



COURSE OUTLINE

1. **Course:** ENSC 201, Introduction to Environmental Science - Winter 2021

Lecture 01: TR 12:30 - 13:45 - Online

Instructor	Email	Phone	Office	Hours
Dr Daniel Shugar	daniel.shugar@ucalgary.ca	403 220-5028	ES 230	TBA

An introduction to Environmental Science.

Topical issues in Environmental Science including climate change, aquatic systems, agriculture, forestry, mining, energy, endangered species, and protected areas contextualized within the framework of law, policy, economics, sustainability, and the precautionary principle.

Course outcomes: By the end of this course students will have a solid grounding in the basic concepts of environmental science such as (but not limited to) sustainable development (both intergenerational equity and intragenerational equity), the precautionary principle, biodiversity, genetic diversity, species endemism, alien invasive species, biomagnification of toxins, anthropogenic climate change, drought, the Clausius-Clapeyron Relationship, and habitat fragmentation. These topics will be discussed in the context of human resource extraction and wherever applicable microeconomic theory will be used to explain concepts. Students will also be introduced to the rudiments of Canadian environmental law.

Online Delivery Details:

Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor's permission.

This course has a registrar scheduled, synchronous final exam. The writing time is 2 hours + 50% buffer time.

The course lectures will be held synchronously ('live') on Zoom but recorded for any students who cannot attend the live lecture, or who want to revisit material at a later date.

Course Site:

D2L: ENSC 201 L01-(Winter 2021)-Introduction to Environmental Science

Note: Students must use their U of C account for all course correspondence.

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

3. **Grading:**

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Weekly quizzes	20	most weeks
1st midterm	25	Feb 11, 2021, synchronous in class (40 minutes written with 20 minute buffer)
2nd midterm	25	Mar 18, 2021, synchronous in class (40 minutes written with 20 minute buffer)
Final exam	30	registrar-scheduled (TBD) synchronous

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	95 %	88 %	83 %	78%	74%	70 %	66 %	62%	58%	54 %	50 %

If, for some reason, the distribution of grades determined using the aforementioned conversion chart appears to be abnormal the instructor reserves the right to change the grade conversion chart if the instructor, at the instructor's discretion, feels it is necessary to more fairly represent student achievement. Note: these boundaries will only be changed if such a change causes an increase in student grades. Tests and class participation will be marked on a numerical (percentage) basis. A passing grade in any one component is not required for the student to pass the course as a whole.

This course will have a final exam that will be scheduled by the Registrar. [The Final Examination Schedule](#) will be published by the Registrar's Office approximately one month after the start of the term. The final exam for this course will be designed to be completed within 2 hours.

The final exam will be administered using an on-line platform. Per section [G.5](#) of the online Academic Calendar, timed final exams administered using an on-line platform, such as D2L, will be available on the platform. **Due to the scheduling of the final exams, the additional time will be added to the end of the registrar scheduled synchronous exam to support students. This way, your exam schedule accurately reflects the start time of the exam for any synchronous exams. E.g. If a synchronous exam is designed for 2 hours and the final exam is scheduled from 9-11am in your student centre, the additional time will be added to the end time of the synchronous exam. This means that if the exam has a 1 hour buffer time, a synchronous exam would start at 9 am and finish at 12pm. - updated April 6, 2021**

4. Missed Components Of Term Work:

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

Please note that the instructor needs to be informed of any missed components within 48 hours of the missed midterm.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

6. Course Materials:

Required Textbook(s):

Dearden, Mitchell, O'Connell, *Environmental Change and Challenge: A Canadian Perspective*: Oxford.

This is the brand new (6th) edition of the book - if you are able to find an earlier edition, feel free to use that and let your instructor know if any readings or material is not available. Additional readings will be supplied via D2L.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC [ELearning](#) online website.

7. Examination Policy:

No aids are allowed on tests or examinations.

There will be a comprehensive open-book final examination in this course. It will be done in D2L and you will have 2-hrs (plus 1-hr buffer) to complete it. The test will be available over a 24-hr period and you can start it whenever you wish, but the test will time-out after 3 hrs and MUST be completed by the end of the 24-hr period, to be scheduled by the registrar. There will also be two midterm examinations that will be held in class as scheduled. Students unable to write a midterm examination because of documented illness; family emergency, or religious observance will have the option of having the weight shifted onto the final examination. Calculators are neither allowed nor necessary. Should the writing of a midterm examination for the entire class become impossible due to events beyond the control of the instructor (such as, and not exclusively consisting of; inclement weather, instructor's illness, or other "acts of fate") the midterm examination will be written in the next possible class.

Students should also read the Calendar, Section G, on Examinations.

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8. Approved Mandatory And Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

9. Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

10. Human Studies Statement:

Students will not participate as subjects or researchers in human studies.

See also [Section E.5](#) of the University Calendar.

11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar
- b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. Other Important Information For Students:

- a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in

physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).

- b. **SU Wellness Services:** For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at [403-220-2208](tel:403-220-2208). The complete University of Calgary policy on sexual violence can be viewed at (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>)
- d. **Misconduct:** Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional [Code of Conduct](#) and promote academic integrity in upholding the University of Calgary's reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor's consent; submitting or presenting work as if it were the student's own work; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; borrowing experimental values from others without the instructor's approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more on academic integrity:

[Student Handbook on Academic Integrity](#)
Student Academic Misconduct [Policy](#) and [Procedure](#)
[Research Integrity Policy](#)

Additional information is available on the [Student Success Centre Academic Integrity page](#)

- e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Program Director of the Environmental Science Program, Dr. Daniel Shugar by email daniel.shugar@ucalgary.ca or phone 403 220-5028. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

- f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.
- g. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca. [Student Ombudsman](#), Email: ombuds@ucalgary.ca.
- h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.
- i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.

Note that the following is subject to change! Chapter listings refer to 6th Ed of text. If using an earlier version, it is your responsibility to figure out the correct chapters.

Unit I: Introduction to the Ecosphere

Week 1: Dearden, Mitchell, O'Connell (2020) Chapter 1; Holden & Jacobson (2012, pp. 185-186, pp. 217-219).

Week 2: Dearden, Mitchell, O'Connell (2020) Chapter 3; Holden & Jacobson (2012, p.61, pp. 233-235)

Week 3: Dearden, Mitchell, O'Connell (2020) Chapter 4; Holden & Jacobson (2012, p. 234).

Week 4: Dearden, Mitchell, O'Connell (2020) Chapter 5.

Unit II: Climate Change, Aquatic Resources, and Agriculture

Week 5: Dearden, Mitchell, O'Connell (2020) Chapter 8; Holden & Jacobson (2012, pp. 93-102., pp. 36-38).

Week 6: Reading break

Week 7: Dearden, Mitchell, O'Connell (2020) Chapter 12.

Week 8: Dearden, Mitchell, O'Connell (2020) Chapter 9; Holden & Jacobson (2012, p. 234).

Week 9: Dearden, Mitchell, O'Connell (2020) Chapter 11.

Unit III: Forestry, Minerals, Energy, Mining, and Protected Areas

Week 10: Dearden, Mitchell, O'Connell (2020) Chapter 10.

Week 11: Dearden, Mitchell, O'Connell (2020) Chapter 13.

Week 12: Dearden, Mitchell, O'Connell (2020) Chapter 15.

Week 13: Dearden, Mitchell, O'Connell (2020) Chapter 14.

Week 14: review/buffer

Course Outcomes:

- By the end of this course students will have a solid grounding in the basic concepts of environmental science such as (but not limited to): sustainable development (both intergenerational equity and intragenerational equity), the precautionary principle, biodiversity, genetic diversity, species endemism, alien invasive species, biomagnification of toxins, anthropogenic climate change, drought, the Clausius-Clapeyron Relationship, and habitat fragmentation. These topics will be discussed in the context of human resource extraction and wherever applicable microeconomic theory will be used to explain concepts. Students will also be introduced to the rudiments of Canadian environmental law.

Electronically Approved - Apr 06 2021 16:52

Department Approval