

ECON 381 A01 (cross-listed as ES 312) Environmental Economics CRN#21024 (ES 312: CRN #21470)

Instructor: Dr. Colette Salemi, csalemi@uvic.ca

TA: Yin Shi, echoeden@uvic.ca

Lecture: Monday and Thursday 10:00-11:20 AM, DTB A102

Office hours: Wednesday 9:00-10:00 AM, BEC 372

Quiz viewing sessions: Monday 2:30-3:30 PM, BEC 372; sign-up required

TA-led tutorials: TBD, Zoom

We acknowledge with respect the Lekwungen peoples on whose traditional territory the University of Victoria stands, and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

1 Learning objectives

The environment is a critical component of our economy, serving as both a source of production inputs and a "sink" for our pollution. Overuse of natural sources and pollution sinks, however, results in various health and natural hazard risks for society. This over-use represents a negative externality problem, necessitating interventions that result in producers and consumers "internalizing" the externality.

This course is an introduction to economic decision-making regarding optimal environmental management. Students will learn different approaches to thinking about the "right" amount of environmental control, including the tools economists use to determine the societal benefits of a clean environment. The course additionally focuses on introducing students to the many benefits that well-functioning ecosystems offer to society, also known as ecosystem services. Given the relationship between resource extraction and ecosystem services, the course briefly reviews natural resource harvesting models, reflecting on sustainability priorities. Additionally, the course introduces students to incentive-based regulatory tools for pollution abatement, focusing on efficiency gains, past performance, and public perception. Finally, the course examines environmental problems in developing countries, focusing on how environmental issues can compromise growth and welfare improvements, as well as the factors that result in overextraction of natural capital in these contexts.

Climate change is one of many pollution-related problems discussed in this course, but it is not the central focus. Students interested in a comprehensive overview of the economics of climate change are encouraged to enroll in ECON 383.

2 Cross-listing

ECON 381 is cross-listed as ES 312. In terms of content, assessments, and course experience, there is no difference between ECON 381 and ES 312. The only practical difference between the two registration options is that very few students register under ES 312, so ES 312 students are usually denied the opportunity to complete a Course Experience Survey. The instructor recommends that any student who can enroll in the course as ECON 381 and still satisfy degree requirements do so. See Section 8.9 for more information.

3 Textbook and learning technology

This class uses the same Brightspace page for ECON 381 and ES 312. The class Brightspace page includes a Course Calendar, with detailed information about quiz dates and reading assignments. This page is subject to change depending on the pace of the course. With the exception of the textbook, all PDFs of readings are posted on Brightspace. Lecture slides are also posted on Brightspace, as are quiz performances. The instructor does NOT provide a real-time estimate of the student's grade on Brightspace.

Required textbook: Economics and the Environment by Eban Goodstein and Stephen Polasky, 9th Edition. The instructor recommends students purchase the 150-day PDF rental (\$29 USD). Click here to rent the e-book from Wiley Publishers.

4 Grade determination

ECON 381 follows the University of Victoria's grading breakdown, which is as follows:

- A+ (90-100%); A (85-89%); A-(80-84%)
- B+ (77-79%); B (73-76%); B- (70-72%)
- C+ (65-69%); C (60-64%)
- D (50-59%)
- F (0-40%)

The course components used to determine final grades are discussed in the sections below.

4.1 Quizzes (11 total, top 9 are each 11% of final grade)

Students complete 11 quizzes at the start of designated class times. See the Course Calendar on Brightspace for the dates of each quiz. This class has no problem sets or midterm/final exams.

A student's grade is determined by their 9 strongest quiz performances. The instructor drops each student's two lowest quiz grades from the semester. This is meant to

ensure that students who are too sick to complete a quiz, and therefore receive a zero, are not penalized for the first two instances (corresponding with a two-week absence due to COVID-19). This also ensures that students who are working hard, but have a few bad quiz performances, are not overly penalized.

Each quiz consists of **10 multiple choice questions** and focuses on the content emphasized during previous class meetings, as defined in the Course Calendar. Students have **20 minutes** to complete each quiz, which is considerably more time than is required for a student who is prepared.

All quizzes are graded and returned to students using Crowdmark software. On Crowdmark, students will be able to see which questions they answered correctly or incorrectly, but will not see the original quiz questions.

To ensure an equal playing field and mitigate opportunities for cheating, **the following** rules are binding:

- Assigned seating: the instructor assigns students to seats while they are writing their quizzes. The seating chart is made available to students prior to the quiz and in class. Students are required to sit in their assigned seats.
- Personal items: students must put bags, phones, smart watches, coats, and hats, in the front of the classroom before starting the quiz.
 - The only items a student may have while taking the quiz are: writing utensils, calculator, ID card, water/coffee.
- No washroom breaks: there are no washroom breaks during the quiz. If a student finishes early and turns in their quiz to the instructor, they may go use the washroom (quietly!).
- Tardiness = score of zero: any student not physically present in the classroom at 10:00 AM on the day of a quiz receives an automatic zero.

No study guides are provided for quiz preparation. Students are responsible for attending class and taking notes on the lecture. The instructor encourages students to collaborate with note-taking and study preparation.

Answer keys are not shared with students. This is because quiz questions from previous years are re-used, and because answer keys are often leaked online without instructor consent (a violation of intellectual property). Students who wish to review their full performance can book a 10 minute slot with the instructor to do so.

Quizzes cannot be rescheduled or re-taken, for any reason. The instructor recommends that students who encounter legitimate and protracted hardship during the term (such as the death of a parent) withdrawal from the course immediately.

When a student misses a quiz (for whatever reason), they automatically receive a zero. None of the quizzes are "required", as defined by the University of Victoria. So if a student misses a quiz, it is marked as "completed" with a score of zero.

Late enrollment: Students who register in ECON 381 late automatically receive scores of zero for all missed quizzes.

4.1.1 Quizzes and CAL accommodations

Students with accommodations through CAL are responsible for managing their accommodations, including

- Submitting their letter to the instructor at least 1 week prior to the first quiz.
- Arriving at the appropriate quiz venue (CAL or OREM) on time to complete quizzes.
- Arranging a peer note-taker (if necessary), and corresponding with them. Note: if and only if the student has tried and failed to recruit a peer note taker will the instructor respond to requests for help with finding one.

Students with CAL accommodations will complete their quizzes immediately AFTER class on the scheduled quiz date. Hence, any student completing their quiz at CAL/OREM will:

- Arrive to class at 10:20 AM on any day a quiz is scheduled. Basically, students completing quizzes with CAL skip the first 20 minutes of class during which others complete their quiz.
- Immediately go to CAL/OREM after class to begin their quiz at 11:30 AM.

Class conflicts: This quiz system was designed to ensure that the entire class completes the quiz within as narrow a time window as possible, to mitigate any unfair advantages. But the instructor acknowledges that the quiz scheduling at CAL/OREM may complicate class schedules, since a student may have another class that overlaps with the CAL/OREM quiz time. Unfortunately, there is nothing that can be done to resolve this problem. In such a case, the instructor recommends the student either adjust their course calendar to ensure they are free during the quiz times, or enroll in ECON 381 during a different semester.

Waived accommodation: In the past, students with modest time extensions through CAL (ex: 1.15 - 1.5 time) have opted to take the quiz with their peers. The instructor encourages all students registered with CAL to make the decision that is best for them. If a student registered with CAL wants to take the first few quizzes with the class to evaluate whether they want to do the remaining quizzes in class vs. at CAL/OREM, the instructor supports such an approach.

4.2 Introduction activity (1 bonus point)

Students receive 1 bonus point towards their final grade for completing the Introduction Activity at the start of the term. The Introduction Activity is essential for the class, as it provides the instructor with the information required to memorize every student's name. The instructor cares about addressing each student respectfully, and this activity is how the instructor collects students' preferred names, as well as gender pronouns. The activity takes less than 5 minutes to complete.

Information provided: Students must use **PowerPoint software** (free to students via UVic) to fill in a template in which they provide the following information:

- Their name as it appears on Brightspace
- The name they prefer the instructor address them by: a nickname, or for some international students, a preferred "English name". If the student prefers to be addressed by their name as it appears in Brightspace, they can leave this blank.
- Their gender pronouns
- Their home province/state and country
- An photo clearly showing the student's face.
 - In the past, some students snapped a photo of their picture on their UVic ID: this is totally fine!
 - The photo must be appropriate. As a rule of thumb: would this photo embarrass your family if they saw it?
 - Students cannot use a photo where the student's face is covered by a mask, or photos that do not clearly show the student's face.
 - The photo must look like the student no filters please!

Photo opt-out policy: To abide by University of Victoria restrictions on student photos, students have the choice to opt out of submitting a photo of themselves. But if a student opts out of sharing a photo, they must meet with the instructor face-to-face (during Office Hours or after class) to introduce themselves. In this case, the student submits an Introduction Activity slide without a picture of their face for 1 bonus point.

4.3 Attendance (grade adjustment)

The instructor takes attendance at the start of every class meeting. Attendance does not directly impact student grades: it does not represent any meaningful fraction of the overall grade. But poor attendance may result in lost points at the end of term according to the 5 point rule (see below).

The instructor not only takes attendance but also makes notes throughout the term of **engaged attendance**. That's to say, the instructor notes students who are physically present but are distracted, disengaged, and/or disrespectful.

4.4 5 point rule (grade adjustment)

The instructor maintains discretion to adjust final scores by up to 5 points, either up or down. In most cases, student grades are not adjusted at all. It is extremely rare for a grade to be adjusted by more than 2 points. But the instructor maintains the right to adjust by up to 5 points to disincentivize poor behavior.

Students are eligible to receive more points if they demonstrate consistent engagement by:

- Participating in class Q&A
- Regular and engaged attendance
- Attending office hours when they need help, if relevant

Students are eligible to lose points if they:

- Are disruptive in class
- Bring unregistered students to class without permission
- Are demonstrably disengaged in class (wearing headphones, blatantly not paying attention, etc.)
- Are frequently late to class
- Have a poor attendance record
- Send unnecessary emails to the instructor (see email rules)

4.5 There are no extra credit opportunities in ECON 381

Aside from the introduction activity bonus point, there are no opportunities for extra credit in ECON 381.

5 Additional supports

5.1 Office hours

The instructor holds weekly office hours. Students may request to meet the instructor for Office Hours outside of the scheduled time, but they must justify their request. The only justifiable reason to request a separate office hour meeting is if another course is scheduled for the same time as ECON 381's office hours. Consequently, students must list the course that conflicts with the office hour schedule in their email request.

5.2 TA tutorials

The TA offers weekly tutorials on Zoom that review more challenging material from the previous week in preparation for the upcoming quiz. These sessions are recorded and posted on Brightspace.

5.3 Quiz viewing sessions

Because quiz answer keys and booklets cannot be returned, students can sign up for a 10-minute quiz viewing session to examine their scores and the full answer key in the presence of the instructor. Sign-up slots are available from the end of class on the relevant quiz day until 12 PM on the following Monday. Students can sign up for quiz viewing sessions on the Groups page in Brightspace. See the Quiz Viewing Sessions page on Brightspace under Course Information for more details.

6 Class policies

6.1 The slides in this class are a complement to lecture, NOT A SUBSTITUTE!

The slides are basically outlines of content the instructor will lecture on - a lot of the critical information is not included on them. Students must take notes during class. Students are responsible for obtaining notes from peers if they must miss lecture.

The limited information on slides is a deliberate pedagogic choice. Too often, students memorize and regurgitate information on detail-heavy slides without understanding their meaning. Learning occurs when a student reads required text, listens attentively during lecture, asks clarifying questions, and takes their own notes that bring ideas together.

6.2 Cheating on quizzes

The instructor upholds a zero tolerance cheating policy. A student caught talking, referring to banned notes, or blatantly looking at other student's work during a quiz will be immediately removed from the classroom and will receive a score of zero for the quiz. The instructor will immediately submit a Violation of Academic Integrity report to the Department. Please see Section 8 for more information on Academic Integrity.

6.3 Consistently poor behavior

If a student or group of students is behaving disrespectfully during class, the instructor will issue a public warning about expected classroom conduct. If the behavior persists, the instructor will send private warnings via email to the student(s). If the behavior persists after a public and private warning, the instructor will contact the Chair of the Economics department and the Office of Student Life to report the misconduct. A Letter of Expectations outlining the disrespectful behavior will be added to the student's permanent record.

6.4 Tablets, computers, phones in class

Electronic device use is highly discouraged but not banned. The instructor recommends students take notes using a paper notebook and pencil, a method that has empirically been

shown to improve learning outcomes. The one case in which laptops are encouraged is if students are working together to take notes in a shared file.

The instructor hopes students realize that it is quite obvious to the lecturer when students are on TikTok or otherwise focused on device content instead of class content. The instructor takes notes throughout the term on the students who are clearly distracted by their devices during class. These notes will be considered during final grade adjustment according to the 5-point rule.

6.5 Emailing the instructor

In general, there are few circumstances in which students are allowed to email the instructor.

When it's appropriate to email the instructor

- Scheduling a separate office hour meeting because the student has a class at the same time as office hours (that is the only legitimate reason for requesting a separate office hour time). The student must list the conflicting class in their email.
- Student identifies an apparent mistake on the slides or on Brightspace.
- Student believes a mistake occurred in the automatic multiple choice grading.
- To share some interesting news or academic article about the topics the course is covering.
- To request a letter of recommendation (if the student is performing well in the course).

Students may NOT email the instructor:

- To report that they cannot attend class on a given day
- To grovel for a grade change
- To complain about a quiz's content
- To request to take a quiz on a different date, which is not allowed
- To ask a question that is already answered given information provided on the Syllabus or Brightspace Course Information section.

The instructor is not responsible for responding to inappropriate emails as outlined above. Bear in mind that emails that violate these rules will be considered when the instructor is adjusting final grades based on the 5 point rule.

6.6 Addressing the instructor

The instructor uses she/her pronouns. Students are welcome to address the instructor by her first name, Colette (pronounced co-let), as Dr. Salemi (last name pronounced sa-lem-me), or as Professor Salemi. The instructor asks students to not refer to her as "Mrs" (Mrs. Salemi is her mother) or as "Miss" or "Ms" (both of which she finds diminutive).

7 Calendar at a glance

The following list provides a quick overview of the topics covered. A more detailed calendar, with quiz dates and reading assignments, can be found on the Brightspace Course Calendar page. Students must use the Course Calendar page on Brightspace to see reading assignments and quiz dates.

- Week 1 (Jan. 6th, 9th): Introduction to the course; Lekwungen resource management; Ethical frameworks
- Week 2 (Jan. 13th, 16th): Externalities and public goods.
- Week 3 (Jan. 20th, 23rd: The efficiency standard; Measuring the benefits of environmental regulation
- Week 4 (Jan. 27th, 30th): Measuring the benefits of environmental regulation cont'd; Measuring the costs of environmental regulation
- Week 5 (Feb. 3rd, 6th): The safety standard; environmental justice; the sustainability standard
- Week 6 (Feb. 10th, 13th): Measuring sustainability, nonrenewable resource models
- Week 7 (Feb. 17th, 20th): Holiday, no class
- Week 8 (Feb. 24th, 27th): Renewable resource models; ecosystem services
- Week 9 (March 3rd, 6th): Incentive based regulation: theory
- Week 10 (March 10th, 13th): Incentive-based regulation in practice; clean technology
- Week 11 (March 17th and 20th): Energy policy; poverty, population, and environment
- Week 12 (March 24th, 27th): Clean technology in developing countries; Governing the commons
- Week 13 (March 31st, April 3rd): Political economy of global agreements; closing remarks

8 University policies and support systems

This course adheres to the Undergraduate Course Policies of the University of Victoria and the Department of Economics. Students are encouraged to familiarize themselves with the policies (Here is a link to the policies). These policies deal with Academic concessions; Academic integrity (plagiarism and cheating); Grading; Inclusivity and diversity; Late adds; Repeating courses; Review of an assigned grade; Sexualized violence prevention and response; Disability services; Travel plans; Waitlists.

The following policies are explicitly included because of their importance.

8.1 Waitlist Policies

- Instructors have no discretion to admit waitlisted students or raise the cap on the course.
- Students on the waitlist should discuss with the instructor how to ensure they are not behind with coursework in the event they are admitted.
- Registered students who do not participate as specified in this outline during the first 7 calendar days they are registered for the course will be automatically dropped from the course.
- Registered students who decide not to take the course are responsible for dropping the course and are urged to do so promptly out of courtesy toward waitlisted students.
- Waitlist offers cease after the last date for adding courses irrespective of published waitlists.

8.2 Academic Integrity

Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility. Students are expected to observe the same standards of scholarly integrity as their academic and professional counterparts. A student who is found to have engaged in unethical academic behaviour, including the practices described in the Policy on Academic Integrity in the University Calendar, is subject to penalty by the University.

The instructor for ECON 381 takes cheating very seriously and will immediately report those demonstrably cheating on any quizzes.

8.3 Student Code of Conduct

The Humanities, Science, and Social Sciences Faculties have adopted this Student code of conduct. Students are expected to be familiar with the university's expectations regarding their behavior (link here).

The instructor for ECON 381 will remove and report any students whose behavior is so inappropriate and/or offensive that it distracts or causes harm to others.

8.4 University Policy on Human Rights, Equity and Fairness

The University is committed to promoting, providing and protecting a positive, supportive and safe learning and working environment for all its members. See General University Policies.

8.5 Academic advising

For academic advising-related questions, students in the Economics Department are encouraged to meet with the Economics Undergraduate Advisor (Brooklynn Comish-Trimble, ecadvice@uvic.ca). Students may also seek support from the Academic Advising Centre, the Centre for Academic Communication, and the Math and Stats Assistance Centre.

8.6 Accessibility and CAL

Students with a letter from the Centre for Accessible Learning (CAL) are welcome in ECON 381 but will need to ensure that their quiz schedule does not conflict with their regular course schedule.

If a student has a disability/health consideration that may require accommodations (such as dyslexia or low vision), the student may choose to register with CAL for formal arrangements to be made. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Please note that the instructor cannot make concessions to a student on the basis of disability if the student does not provide a letter from CAL.

See Section 4.1.1 for more information on ECON 381's specific expectations for students with a CAL letter.

8.7 Health services

University Health Services (UHS) provides a primary care health clinic for students, and coordinates healthy student and campus initiatives. Demand for these services are high, so the instructor recommends arriving early in the day to ensure receipt of care.

Support Connect is a 24/7 mental health support service for students. This is of particular value when the counselling schedule is full, or on the weekends when students do not have access to counselors.

• Toll-free (calls from North America): 1-844-773-1427

• International collect calls: 1-250-999-7621

Counselling Services: UVic offers a limited set of psychosocial counseling services to registered students. The instructor recommends students inquire about these services as early as possible, as demand greatly exceeds demand. Also note that Counselling Services are not available on weekends.

8.8 International student expectations and resources

Expectations: Students are treated the same in ECON 381 regardless of their country of origin. Students with weak language skills are expected to work hard to keep up with lecture, review readings and seek help from peers and the instructor.

Supports: The University of Victoria offers a number of resources to support international students as they pursue their studies. UVic's International Centre for Students is the primary office supporting international students on campus at the university-wide level and provides various supportive program through the UVic Global Community Initiative, including a Mentorship Program and Conversation Partner Program. The International Student Liason in the Economics Department is Prof. Paul Schure (schure@uvic.ca), and Dr. Schure can help international students connect with other international and domestic students in the Department.

8.9 Course Experience Survey (CES)

Towards the end of term, students registered in the course under ECON 381 will have the opportunity to complete a confidential course experience survey (CES) regarding their learning experiences. Students may fill out the survey once they received an invitation to complete it via email. The instructor sets aside 10 minutes on the last day of class immediately after Quiz 11 for students to fill out their CES survey.

For the past several semesters, students registered under ES 312 have been blocked from completing the CES survey. Unfortunately, the Learning and Teaching Support and Innovation (LTSI) office uses a software package for the CES survey that prohibits CES completion if there are fewer than 5 students in a section. LTSI has refused to do anything to resolve this problem. Because LTSI is unwilling to help, whenever there are fewer than 5 students taking the course under ES 312, those students lose their right to complete a CES survey. Any students who have an issue with this genuine problem are welcome to reach out to their department chairs and demand LTSI incorporate their input.

8.10 Sexualized Violence Prevention & Response

Students are encouraged to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp

If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support, please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Contact svpcoordinator@uvic.ca.

8.11 Additional services

Elders' Voices The Office of Indigenous Academic and Community Engagement (IACE) provides access to local Indigenous Elders. IACE wants students to know that the elders

are present to "guide students, staff, faculty and administration in Indigenous ways of knowing and being." $\,$