

Course Outline

Environmental Technology

Winter, 2021

ENVT 270 Wildlife Conservation and Management

3 Credits, 3 hours lecture 1 hour tutorial per week

The course provides students with a synthesis of wildlife and range ecology, conservation and management with a focus on the requirements of the oilsands industry within industrial, urban, rural, wilderness and agricultural environments. Both game and non-game species in terrestrial and aquatic environments are considered. Specific topics addressed include: population biology; wildlife/habitat relationships; herbivory and predation; behavioral ecology; competition; parasites and pathogens; population sampling; conservation biology and management techniques. Field trips are required.

Prerequisites BIOL 108

Instructor

Dr. David Smith S209B 780-791-4997 david.smith@keyano.ca

Office Hours

Monday to Friday 12:00 – 12:50 All office hours are in S209B

Hours and Location of Instruction

Tuesday, Thursday 9:00 – 10:20 Room S216 Friday 11:00 – 11:50 Room S214

Required Resources

<u>Textbook title</u>, Krausman, P.R. and J. W. Cain, III. 2013. Wildlife Management and Conservation. John Hopkins University Press. Baltimore. ISBN 978-1-4214-0986-3 Other supplies

Course Outcomes

The student will be able to:

- Collect, analyze and interpret ecological data on wildlife and wildlife habitat in the oilsands region.
- Synthesize information from numerous disciplines on a variety of issues related to wildlife
 management in Alberta, across Canada and world-wide, especially with regard to wildlife/habitat
 relationships, range management, wildlife and range ecology, wildlife management techniques
 and policy.
- Demonstrate a thorough understanding of wildlife population dynamics and population genetics by presenting an oral presentation and by submitting scientific writing assignments.

.

Evaluation

Clearly outline what students must do in order to pass or complete the course.

Research project 5%, due week of March 22

Assignments 5%, due each week

Oral Presentation 10%, due three weeks before final exams
Term Paper 15%, due three weeks before final exams

Midterm Exam 25%, week of February 22 Final Exam 40%, week of April 19

Total 100%

A grade of C- is required for progression or transfer.

Grading System

Descriptor	Alpha Grade	4.0 Scale	Percent	Rubric for Letter Grades
	A+	4.0	> 92.9	Work shows in-depth and critical analysis,
Excellent	Α	4.0	85 - 92.9	well developed ideas, creativity, excellent
	A-	3.7	80 - 84.9	writing, clarity and proper format.
	B+	3.3	77 – 79.9	Work is generally of high quality, well
Good	В	3.0	74 - 76.9	developed, well written, has clarity, and
	B-	2.7	70 - 73.9	uses proper format.
	C+	2.3	67 - 69.9	Work has some developed ideas but needs
Satisfactory	С	2.0	64 - 66.9	more attention to clarity, style and
Progression	C-	1.7	60 – 63.9	formatting.
Poor	D+	1.3	55 - 59.9	Work is completed in a general way with
Minimum Pass	D	1.0	50 - 54.9	minimal support, or is poorly written or did
				not use proper format.
Failure	F	0.0	< 50	Responses fail to demonstrate appropriate understanding or are fundamentally incomplete.

Proposed Schedule of Topics (week of:)

Jan. 4 History of wildlife management – Chapters 1, 2 Jan. 11 Case studies in wildlife management – Chapters 3, 4 Jan. 18 Cover Jan. 25 Food and nutritional ecology – Chapter 11 Feb. 1 Tracks and other sign (research project) Feb. 8 Habitat – Chapter 15, midterm and wildlife research project Feb. 22 Hunting and trapping – Chapter 9 Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17 Apr. 12 Wildlife research project due and oral presentations	Froposed Schedule of Topics (week of.)				
Jan. 18 Cover Jan. 25 Food and nutritional ecology – Chapter 11 Feb. 1 Tracks and other sign (research project) Feb. 8 Habitat – Chapter 15, midterm and wildlife research project Feb. 22 Hunting and trapping – Chapter 9 Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Jan. 4	History of wildlife management – Chapters 1, 2			
Jan. 25 Food and nutritional ecology – Chapter 11 Feb. 1 Tracks and other sign (research project) Feb. 8 Habitat – Chapter 15, midterm and wildlife research project Feb. 22 Hunting and trapping – Chapter 9 Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Jan. 11	Case studies in wildlife management – Chapters 3, 4			
Feb. 1 Tracks and other sign (research project) Feb. 8 Habitat – Chapter 15, midterm and wildlife research project Feb. 22 Hunting and trapping – Chapter 9 Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Jan. 18	Cover			
Feb. 8 Habitat – Chapter 15, midterm and wildlife research project Feb. 22 Hunting and trapping – Chapter 9 Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Jan. 25	Food and nutritional ecology – Chapter 11			
Feb. 22 Hunting and trapping – Chapter 9 Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Feb. 1	Tracks and other sign (research project)			
Mar. 1 Water – Chapter 12 Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Feb. 8	Habitat – Chapter 15, midterm and wildlife research project			
Mar. 8 Soils and wildlife – Chapter 15 Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Feb. 22	Hunting and trapping – Chapter 9			
Mar. 12 Disease and parasites – Chapter 8 Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Mar. 1	Water – Chapter 12			
Mar. 22 Conservation planning – Chapter 18 Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Mar. 8	Soils and wildlife – Chapter 15			
Mar. 29 Population dynamics and Wood Bison management – Chapter 7 Apr. 5 Climate change and fire – Chapter 17	Mar. 12	Disease and parasites – Chapter 8			
Apr. 5 Climate change and fire – Chapter 17	Mar. 22	Conservation planning – Chapter 18			
· '	Mar. 29	Population dynamics and Wood Bison management – Chapter 7			
Apr. 12 Wildlife research project due and oral presentations	Apr. 5	Climate change and fire – Chapter 17			
	Apr. 12	Wildlife research project due and oral presentations			

Please Note:

Date and time allotted to each topic is subject to change.

Performance Requirements and Student Services

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the <u>Keyano College credit calendar</u>. The Keyano College credit calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own;
- The use of unauthorized aids in assignments or examinations (cheating);
- Collusion or the unauthorized collaboration with others in preparing work;
- The deliberate misrepresentation of qualifications;
- The willful distortion of results or data;
- Substitution in an examination by another person;
- Handing in the same unchanged work as submitted for another assignment; and
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, <u>you must successfully complete</u> the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of <u>your instructors</u>. Your course work may not be graded until you show this signed certificate.

Specialized Supports

The Student Services department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano College. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented differently this semester by being provided mostly virtually. In-person service can be requested as needed. All Alberta Health Services guidelines will be followed for in-person appointments—wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30.

Accessibility Services: provides accommodations for students with disabilities. Students with documented disabilities, or who suspect a disability, can meet with a Learning Strategist to discuss their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact us to request them for the semester. Please note that requesting accommodations is a process and requires time to arrange. Contact us as soon as you know you may require accommodations. For accessibility services supports and to book a virtual appointment, please contact accessibility.services@keyano.ca.

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing accessibility.services@keyano.ca

Wellness Services: offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. All individual appointments will continue virtually.

Wellness Services welcomes students to participate in any of the virtual group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual virtual appointments can be made by emailing wellness.services@keyano.ca.

Library Services: provides students with research and information supports as they engage in their studies. Library staff are available to support you both virtually and in person throughout the semester. For a detailed list of library supports and services, go to www.keyano.ca/library. For any inquiries, please email askthelibrary@keyano.ca.

Begin your research with the <u>Library's FIND page</u>. Search for sources using OneSearch, the Library's Catalogue, or by searching in a specific database selected from the A-Z Database List.

Individual support with the Information Librarian is available virtually. Appointments can be requested by using the Book A Librarian online form.

Research and Subject Guides are helpful resources when beginning your research or addressing other information needs. To view a subject or course specific guide, go to the Subject Guide webpage here.

To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the Research Help Library page.

The Loanable Technology collection is available to support students in their online learning pursuits. Items available for borrowing include mobile projectors, webcams, noise cancelling headphones, Chromebooks, and laptops. For an up-to-date list of technology available for borrowing, go to the Library's Loanable Technology webpage.

Skill Centre: Provides academic support services to students registered in credit programs at Keyano College in the form of tutoring, assignment/lab support, writing support groups, facilitated study groups, workshops, and study space. This service is free and is available for all Math, Sciences, Humanities and Trades courses offered at Keyano.

Annle

While most courses are being offered online, the Skill Centre will be offering mostly virtual services and in-person sessions as requested. Please email Skill@keyano.ca to get in contact with our Academic Content Specialists. The Skill Centre is located in CC-119 at the Clearwater Campus.

For the most up to date information on how to book a session, please view the <u>Keyano Skill Centre</u> homepage.

Academic Success Coaching: offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano. Academic.success@keyano.ca is the best way to access resources during virtual service delivery. The Academic Success Coach is located in the Skill Centre in CC-119 at the Clearwater Campus.

E-Learning

Technology and internet will impact your online learning experience. It's important that you are able to watch an online video and other course materials, take online quizzes, and participant in a live class with your instructor and other students.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important. Here's a list of recommended system requirements.

Internet Speed

Minimum Internet speeds of 5 Mbps.

Microsoft Windows

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home). Check your internet speed with Fast.com.

System requirements:

WICOSOIL WILLIAMS	Apple	
Minimum Requirements:	Minimum Requirements:	
A Windows 10 computer/laptop Minimum 4GB of RAM.	A Macintosh (V10.14 and above) computer/laptop Minimum 4GB of RAM.	
 10GB+ available hard drive storage. 	· 10GB+ available hard drive storage.	
 Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). <u>Microsoft</u> <u>Office</u> software is free to all Keyano students and employees. 	Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees.	
 Microphone, webcam and speakers. A headset with a microphone is recommended. 	 Microphone, webcam and speakers. A headset with a microphone is recommended. 	
· System updates must be regularly installed.	System updates must be regularly installed.	
· Anti-Virus / Anti-Malware software	· Anti-Virus / Anti-Malware software.	

Recommended Requirements

- 8GB of RAM
- A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.

Recommended Requirements

- 8GB of RAM
- A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.

Chromebooks are **not** recommended as they are not compatible with testing lockdown browsers.

A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.

Specific Department Requirements:

Business and OA programs require Windows 10. Other programs may utilize Windows based tools as well.

Computer Software

Students will be able to get access to Microsoft Office 365 for free using Keyano credentials by clicking here.

Recording of Lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or lecture materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to share, distribute, publish or sell course related content (instructor, or students) without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The <u>Academic Integrity Policy</u> provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.