



UNIVERSITY OF  
ALBERTA



**AREC 365**

**NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**

In Winter 2018, AREC 365, *Natural Resource and Environmental Economics*, is being offered at Yukon College as part of the Northern Environmental and Conservation Sciences, B.Sc. Program. All students registered in AREC 365 must adhere to the requirements outlined in this course syllabus. University of Alberta students must also be aware of, and adhere to, the University's Code of Student Behaviour, referenced in the outline.

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**INSTRUCTOR:** DEREK PARKER, M.SC.  
Sessional Instructor, Dept. of Renewable Resources, U of Alberta, and  
Northern Environmental and Conservation Sciences Program, Yukon College

**OFFICE HOURS:** By appointment

**OFFICE LOCATION:** TBA

**E-MAIL:** [derek.parker@gmail.com](mailto:derek.parker@gmail.com)

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**CLASS DAYS & TIMES:** Mondays and Wednesdays, 11:30-1:00 PM

**CLASS LOCATION:** C1511

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**COURSE DESCRIPTION:**

This course provides an overview of how economics can be applied to modern day environmental and natural resource concerns. Economic theory and tools will be applied to issues such as management and preservation of healthy forests, fisheries, climate, air and water. Concepts for discussion and study include cost-benefit analysis, market failure, non-market valuation techniques, environmental goods and services, and policy considerations for environmental economic issues.

**STUDENT LEARNING OUTCOMES AND COMPETENCIES:**

Upon successful completion of this course, students will be able to:

- identify economic policy dimensions of current-day natural resource and environmental problems.
- apply classical and modern economic thinking and tools to address natural resource and environmental issues.
- assess the costs and benefits of alternate approaches to exacerbating or resolving environmental problems.

**COURSE FORMAT (3-0-0):**

The course consists of two 1.5-hour lectures per week.

Audio or video recording of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as part of an approved accommodation plan. Recorded material is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the instructor.

## **COURSE PREREQUISITES AND/OR CO-REQUISITES:**

Prerequisite(s): Registration in University of Alberta/Yukon College B.Sc. in Environmental and Conservation Sciences degree program and successful completion of U of Alberta ECON 101, Yukon College ECON 100, or an equivalent Introduction to Microeconomics course.

## **TEXTBOOKS/MATERIALS:**

Required: Fisher B, Naidoo R, Ricketts T. 2015. *A Field Guide to Economics for Conservationists*. Roberts and Company Publishers. ISBN 978-1-936221-50-9.

Recommended (available free on-line):

Tietenberg T, Lewis L. 2011. *Environmental & Natural Resource Economics, 9th ed.* Pearson Education, Inc., publishing as Addison-Wesley. ISBN-13: 978-0-13-139257-1. Available online at:

(<http://s1.downloadmienphi.net/file/downloadfile7/200/1375238.pdf>).

10<sup>th</sup> edition is available for purchase in the Yukon College bookstore.

## **COURSE WEBSITE**

Lectures, announcements, additional reading, and other material will be available on University of Alberta's eClass system (<https://eclass.srv.ualberta.ca/portal/>) for download or viewing. Information and support for eClass is available here: <https://support.ctl.ualberta.ca/index.php?Knowledgebase/List/Index/22/eclass>.

## **UNIVERSITY OF ALBERTA ACADEMIC INTEGRITY AND CODE OF STUDENT BEHAVIOUR**

### **Academic Integrity**

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at [www.governance.ualberta.ca](http://www.governance.ualberta.ca)) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

### **Code of Student Behaviour**

All students at the University of Alberta are subject to the Code of Student Behaviour, as outlined at:

<http://www.governance.ualberta.ca/en/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx>. Please familiarize yourself with it and ensure that you do not participate in any inappropriate behavior as defined by the Code. Key components of the code include the following statements.

30.3.2(1) No Student shall submit the words, ideas, images or data of another person as the Student's own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study.

30.3.2(2) c. No Student shall represent another's substantial editorial or compositional assistance on an assignment as the Student's own work.

## **PROFESSIONALISM AND CLASSROOM RULES OF ENGAGEMENT**

Students are expected to attend all lectures, be engaged and courteous in all course activities, and to be on time for class. Please do not use cell phones during class. Laptops are permitted for note taking and in-class work; however, please do not use laptops in class for non-class-related activities.

## **COURSE REQUIREMENTS/EVALUATION:**

### **Participation**

To engage in subject material and demonstrate ongoing learning commitment, students are to write and submit brief reflections of class readings prior to class discussion.

Students must adhere to the citation style used by the Council of Science Editors in all written assignments ([https://guides.library.ualberta.ca/ld.php?content\\_id=16869133](https://guides.library.ualberta.ca/ld.php?content_id=16869133)). ).

Unless otherwise specified, assignments are due by 11:59 pm local time on the date that they are due. Late assignments will lose 5% of their mark per day that they are late.

### **Team project**

Team project involves creating an interim and final paper as well as a presentation.

### **Quizzes and Exams**

There will be two quizzes and one comprehensive final exam. The quizzes will be scheduled during class time on January 24 and February 28. The final examination will be held at the end of term, during the scheduled Yukon College exam period.

### **Evaluation**

The course grade will be determined as follows:

<b>Assignment</b>	<b>Percent</b>
Participation	20%
Team Project (team score)	15%
Team Project (individual score)	15%
Quiz #1 (January 24, 2018)	10%
Quiz #2 (February 28, 2018)	10%
Final Exam (scheduled during Yukon College exam week)	30%

### **Assignment of grades**

The total numerical score will be converted to a grade on the following letter grading system:

<b>Letter grade</b>	<b>Percent</b>
A+	95-100
A	90-94
A-	85-89
B+	79-84
B	75-78
B-	71-74
C+	67-70
C	64-66
C-	55-63
D	50-54
F	0-49

### **YUKON FIRST NATIONS CORE COMPETENCY:**

Yukon College recognizes that a greater understanding and awareness of Yukon First Nations history, culture and journey towards self-determination will help to build positive relationships among all Yukon citizens. As a result, to graduate from ANY Yukon College program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see [www.yukoncollege.yk.ca/yfnccr](http://www.yukoncollege.yk.ca/yfnccr).

### **ACADEMIC ACCOMMODATION:**

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon College Academic Regulations (available on the Yukon College website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, he/she should contact the Learning Assistance Centre (LAC) at (867) 668-8785 or [lassist@yukoncollege.yk.ca](mailto:lassist@yukoncollege.yk.ca).

### **YUKON COLLEGE LORENE ROBERTSON WRITING CENTRE:**

All students are encouraged to make the Writing Centre a regular part of the writing process for coursework. The Writing Centre offers half-hour writing coaching sessions to students of all writing abilities. Coaching sessions are available in person and through distance technologies (e.g., email plus Skype or phone). For further information or to book an appointment, visit the Centre's website: [www.yukoncollege.yk.ca/student\\_info/pages/writing\\_centre](http://www.yukoncollege.yk.ca/student_info/pages/writing_centre) or email [writingcentre@yukoncollege.yk.ca](mailto:writingcentre@yukoncollege.yk.ca).

### **TOPICS:**

- What is economics?
- Why should conservationists care about economics?
- Classical and modern economic theory relevant to conservation issues
- Market failure
- Non-market valuation methods
- Cost-benefit analysis
- Private versus public/social benefits
- Economic aspects of sustainable natural resource management (forestry and fishery applications)
- Economic incentives for conservation purposes
- Economic impact assessment of carbon and pollution pricing
- Existence values
- Ecosystem services