

**Resource Economics, ECON 3332B
Course Outline**

Winter 2021

Instructor: Peter Burton peter.burton@dal.ca**Lectures:** Asynchronous: All course content will be posted on BrightSpace**Office Hours:** 3 hrs per week Times to be announced**Course Description**

This course focuses on intertemporal economics and the economics of market failure as they pertain to the use of natural resources. A selection of resource sectors will also be discussed. Fisheries, agriculture, forestry, and energy represent possibilities, but this will vary from year to year.

This course is designed for senior economics majors and economics honours students. As a consequence, it is designed for students with a good background in micro-economic theory (Econ 2200) and calculus.

Course Prerequisites (with a grade of C or better)

ECON 2200.03 or ECON 2210.03 or ECON 2220.03,
MATH 1000.03 or equivalent

Course Objectives/Learning Outcomes

Students should have a basic understanding of key issues in resource economics.

Course Materials

Content will be posted on BrightSpace each week

Additional readings may be assigned during the course.

Useful reference

Hartwick, J. And N. Olewiler (1998), The Economics of Natural Resource Use
(2nd Ed.), Addison Wesley; Dons Mills Ont.

Course Assessment:
Essay*

Topic Submission Deadline:	February 4	
Essay:	March 18	5%
Revised Essay	April 1	5%
Weekly Quizzes		90%
		100%

* Essays should be approximately 10 pages in length. Essay topics and outlines must be approved by the instructor. In addition, both the essay and revised essay will contribute to the mark. More information on the Essay is presented below.

Weekly quizzes (each marked out of 10) will be assigned based on the previous week's work. There will be 11 quizzes and the course mark will be given by the total of the best 9 of the 11 quizzes. Quizzes will be assigned on Mondays and be due to be submitted on BrightSpace that Thursday (at 1700 hrs Atlantic Time). There will be no final exam.

Quiz	Assigned	Due
1	Jan 11	Jan 14
2	Jan 18	Jan 21
3	Jan 25	Jan 28
4	Feb 1	Feb 4
5	Feb 8	Feb 11
6	Feb 22	Feb 25
7	Mar 1	Mar 4
8	Mar 8	Mar 11
9	Mar 15	Mar 18
10	Mar 22	Mar 25
11	Mar 29	Apr 1

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale and Dalhousie Definition/Explanation of letter grades (17.1 Undergraduate Calendar)

		Definition	Explanation
A+	90 – 100%	Excellent	Considerable evidence of original thinking; demonstrated outstanding capacity to analyse and synthesize; outstanding grasp of subject matter; evidence of extensive knowledge base.
A	85 – 89%		
A-	80 – 84%		
B+	77 – 79%	Good	Evidence of grasp of subject matter, some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.
B	73 – 76%		
B-	70 – 72%		
C+	65 – 69%	Satisfactory	Evidence of some understanding of the subject matter; ability to develop solutions to simple problems; benefitting from his/her university experience.
C	60 – 64%		
C -	55 – 59%		
D	50 – 54%	Marginal Pass	Evidence of minimally acceptable familiarity with subject matter, critical and analytical skills
F	<50%	Inadequate	Insufficient evidence of understanding of the subject matter, weakness in critical and analytical skills; limited or irrelevant use of the literature.

Course Policies:

- **Late or missed essays, revised essays, or quizzes will receive zero.**
- **Students should adhere to the University Policy on Academic Integrity (see below) for all work. Note that this includes a ban on all forms of plagiarism and improper citation of sources.**
- **Students are not permitted to collaborate on quizzes**
- **Essays, revised essays, and quizzes may be required to be submitted or may be submitted to plagiarism detection software**



Course Content Outline:

Social Decision Making

Static Models

Allocation Problems – Land Use
Von Thunen

Renewable Resources

Sustained Growth Harvested – The Fishery
Schaefer
Gordon-Schaefer

Dynamic Models

Nonrenewable Resources – The Mine
Gray
Hotelling

Renewable Resources

Stock Harvested – Forestry
Faustmann
Hartman/Strang

Growth Harvested- The Fishery
Dynamic Schaefer

Econ 3332 Essay

Winter 2021

This essay gives you the opportunity to explore a resource in greater depth than can be done in class. In particular, you can (briefly) explore the physical setting of the resource (i.e., its biology, ecology, geology etc), its cultural importance or importance the local or global economy as well as policy issues and conflicts over the resource.

As an alternative, you could explore the economic literature's analysis of a resource which we are not examining in class (e.g., water, petroleum). However, you should be capable of accessing the major literature in the area. Please see me before considering this option.

Examples of possible topics:

- The Nova Scotia Snow-Crab Fishery,
- North West Territories Diamond Mines
- The Nova Scotia Scallop Fishery
- The Effects of the Mountain Pine Bark Beetle on Canada's Forests
- Wind Energy in Denmark
- Tropical Forest Plantations
- Bamboo
- Pacific Tuna
- The Newfoundland Pulp and Paper Industry

The paper (including references) should be about ten pages in length

Deadlines:

Topic : Feb 4 Hand in a page mentioning the resource being covered, any geographic or time limits on your analysis, and policy issues you would like to explore (e.g., recent conflicts over use, depletion).

Include ideas of literature/information sources. **Your topic must be approved for future work to count!**

Paper(5pts): March 18 This should be your best effort at a finished, polished paper.

Revised Paper(5pts): April 1 This includes any revisions in light of comments made on the essay.

Technical details:

The finished essay should be about 10 pages (8 to 12 including everything). It should include a title page (with title, date, your name and student number) and a bibliography or "references" section (with a consistent method of citing sources).

Generally avoid footnotes.

Please use the following standard page formats (Line spacing: double or 1.5; font: 11 or 12 pt; margins: approximately 2.5 cm (1 inch)). I will not be exact but will take off marks if a paper is obviously difficult to read or trying to extend or reduce length by adjusting format.

The essay and revised essay may be required to be submitted to plagiarism detection software.

University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Missed or Late Academic Requirements due to Student Absence

As per Senate decision instructors may not require medical notes of students who must miss an academic requirement, **including the final exam**, for courses offered during fall or winter 2020-21 (until April 30, 2021). Information on regular policy, including the use of the Student Declaration of Absence can be found here: https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html.

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus_life/academic-support/accessibility.html

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

Code: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness

Statement: <http://www.dal.ca/cultureofrespect.html>

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support.

Visit or e-mail the Indigenous Student Centre (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus_life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

https://www.dal.ca/academics/important_dates.html

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

Student Resources and Support

Advising

General Advising https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: <https://www.dal.ca/faculty/science/current-students/academic-advising.html>

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: <https://libraries.dal.ca/>

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Fair Dealing Guidelines <https://libraries.dal.ca/services/copyright-office/fair-dealing.html>

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness/services-support/student-health-and-wellness.html

Student Advocacy: <https://dsu.ca/dsas>

Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html

Safety

Biosafety: <https://www.dal.ca/dept/safety/programs-services/biosafety.html>

Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>

Radiation Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety.html>

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>