

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

<b>Course Code and Number:</b> BIO 310		<b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>															
<b>Course Full Title:</b> Conservation Biology <b>Course Short Title:</b> <i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>																	
<b>Faculty:</b> Faculty of Science		<b>Department (or program if no department):</b> Biology															
<b>Calendar Description:</b> Using an interdisciplinary approach drawing from ecology, evolution, genetics, ethics, society, politics, and law, this course examines both theoretical and practical aspects of conservation biology. Students will investigate the causes and extent of human impacts on the natural world and explore practical solutions to maintain biodiversity.																	
<b>Prerequisites (or NONE):</b>		BIO 210.															
<b>Corequisites (if applicable, or NONE):</b>																	
<b>Pre/corequisites (if applicable, or NONE):</b>																	
<b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i> Former course code/number: Cross-listed with: Dual-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>		<b>Special Topics</b> <i>(Double-click on boxes to select.)</i> This course is offered with different topics: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, topic will be recorded when offered.)</i>															
		<b>Independent Study</b> If offered as an Independent Study course, this course may be repeated for further credit: <i>(If yes, topic will be recorded.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit															
<b>Typical Structure of Instructional Hours</b> <table border="1"> <tr> <td>Lecture/seminar hours</td> <td>20</td> </tr> <tr> <td>Tutorials/workshops</td> <td>15</td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td>10</td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td><b>Total hours</b></td> <td><b>45</b></td> </tr> </table>		Lecture/seminar hours	20	Tutorials/workshops	15	Supervised laboratory hours		Experiential (field experience, practicum, internship, etc.)	10	Supervised online activities		Other contact hours:		<b>Total hours</b>	<b>45</b>	<b>Transfer Credit</b> Transfer credit already exists: <i>(See <a href="#">bctransferguide.ca</a>.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Submit outline for (re)articulation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>	
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		<b>Grading System</b> <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit															
		<b>Maximum enrolment (for information only):</b> 24 <b>Expected Frequency of Course Offerings:</b> 2-3 semesters per year															
<b>Department / Program Head or Director:</b> Gregory Schmalz		<b>Date approved:</b> September 2021															
<b>Faculty Council approval</b>		<b>Date approved:</b> October 8, 2021															
<b>Undergraduate Education Committee (UEC) approval</b>		<b>Date of meeting:</b> January 28, 2022															

**Learning Outcomes:**

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

1. Critically assess the impacts human activities have had on species and ecosystems.
2. Categorize the threats to global biodiversity.
3. Incorporate the International Union for the Conservation of Nature and Natural Resources to describe the status of species at risk.
4. Design a survey method to determine if a species is at risk.
5. Identify the biological and sociological factors involved in developing effective conservation strategies
6. Outline the potential steps to preserve an endangered species.
7. Summarize the challenges faced by conservation science.
8. Explore sustainable use of the environment by indigenous peoples.
9. Apply their knowledge by preparing a management plan to increase biodiversity at a specified location.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** *(Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)*

Lectures and in-class discussions, seminars, guest speakers working in the field of conservation, field trips, and student presentations.

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials** *(If more space is required, download Supplemental Texts and Resource Materials form.)*

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Primack	An Introduction to Conservation Biology			2018
2.				
3.				
4.				
5.				

**Required Additional Supplies and Materials** *(Software, hardware, tools, specialized clothing, etc.)*

**Typical Evaluation Methods and Weighting**

Final exam:	35%	Assignments:	5%	Field experience:	5%	Portfolio:	%
Midterm exam:	20%	Presentation, conservation management plan:	15%	Practicum:	%	Written, conservation management plan:	20%
Quizzes/tests:	%	Lab work:	%	Shop work:	%	Total:	100%

**Details (if necessary):**

**Typical Course Content and Topics**

1. What is conservation biology?
2. Society and conservation
3. Biological diversity – students will identify species and measure the biological diversity in a local park or an area of UFV campus
4. Populations and species at risk
5. Extinction
6. Conserving species – students will prepare a poster suitable for grade 7-8 students on an endangered animal and the conservation efforts being done to preserve it
7. Protected areas: students will read Ferreira MI, Shaw P, Sakaki GK, Alexander T, Donnini JG, Rego VV. Collaborative governance and watershed management in biosphere reserves in Brazil and Canada. *Revista Ambiente & Água*. 2018 Jun 4;13 and discuss how inclusion of indigenous views are necessary in protected areas.
8. Restoration ecology
9. Sustainable development
10. Create a management plan to increase biodiversity in suburban areas: students will go to a local park or an area of UFV campus and measure the biodiversity of the sites and prepare a plan to increase the biodiversity of the site. Students will design their own sampling methods for working in the field.