RENR 427

Science Policy and Canada's North

RENR 427, *Science Policy and Canada's North*, is being offered at Yukon University as part of the Northern Environmental and Conservation Sciences, B.Sc. Program. All students registered in RENR 427 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.

INSTRUCTOR: Alison Perrin & Sabrina Kinsella

Alison Perrin: Instructor/Senior Research Professional, Yukon University

Sabrina Kinsella: Instructor, Yukon University; A/Senior Science Advisor, Executive Council Office, Government of Yukon

OFFICE HOURS: By appointment

OFFICE LOCATION: Zoom or NR32 YukonU Research Centre

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CLASS DAYS & TIMES: Mon/Wed 1:00 - 2:20 pm

CLASS LOCATION: Room A2313

COURSE DESCRIPTION

The purpose of this course is to expose students to key themes in science policy in the Canadian North, and to prepare students for careers at the northern science-policy interface. Case studies from the Canadian North will be used to explore the main themes of the course. Topics will include the basic elements of the policy-making process and how science contributes to policy making; the process by which scientific knowledge is generated and the role science and technology plays in society; and the two elements of science policy: science for policy, and policy for science.

COURSE PREREQUISITES AND/OR CO-REQUISITES

Registration in Yukon University/University of Alberta B.Sc. in Environmental and Conservation Sciences degree program.

LEARNING OUTCOMES

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

- Articulate the basic elements of the policy-making process and how science contributes to policy making
- Understand the process by which scientific knowledge is generated and the role science plays in society
- Develop an understanding of the two elements of science policy: science for policy, and policy for science
- Articulate elements of successful science-policy integration including the role of the scientist, and the role of the policy maker
- Have detailed knowledge of a number of case studies in northern Canadian science policy
- Apply critical thinking, writing, oral presentation, and research skills

COURSE FORMAT

Weekly breakdown of instructional hours

This 13-week course will take place two times per week, Mondays and Wednesdays from 1:00 - 2:20 pm in the fall semester. It is expected that this course will require 3-4 hours/week of homework and additional reading. It is important to note that the time required will vary by individual.

The course is divided into weekly modules. Each module includes required and recommended readings. Students will be expected to read assigned module readings and encouraged to explore and read supplementary material. Other media may be included (e.g., videos, websites) or suggested. Students are recommended to bring issues and questions on the study questions to class or to the instructor during office hours.

Delivery format

The class will be delivered face-to-face, and students will be required to attend sessions on campus. Lecture slides will be shared online, however class discussions and in-person lectures will include a variety of information that will help students complete their assignments.

EVALUATION

The course grade will be determined as follows:

Assignment	**Percent**
Rapid evidence assessment – Assn 1	10%
Rapid evidence assessment – Assn 2	10%
Rapid evidence assessment – Assn 3	20%
Science policy analysis proposal	10%
Science policy analysis paper	30%
Presentation of science policy analysis	10%
Briefing note	10%
Total	100%

Assignments

1. Assignments: Students will be required to complete 3 assignments targeted to developing competency in applying scientific evidence to policy making through conducting and communicating a rapid evidence assessment on a topic related to the student's science policy analysis proposal. Students will be graded on both the content and communication aspects of their assignments.

2. Science Policy Analysis Proposal: Students will be required to submit a proposal for their science policy analysis review paper. A template for the proposal will be provided by the instructor. Students will be strongly encouraged to meet with the instructor during office hours to discuss their proposal before it is submitted.

3. Briefing Note: Each student will be required to prepare a briefing note using a template provided by the instructor. The briefing note will be graded on the clarity of the material presented, and the suitability of the material presented to the intended audience (a senior decision-maker).

4. Science Policy Analysis Review Paper: Students will prepare an analytical review paper on a science-policy topic, chosen in consultation with the instructor (3,000-4,000 words typed). Each paper must include a reference list/bibliography. Regular statements/indications of progress on the paper will be required. As an alternative to the review paper, and subject to approval by the instructor, students can propose and complete a project of their interest to meet the writing/research aspects of the course.

5. Presentation of Science Policy Analysis: Each student will be required to deliver a 3-5-minute presentation on their science policy analysis review paper or project. Presentations will be graded on the clarity of the material presented, oral presentation skills, the quality of visual presentation aids, and quality of responses to questions posed by the instructor and the class following the presentation. Students will sign up for presentation slots that will be held during the last two weeks of the course.

Due Dates and Late Assignments

All assignments are due at the end of the week and must be submitted online through the course website.

Students are expected to abide by the due dates listed below. Students will be penalized for handing in assignments late. Assignments up to one week late after the deadline will have 10% deducted from the mark. For every week an assignment is late, 10% will be deducted from the mark.

If a student is aware that they have a conflict with a due date, it is the student's responsibility to make arrangements with the instructor in advance of the due date.

Assignment	**Due Date**
Science policy analysis proposal	October 11, 2024
Rapid evidence assessment – Assn 1	October 18, 2024
Rapid evidence assessment – Assn 2	November 8, 2024
Rapid evidence assessment – Assn 3	November 29, 2024
Presentation of science policy analysis	December 2 & 4, 2024
Briefing note	December 6, 2024
Science policy analysis paper	December 13, 2024

Assignment of grades

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

Letter grade	**Percentage**
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-	60-63
D+	55-59
D	50-54
F	0-49

COURSE WITHDRAWAL INFORMATION

Students should refer to the UAlberta calendar for important dates (calendar.ualberta.ca).

TEXTBOOKS AND LEARNING MATERIALS

Textbook:

Sutherland, W. J. (Ed.). 2022. Transforming Conservation: A practical guide to evidence and decision making. Open Book Publishers.

Other required readings for the weekly modules will be made available online in Moodle.

COURSE WEBSITE

YukonU's Moodle system will host the course website. The course website will be used to provide links to readings, lecture slides, study questions, assignments, and the student's gradebook. It is the student's responsibility to check the course website weekly for updates. Students will also be required to submit assignments through Moodle. YukonU's Information Technology Services website is a helpful resource for how to use Moodle: https://www.yukonu.ca/student-life/technical-resources.

ACADEMIC INTEGRITY

Yukon University Academic Standards and Regulations

Students are expected to contribute toward a positive and supportive environment and are required to conduct themselves in a responsible manner. Academic misconduct includes all forms of academic dishonesty such as cheating, plagiarism, fabrication, fraud, deceit, using the work of others without their permission, aiding other students in committing academic offences, misrepresenting academic assignments prepared by others as one's own, or any other forms of academic dishonesty including falsification of any information on any Yukon University document.

Please refer to YukonU Academic Regulations & Procedures for further details about academic standing and student rights and responsibilities.

University of Alberta Academic Integrity and Code of Student Behaviour

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) 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.

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 attend all lectures, to be engaged and courteous in all course activities, and to be on time for class. Please do not use cellular 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.

ELECTRONIC DEVICES

Use of electronic devices during examinations is prohibited.

RECORDING OF LECTURES, LABS, ETC.

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course 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 content author(s).

Please note that some classes in the B.Sc. Northern ENCS Program may be recorded using web conferencing software, and links to recordings may be posted on the class website.

ACCESSIBILITY AND ACADEMIC ACCOMMODATION

Yukon University is committed to providing a positive, supportive, and barrier-free academic environment for all its students. Students experiencing barriers to full participation due to a visible or hidden disability (including hearing, vision, mobility, learning disability, mental health, chronic or temporary medical condition), should contact Accessibility Services (https://www.yukonu.ca/student-life/learning-matters/accessibility-services) for resources or to arrange academic accommodations: access@yukonu.ca.

TENTATIVE SCHEDULE/TOPIC OUTLINE

Week	**Module/Topic**
Introduction to science policy	
1	What is policy?
2	Evidence informed policy development
3	Science and society
Science for policy in the Canadian North	
4	Gathering evidence
5	Indigenous ways of knowing, doing, and being and public policy
6	Conservation science & social science
7	Science integrity & roles of scientists
Policy for science and science policy integration	
8	Challenges in science/policy integration
9	Communicating science
10	Communicating science to decision-makers
11	Policy for science
12	Science policy review presentations
13	Science policy paper