

COURSE OUTLINE: GEOG 4431 – Conservation Geography Fall Term 2015

Text: Fryxell J.M., A.R.E. Sinclair, and G. Caughley. 2014. Wildlife Ecology, Conservation, and Management, 3rd Edition. John Wiley & Sons, West Sussex, UK, 509 pp.

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Office Hours: Office location: RC 2006H Thunder Bay Campus. Official office hours are Tuesday and Thursday from 9:00 to 5:30. Actual office hours are informal, just drop by and if I am there you will be welcome.

Communication: Please use the email address above for all digital communications. I will not monitor the D2L communication option just because there is no need for two independent addresses. Please consult the reference materials before emailing me with a question. The Course Outline may be updated periodically, so please check it periodically. Questions are welcome, but please be patient. I will reply as soon as I can.

Introduction: My BSc and MSc are from the Department of Biology at Kansas State University. My PhD. is from the Department of Ecology at University of Minnesota. I did post-doctoral work and lectured at the Faculty of Forestry at University of British Columbia. I then joined the faculty at the Fisheries and Wildlife Department of Michigan State, and eventually took a position as polar bear biologist for the Northwest Territories Department of Renewable Resources. That position transferred to Nunavut when the NW Territories divided. I was Manager of the Wildlife Research Section for my last few years in the north and moved to the Thunder Bay area in 2008. I am an adjunct professor with Geography and teaching this course as contract lecturer for Dr. Martha Dowsley who is on sabbatical this year.

Conservation geography is a multidisciplinary field of study. Conservation issues are mostly human-caused problems, so typically conservation initiatives have more to do with influencing human behavior than modifying nature. The foundation of economies and of civilizations is natural resources and the use of ecosystem services. Human populations have increased, and the quality of life of most individuals is also increasing. This is both the rationale for conservation and a constraint. We live from nature, and reducing our use of natural resources or using them in a better way can mean reducing/limiting what is available. There are trade-offs that are necessary and

governance of natural resources is a political as well as scientific endeavor. What is necessary is sometimes not practical, and what is deemed to be an acceptable practice sometimes has unacceptable consequences. Conservation is not development, or preservation or environmentalism; rather it is finding a middle way that buys time for individuals, populations, species, ecosystems, and ultimately human-kind to reconcile the drive to increase with the realities of a finite world. Conservation is not a goal or an ideal, it is an activity. It is like driving a car; once you take your hand off the wheel it goes wrong very rapidly. It is also true that few people manage to have a lasting impact on conservation, so those that have “made a difference” past their time are worth learning about.

As with most fields, conservation has its own vocabulary, basic principles, and a knowledge base that must be learned before conservation as an activity can be understood and practiced. This course will provide a geographical perspective on basics of conservation, and require a case-history practicum that considers a conservation issue in more depth. Instructor reserves the right to modify the course outline as required to meet course objectives.

The scheduled times for completion of quizzes, exams, and assignments are firm, and will be modified only in accordance with Lakehead policy (documented illness and family emergencies). Please contact me if you have any special circumstances or questions. Good luck with the course.

Conservation Case History Practicum: The case history practicum will consist of three components that will be evaluated: Outline, Power-Point Presentation, and Final Paper. The topic will be the student’s choice of a current conservation issue. The practicum will involve researching/documenting the issue, examining/evaluating current conservation approaches to the issue, discussing the root causes of the issue, the constraints to mitigating or resolving the issue, and providing a **practical** action plan that discloses both the costs and benefits of whatever you suggest.

The format should be “decision paper”. Examples of some different types of decision papers are described in the Administration directory on the course D2L site, and I will provide an example in class. Citations should follow the conventions for scientific writing (also see guides in the Administration directory). For greater clarity, an alternative format or unstructured paper is not acceptable, an essay format is not acceptable, a scientific format is unacceptable, footnotes or other numbered reference styles are not acceptable. You must use the decision paper format and the scientific writing and citation styles.

Topics should be selected by the end of the second week of class. An outline must be submitted by the end of the third week of class to confirm an approach that will be successful. The outline should capture the format for decision papers. A description of what constitutes an outline is contained in the Administration directory, and that style is required. The most common error in choosing a topic is to identify something that is too

general. Please reduce the scope of your paper to something that is manageable for our time frame (one semester) and our page limit (10 pages maximum).

A critical part of the assignment is to learn outlines, scientific writing style and citation conventions, and the decision paper format. I will cover this material in class as well as provide guides on D2L. Questions are welcome. I know this will be the first time many of you have used these formats, so don't be shy about asking if anything is unclear. The due dates for the outline and paper are indicated in the course calendar below.

The final portion of this assignment is to provide a 10 minute presentation (power-point) on your conservation issue. Depending on time available, you may also be asked to lead a brief question and answer session on your conservation issue. Presentations are scheduled for the last 2 course periods, but can be given anytime during the term by prior arrangement. Information included in student presentations may be included in quizzes or the final exam. Students will provide digital copy of their presentations.

Midterm:

The midterm will be a T/F, multiple choice, and short answer exam given near the end of class. The midterm will include information from both the lecture slides, text, and assignments. You should bring a soft lead pencil (#2 is best) and a good quality eraser (white gum erasers work well) to the midterm and final exam.

Grading Protocol:

Midterm	20%
Decision Paper (outline 3%, paper 15%, and presentation 7%)	25%
Quizzes and Exercises	15%
Final Exam	40%
Total	100%

Deferred Examinations and Assignments:

Please regard class as a series of appointments that have been arranged to facilitate teaching and evaluation for Conservation Geography. I do not take roll or penalize individuals who do not attend, but you are advised to take all quizzes and do all the exercises during our regularly scheduled class time. Assignments are accepted on or before the day that they are due. Missed in-class exercises and late assignments will be counted as zero credit unless prior approval is provided (email message or hard copy) or appropriate documentation for University approved absence is provided. Approved absence includes illness (medical practitioner certificate), varsity sports (letter or email message from coach), or personal/family emergency (documentation of circumstance). Scheduling conflicts with other courses are not considered an approved absence. Absence due to participation in scientific meetings or field trips associated with other courses will be considered on a case by case basis.

Special Circumstances or Disabilities:

Students with special circumstances or disabilities are encouraged to contact the Learning Assistance Center right away so that appropriate accommodations can be arranged. It is not necessary to get my permission or support. The Learning Assistance Center will notify me of any accommodations that are required, and this information will be kept confidential.

Academic Honesty:

The Guidelines for Academic Conduct from Lakehead University (Code of Student Behaviour and Disciplinary Procedures) may be found at:

><http://vpacademic.lakeheadu.ca/?display=page&pageid=46><

Honesty and integrity are expected in class participation, examinations, assignments, and other academic work. Expectations include:

- Perform your own work unless specifically instructed otherwise;
- Use your own work to complete assignments and exams;
- Cite the source when quoting or paraphrasing someone else's work;
- Follow examination rules;
- Be truthful on all university forms;
- Discuss with your professor if you are using the same material for assignments in two different courses;
- Discuss with your professor if you have any questions about whether sources require citation;
- Use the same standard of honesty with fellow students, lab instructors, teaching assistants, sessional instructors and administrative staff as you do with faculty.

	Topic	Chapter
Sept 15-16	Introduction to Conservation Geography	Intro
	Landforms: the physical matrix (see D2L Slides)	
	Biological Basis of Conservation and Biodiversity	
Sept 22	Nature Begins - Conservation Comes Later	1
Sept 24	Biogeographical Framework	2
Sept 24	Biological Landscapes 1-Types	3
Sept 29	Biological Landscapes 2- Physical Limits	4
Oct 1	Biological Landscapes 3- Interactions Disturbance	21
Oct 6	Multispecies Interactions, Biomes, Climate (decision paper outline due)	6,7,8, 17
Oct 8	Marine and Fresh Water Systems	6,7,8
Oct 13	Biodiversity	9,10,11
Oct 15	Genetic Diversity	20
Oct 20	Climate Change and Conservation	11
Oct 22	Midterm Exam	
Oct 27-29	Population Dynamics	5, 13, 18
	--Decision Paper Due on 12 November--	
Nov 3-5	Population Viability Analysis (PVA)	16
Nov 10	Survey Methods and Considerations (1)	12
Nov 12	Survey Methods and Considerations (2)	12
Nov 17	Habitat Fragmentation and Degradation	21
Nov 19	Protecting/Managing Ecosystems and Populations	19
Nov 24	Canadian Conservation Governance	22
Nov 26	Comprehensive Exam	All except 15,16
	Decision Paper Presentations	
Dec 1	Decision Paper Presentations (first day)	
Dec 3	Decision Paper presentations (final day)	
	Case Studies	
If time permits	Ontario Endangered Species (Peregrine Falcon) Polar Bears and Climate Change	15,16