



**GEOG 474/GEOG 694**  
**Transforming Canadian Resource Management**

Course Outline, W2018

**Course Instructor:** Trevor Swerdfager, Senior Assistant Deputy Minister, Delivery and Results, Department of Fisheries and Oceans, Ottawa, Ontario, Canada; [trevor.swerdfager@uwaterloo.ca](mailto:trevor.swerdfager@uwaterloo.ca)

**Office Hours:** In weeks that class meets in Waterloo, Mondays 5-6p.m. in EV1-103; other times electronically on request

**Course Location and Time:** PAS 2086, Mondays 6:30-9:20p.m. (8 meetings, see course schedule) plus two- day field trip to Ottawa February 26-28, 2018

**Field Trip Costs:** Students are responsible for accommodation, local transit fares and meals in Ottawa for two nights (<\$200-\$400 depending on accommodation choices).

**Course Prerequisite:** Environment undergraduate students Level 3A or higher; Environment graduate students.

**Additional Resources:** Students are welcome to meet with Dr. Wandel (EV1-126) re: assignments during office hours; Thursdays 1-2.

**Course Description:**

This course is situated in the context of the Faculty's growing emphasis on resource management and sustainability and explores the theoretical roots of resource management decision making and programs in Canada with a particular emphasis on living resources – fish, forests and wildlife. The course invites students to consider “a conservation map” as a central metaphor for understanding how resource management in Canada works today. Building from material canvassed in GEOG 356 and similar courses, it briefly “maps out” the nature of modern day conservation programming but then turns to a consideration of how this program suite came to be. In this context, continuing with the map metaphor and Geographic Information System terminology in particular, it traces the evolution of three primary “layers” on conservation's map – a subsistence layer, a utilitarian layer and an intrinsic value layer – and how their evolution has given rise to the program suite that characterizes resource management in Canada today. With this backdrop in place, the course then identifies a set of common assumptions or premises flowing from these map layers which underpin conservation programming in Canada today. It then argues that for a host of reasons, none of these foundational premises remain fully valid and that our map no longer works. It concludes by inviting students to consider the conclusion that we need a new map and by offering several suggestions for what that map might look like and how we can go about building it.

The primary instructor of the course is a senior public servant in the Government of Canada. As a result, while maintaining a strong focus on key theoretical concepts and related literature, the course is heavily oriented around a pragmatic focus on how resource management systems work and how those systems condition the nature of resource related decisions. Selected readings and course material reflect this preoccupation and class sessions will place a premium on student participation in discussion designed to expose multiple dimensions of conservation issues confronting us today. A key element of the course is a two-day field trip to Ottawa during which students will interact with elected officials, senior leaders in the federal Public Service and senior representatives of several major advocacy organizations dealing with resource issues on an ongoing basis. The field trip will feature an evening lecture in Ottawa on Monday, February 26<sup>th</sup> and full days of meetings the 27<sup>th</sup> and 28<sup>th</sup> ending in time for students to return to Waterloo on the 28<sup>th</sup>.

**Learning objectives** – Following completion of this course, students should be able to:

- Describe the key formative value systems and historical trends that have shaped conservation programming in Canada today;
- Identify, link and critically evaluate multiple perspectives and actors in resource management decision making in the federal system;
- Describe, at a general theoretical level, how fish, forest and wildlife institutions function in a real world pragmatic context;
- Understand and analyze resource management issues from multi-actor, multi-institutional perspectives;
- Generate insights into how best to develop and position solutions to today’s conservation issues with the goal of advancing sustainability based approaches rather than more traditional single solution paradigms; and,
- Advance and deepen their thinking regarding potential future transformation of fish, forests and wildlife management in Canada

**The Course Evaluation Framework**

<b>GEOG 474</b>	<b>Due</b>	<b>Value</b>
Literature Review A	Feb. 5	20%
Presentation slide deck	Mar. 5	25%
Memo to Cabinet	Mar. 29	40%
Participation		15%

<b>GEOG 694</b>	<b>Due</b>	<b>Value</b>
Literature Review B	Feb. 5	15%
Presentation slide deck	Mar. 5	20%
Memo to Cabinet	Mar. 29	25%
Term Paper	Mar. 29	25%
Participation		15%

**All assignments are to be submitted electronically, to the relevant dropbox on Learn.**

## **Assignment Details**

### **Literature Review A (for GEOG 474)**

Prepare an annotated bibliography and short literature review. Sources in the annotated bibliography will consist of a three paragraph summary (300-500 words) for each of at least six primary literature sources in total dealing with one of: aboriginal resource management systems or issues; government-led fish, forest or wildlife management programs or issues; and parks or endangered species programs or issues. Sources can be peer-reviewed articles, government reports or legislation. For articles and reports, the summary should identify the main conclusions presented, the methods used to generate the conclusions and the perspective the author brings to bear on the issue; for legislation, the summary should describe its key content and its history including any recent or currently proposed revisions. Following the annotated bibliography, prepare a one page synthesis of Canadian Resource management with respect to your topic area.

### **Literature Review B (for GEOG 694)**

Prepare a Literature Review on one of the following topics: aboriginal resource management systems or issues; government-led fish, forest or wildlife management programs or issues; and parks or endangered species programs or issues. Your aim is to synthesize the status of and key issues in your topic area, and must make reference to legislation or management frameworks (e.g. a Department's Sustainable Development Strategy). Aim to include at least eight peer-reviewed papers in your synthesis.

## **Presentations**

Through group discussion and collaboration, prepare a ten slide presentation addressing one of the five questions listed in the Box on Page 7. The presentation should build on lessons learned as part of the Ottawa field trip at the end of February and must summarize the issues at play and their background, identify key perspectives on the issue and propose a solution to it. The presentation must also include an analysis of the proposed solution's federal-provincial implications, its gender based implications and a summary of how the proposed solution would be implemented if adopted by government. Each student will submit their presentation for individual marking and can draw on group discussions as they wish. The author of the strongest presentation from each will group (expectations adjusted based on GEOG 474 or GEOG 694) will be invited to present their work in class on March 12, 2018 in a "mock Cabinet" session (up to 3% bonus mark on your final grade based on how well you present). This assignment will be worth 25% of the total course mark (20% for graduate students.)

## **Memorandum to Cabinet**

Working individually, prepare a mock "Memorandum to Cabinet" final term paper that builds upon the presentations prepared in element two above and addresses one of the questions in the Box on Page 7. A template for the paper will be distributed in class in January and must be followed. Its structure will follow the key elements of the presentation prepared in element two but will also include a requirement to present two options to the proposed solution, a detailed analysis of stakeholder perspectives on the proposed solution and a robust description of how the solution would be implemented if adopted. The

paper is not to exceed seven single-spaced 8.5" by 14" pages (using a provided template) plus a bibliography which will not count toward the page limit

### **Participation**

It is expected that you are present, prepared for, and an active participant in class for all eight sessions and the Ottawa component. It is expected that materials submitted for evaluation will draw heavily on lecture themes and content and will be evaluated accordingly

### **Term Paper (GEOG 694 only) – choose 1 Option**

#### ***Option 1***

Create a "Question and Answer" briefing package suitable for use by a Minister participating in a Cabinet discussion of the Memorandum to Cabinet. Supported by appropriate references (which shall not count in the word limit), this package will provide background information on all detailed aspects of the issue addressed in the Memorandum. You will need to anticipate approximately 15 questions from a wide variety of perspectives and will need to summarize complex issues and questions in very short and concise form (about half a page per question).

#### ***Option 2 (for students who wish to use this course as an MCC elective; others may choose this Option as well)***

Focus on the climate change aspects of the issue addressed in the Memorandum to Cabinet. In this context, describe the manner in which climate change has created and/or exacerbated the issue at play, what climate change adaptation and response opportunities or challenges it present and how the option recommended in the Memorandum to Cabinet will advance progress in addressing these issues and challenges. Max. 2500 words excluding references.

### **Late Policy for All Assignments**

This course is designed to give you exposure to life beyond the university. Consequently, a strict penalty of 10% (absolute, not of earned grade) per 24 hour period including weekends will be assigned to late work. All assignments are due to the relevant dropbox on Learn no later than 11:30 p.m. on the day they are due.

## Course Schedule

Date	Topic	Readings
January 8th	L1 – Introductions, Logistics, Course Overview	
January 15 <sup>th</sup>	L2 – Conservation’s Map: The Subsistence Layer	Chapter Two, The Pentagon’s New Map by Thomas Burnet  An Introduction to Critical Cartography, Jeremy Crampton, (pdf included)
January 22 <sup>nd</sup>	L3 – The Utilitarian Layer: Fisheries	Oceana Fisheries Audit, 2017 (pdf included)  The Fisheries Act (pdf included)
January 29 <sup>th</sup>	L4 – The Utilitarian Layer: Wildlife and Forests	Chapter One, “A History of Ideas in Game Management” in Leopold, Aldo. 1948 <u>Game Management</u> Charles Scribner and Sons, New York  Chapter One “The Bay Men” in, Newman, Peter C. 1985. <u>Company of Adventurers</u> Viking Penguin Books, Markham, Ontario.
February 5 <sup>th</sup>	L5 – The Intrinsic Value Layer; Parks and Endangered Species  (note assignment one is due this day by start of class)	<u>The Species At Risk Act</u> (pdf attached)  National Parks Strategic Plan (pdf attached)
February 12 <sup>th</sup>	L6 – a) Our Final Two Layers – Private Conservation and Land Claims based Co-Management; and b) Francis Fukayama and Political Decay	Chapter 31 “Political Decay” in Francis Fukuyama, <u>Political Order and Political Decay</u> , 2014, Farrar, Straus and Giroux.  Chapter One – “So Close and Yet so Different” in Acemoglu, Daron and Robinson, James A. 2012 <u>Why Nations Fail</u> , Crown Publishers, New York
February 19 <sup>th</sup>	Reading week – no class	
February 26 <sup>th</sup> In Ottawa	L7 – Decision making in Ottawa  (note this lecture will be in Ottawa commencing at the usual time of 6:30. Location TBC)	Chapter One “Introduction” in Savoie, Donald. 1999. <u>Governing from the Centre</u>

		University of Toronto Press, Toronto
February 27 <sup>th</sup> In Ottawa	Field trip in Ottawa, schedule to be listed separately	
February 28 <sup>th</sup> In Ottawa	Field trip in Ottawa, schedule to be listed separately	
March 5 <sup>th</sup>	No class	
March 12 <sup>th</sup>	L8 - Group presentations in class	
March 19 <sup>th</sup>	No class	
March 26 <sup>th</sup>	L9 – Considering “success”, Glimmerings of the New Map	<p>Chapters One “The Characters of the Story” and Chapter Two “Attention and Effort” in Kahneman, Daniel. 2011 <u>Thinking Fast and Slow</u> Anchor Canada Books</p> <p>Genetic Therapies: Post-Human” pages 463-483 in Mukerjee, Siddhartha. 2016, <u>The Gene, An Intimate History</u> Scribner Press, New York</p>

***Presentation and Memorandum to Cabinet (MC) topics***

You will be assigned to one of these topics, and should use other students working on the same topic as your discussion group. You submit an individual slide deck, and use the same topic for your Memorandum to Cabinet.

1. The operation of the Transmountain Expansion Pipeline will result in substantially increased shipping traffic into and out of the Port of Vancouver. In light of the impact of this increased traffic on the Southern Resident Killer Whale population, and given the newly elected provincial government's opposition to the project, should the federal government proceed with implementing its decision to authorize the project and its related shipping activity from the Port of Vancouver? If so, under what conditions should it do so? If not, how should the Government proceed in reversing its previous decision?
2. Should the Government trigger the s58 habitat safety net provisions of the Species At Risk Act to halt all logging in critical habitat areas of the Boreal Caribou? How should it proceed to implement whichever decision it makes with respect to this question?
3. Should the Government re-open the Northern Cod fishery to allow a limited annual harvest in a manner that re-kindles the industry in preparation for when stocks rebound to levels suitable for larger scale harvests? If so, under what terms and conditions should the harvest proceed? If not, how should the Government address the needs of the fishing communities of Newfoundland and Labrador?
4. Should the Government authorize the harvest of Bowhead whales by Inuvialuit land claim beneficiaries in the Beaufort Sea in 2018? If so, under what terms and conditions? And if not, how should the Government address the concerns and legal rights of the Inuvialuit?
5. In an effort to protect a wide range of SARA listed species of plants and animals and ensure that Natural Region 3 is represented in the National Parks system, should the Government expropriate land in the Okanagan Valley area to establish a new national park that would eliminate the grazing of cattle and other economic activities in the area? If so, how should it proceed to do so? If not, how should the Government reply to pressures to create such a park and how should it protect SARA listed species in the area and complete the Parks System for this Natural Region?

**Intellectual Property:**

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and

- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

#### **Academic Integrity:**

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. The University's guiding principles on academic integrity can be found here: <http://uwaterloo.ca/academicintegrity>. ENV students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: <http://uwaterloo.ca/academicintegrity/Students/index.html>

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. Students may also complete the following tutorial: <https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial>

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline: <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71>. Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance: <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70>

#### **Note for students with disabilities:**

AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.



**Mental Health:**

The University of Waterloo, the Faculty of Environment and our Departments/Schools consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. **Please note that help is available.** Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <http://www.uwaterloo.ca/counselling-services> is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

**Religious Observances:**

Students need to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

**Grievance:**

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 - Student Petitions and Grievances, Section 4, [www.adm.uwaterloo.ca/infosec/Policies/policy70.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm). When in doubt please contact your Undergraduate Advisor for details.

**Appeals:**

A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) [www.adm.uwaterloo.ca/infosec/Policies/policy72.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm)

**Communications with Instructor and Teaching Assistants:**

All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

**Turnitin:** Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, and are subject to the USA PATRIOT ACT, 2001; therefore, students must be given an alternative (e.g., scaffolded assignment or annotated bibliography) if they are concerned about their privacy and/or security. Students will be due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.