

Course ID:	Course Title:	Fall 2020
BIO351	Conservation Biology	Prerequisite: BIO213; or BIO133 and permission of the instructor
		Credits: 3

Class Information		Instructor Information		Important Dates	
Delivery:	In Class	Instructor:	G.L. Powell, Ph.D.	First day of classes:	Wed, Sept 9
Days:	Tues/Thurs.	Email:	lpowell@ucalgary.ca	Last day to add/drop, or change to audit:	Sun, Sept 20
Time:	3:15-4:30 pm	Phone:		Last day to request revised final exam:	Mon, Nov 2
Room:	RE 132	Office:		Last day to withdraw from course:	Fri, Nov 20
Lab/Tutorial:	N/A	Office Hours:	Zoom meetings by appointment	Last day to apply for coursework extension:	Mon, Nov 23
Final Exam:	No Final Exam			Last day of classes:	Mon, Dec 14

Course Description

This course will focus on applications of ecology to conservation and sustainability. Emphasis will be placed on human-environment interactions and their implications for biodiversity, natural resource management, and endangered ecosystems and species.

Expected Learning Outcomes

This course will provide students with a foundation in conservation biology theory and explore applied strategies to contemporary conservation issues and concerns at a number of scales including local, national, and global. Students will be encouraged to use theory to formulate their own opinions regarding conservation concerns and potential solutions.

It is the aim of the course that students acquire the following skills:

1. Students will gain a greater understanding of the role of biodiversity in global ecosystems, contemporary threats to biodiversity, and conservation strategies for preserving both biodiversity and genetic diversity.
2. Students will gain a greater understanding of the need and strategies for the conservation of individual species.
3. Students will gain a greater understanding of the need and strategies for the conservation of ecosystems and landscapes.

4. Students will gain a greater understanding of the meaning and implementation of sustainable development practices related to conservation.
5. Students will gain a greater understanding of habitat and wildlife management principles and tools that are used in conservation biology.

Textbooks

There will be no textbook for this course. Required readings (journal articles) will be assigned to students.

Course Schedule

This outline will serve as a general guide to the main topics covered. It may change as the semester progresses.

- History of Conservation Biology and Formal Conservation Philosophies
- Biodiversity and Measuring Diversity; Genetic Diversity
- Genetic Drift, Inbreeding Depression and Effective Population Size
- Species Accumulation Curves and Rarefaction
- Trophic Cascades and Metapopulations
- Habitat Loss, Degradation, and Fragmentation and Habitat as a Matrix
- Overexploitation and Invasive Species
- Conservation, Climate Change, and Phenology
- Conservation of Small Populations and Allee Effects
- Minimum Viable Populations and Minimum Area Requirements
- Population Viability Analysis, De-Extinction and Rewilding
- Ecosystem Services
- Restoration Ecology
- Future Challenges in Conservation Biology

Weeks

1	Sept. 7	
2	Sept. 14	
3	Sept. 21	
4	Sept. 28	
5	Oct. 5	
6	Oct. 12	Term Test 1; Oct. 16
7	Oct. 19	

8	Oct. 26	
9	Nov. 2	
10	Nov. 9	Reading Week
11	Nov. 16	
12	Nov. 30	Term Test 2; Dec. 4
13	Dec. 7	
14	Dec. 14	

Requirements:

All exams and assignments are announced and/or scheduled in advance. Assignments are due at the designated time; please see the late policy below for additional information about late submissions.

Theory (Lecture) Term Tests and Quizzes:

Theory (Lecture) Term Tests are objective, utilizing a variety of formats including multiple-choice, matching, true/false, and short answer. Tests may also contain a set of selected short essay questions.. Quizzes will be conducted online.

Assignments: Assignments are exercises designed to review major concepts, summarize pertinent results, demonstrate comprehension of material covered in lecture, and evaluate the ability of students to conduct independent research.

Submission of Assignments: Over the course of the term, we may be engaged in a number of projects, assignments, activities that require both faculty-student and student-student collaboration that will be turned in for a-grading or evaluated in another way. Thus, it will be vital that all parties take responsibility for their part in these activities. The instructor will provide clear objectives, adequate time, and necessary assistance for completing any projects, assignments, and activities. As students, you will be responsible for working together and managing your time such that you are prepared for due dates.

Method of Submission: Assignments will always be submitted online via Moodle or email with the submission deadline provided, unless otherwise noted by the instructor.

Late Submission of Assignments: We realize that certain circumstances prevent students from turning in individual assignments on time and have developed the following late policy to address these rare situations. This policy will apply to all assignments. The late policy will **NOT cover term tests, quizzes, or a final exam if administered**, all of which **MUST** be completed on time or a grade of zero will be assigned.

The following will only apply if the instructor is contacted **IN WRITING** one day prior to the deadline. Late submissions without contact and valid reason prior to the deadline will not be accepted.

Condition (calendar days include both weekdays and weekends)	Deduction
Assignment is turned in 1 calendar day after it is due (e.g. Due: Monday, handed in on Tuesday)	25%
Assignment is turned in 2 calendar days after it is due (e.g. Due: Monday, handed in Wednesday)	50%
Assignment is turned in 3 calendar days after it is due (e.g. Due: Friday, handed in on Monday)	75%
Assignment is turned in 4 calendar days after it is due (e.g. Due: Monday, handed in on Friday)	100%

Attendance:

Attendance at class is mandatory. Attendance will be noted and a grade assigned for both attendance and participation. In-class assignments and any in-class graded activities cannot be made up and, if missed, will receive a grade of zero.

Grade Summary:

Activity	Percent of Grade	Notes
Term Test 1	15%	Term projects will consist of a 15 minute multi-media presentation on a topic in conservation biology, chosen by the student.
Term Test 2	20%	
Small Activities / Assignments (4)	10%	
Medium Activities / Assignments (4)	20%	
Quizzes (4)	10%	
Term Project (1)	15%	
Participation	10%	

A+	95-100%	Outstanding	C+	65-70%	Satisfactory
A	90-95%	Excellent	C	60-65%	Satisfactory
A-	85-90%	Very Good	C-	55-60%	Poor
B+	80-85%	Good	D	50-55%	Minimal Pass
B	75-80%	Good	F	Below 50%	Fail
B-	70-75%	Good			

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Other:

Mental Health Support

All of us need a support system. We encourage students to build mental health supports and to reach out when help is needed.

On Campus:

- **Counselling Services:** ambrose.edu/counselling
- **Peer Supportive Listening:** One-to-one support in Student Life office. Hours posted at ambrose.edu/wellness.
- **For immediate crisis support, there are staff on campus who are trained in Suicide Intervention and Mental Health First Aid.** See ambrose.edu/crisissupport for a list of staff members.

Off Campus:

- **Distress Centre - 403-266-4357**
- **Sheldon Chumir Health Care Centre - 403-955-6200**
- **Emergency - 911**

Sexual Violence Support

All staff, faculty, and Residence student leaders have received *Sexual Violence Response to Disclosure* training. We will support you and help you find the resources you need. There is a website with on and off campus supports – ambrose.edu/sexual-violence-response-and-awareness.

Off Campus:

- **Clinic: Sheldon Chumir Health Centre - 403-955-6200**
- **Calgary Communities Against Sexual Abuse - 403-237-5888**

Ambrose University Academic Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests

will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devices in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating.

Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.