs will be introduced synchronously, but lab materials will be provided through Brightspace.		
EASC 3170 Seismic and Potential Fields Methods in Geophysics	Asynchronous, posted on Brightspace, with occasional—previously announced—exceptions using WebEx	Asynchronous, posted on Brightspace, with occasional—previously announced—exceptions using WebEx		Four projects/assignments of equal weight, each problem taken from Review Questions and/or Exercises of the textbook. Each project/assignment to be submitted within a week as a typed PDF document.
EASC 3179 Mathematical Methods for Geophysics	Asynchronous, posted on Brightspace, with occasional—previously announced—exceptions using WebEx	Asynchronous, posted on Brightspace, with occasional—previously announced—exceptions using WebEx		Four projects/assignments of equal weight, each closely related to the textbook material. Each project/assignment to be submitted within a week as a typed PDF document.

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EASC 3610 Hydrogeology	Asynchronous lectures and labs. Pre-recorded lectures will be uploaded to a secured website (e.g., MUN Brightspace) for the students to download or stream.	Asynchronous lectures and labs. Lab problems, all of which are numerical exercises, will be posted online at least one week before the due date of the lab. Students will work on the lab problems asynchronously and are encouraged to set up WebEx appointments with the instructor and/or the TA for help with the lab.	Tuesdays, 2:00-4:50 pm during the lab period on WebEx by appointment.	Eight (8) lab reports will be assessed throughout the semester (about one lab report per week). There will be two 1.5-hour mid-term exams (on February 9 and March 16) and a 2-hour final exam.
EASC 3811 Paleontology	Lectures will be synchronous.	Labs will be synchronous	Office hours will be by appointment.	
EASC 4171 Advanced Seismology	Lectures will be asynchronous (prerecorded and uploaded to Brightspace). Instructor will be available during the lecture slot to answer questions.	Labs will be synchronous. Recordings of instructions will be provided to students who are unable to attend the lab sessions (although that will be discouraged since access to the TA will be very important).	During class meetings online or by pre-arranged virtual appointment	Recorded lectures, course notes and other materials will be made available on Brightspace. Two presentations (during lab) 10% Mini assignments (5 in total) 10% Lab exercises (6 in total) 20% Quiz #1 (Feb 2nd) 15% Quiz #2 (March 16th) 15% Final Exam 30%

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EASC 4173 Adv. Electrical, Electromagnetic and Potential Fields Methods	Combination of asynchronous and synchronous: You will be assigned one or two videos to watch and a section of the notes to look at as preparation for each synchronous “class”. These classes, which will be more like tutorials or class meetings, will give you the opportunity to ask questions about the material assigned for each class and/or for the instructor to provide more information or go over material in a different way.	Synchronous Labs will involve computer exercises. Variety of forms - Oasis Montaj to process magnetic and gravity data (synthetic & real); Python to write your own codes; running your own inversion codes such as DCIP2D from UBC. You can remotely access the Labnet computers and the software on them, although some of the software can be installed and run on your own computers.		Assignments (3 or 4) 10% Laboratory exercises 30% In-term exam 1 (3rd Feb) 15% In-term exam 2 (5th Mar) 15% Final exam 30%
EASC 4211 Economic Geology	Asynchronous. Pre-recorded lectures (apart from the 1st one that will be live) will be posted the day before the scheduled slot. Instructor will be available to answer any questions the day after.	Six labs total for the semester (reduced from nine labs). Labs will be uploaded each Thursday with a detailed instructional video/document. Where hand specimen description is required students will be given a range of multiple choice questions to answer. The remaining three lab slots will be utilised as a help drop in session via WebEx and for students to give their term presentations/commodity presentations (can be done live or pre-recorded with questions for presenters posted on discussion board).	Available during the allotted lecture slots via WebEx to answer questions. Outside this time students can email to arrange a meeting. Available with the TA during the lab session to answer course/lab related questions.	

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EASC 4703 Environmental Change and Quaternary Geography	<p>Asynchronous lectures: available through Brightspace comprising slides and some video with detailed notes provided for each lecture.</p> <p>Seminars: regular synchronous seminar classes</p> <p>Podcasts: asynchronous interviews recorded with outside specialists on topics in Quaternary science.</p>	<p>Five synchronous lab classes, which will run through Webex in the timetabled lab slot. Lab class will introduce and work through the practical exercises.</p> <p>Two additional synchronous lab classes which will present 'debriefs' of the practical exercises.</p>	<p>Office hours between 9 and 11 am every Friday. Students can also email to arrange a meeting. Available during the lab session to answer course/lab related questions.</p>	<p>Assessment through quizzes (30%) and practical assignments (70%)</p>
EASC 4903 Global Change	<p>Lectures will be delivered synchronously with option for following asynchronously via recorded lectures, and options to submit pre-recorded presentations.</p>	<p>There is no associated lab section with this course.</p>	<p>Office hours Tu/Th 10:15-11:15. These are initial office hours and will change and/or be added to in order to accommodate students' schedules.</p>	