



School of Science
BIOL 230
Conservation Biology
Term: Winter
Number of Credits: 3

Course Outline

INSTRUCTOR: Tara Stehelin, BSc, MSc, PhD

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TIME/DATES: M/W 2:30 – 4:00 (lectures)

OFFICE HOURS: *anytime*, email me, but scheduled office hours are Thurs. 12:00 – 1:30

COURSE DESCRIPTION

This is an introductory course assessing the essentials of a broad and sometimes value-laden discipline addressing the crisis faced in the management of species at risk. The diversity of life on the planet earth is the focus, its values, its threats and potential solutions to its demise. Three aspects will be emphasized: basic factual content and principles; individualized research and reporting; class interaction and discussion skill.

COURSE REQUIREMENTS

Prerequisites: For students taking the course as BIOL 230: BIOL 101 at YU or equivalent.

EQUIVALENCY OR TRANSFERABILITY

Please see the University Website for information on transferability:

<https://www.yukonu.ca/admissions/transfer-credit>

LEARNING OUTCOMES

Upon successful completion of this course students will be able to do the following,

1. understand the scope, nature of, and reasons for the biodiversity crisis faced by life on planet Earth, including identifying the places where biodiversity is greatest and under the greatest threat,
2. understand and verbalize ethical debates about the role of humans in creating biodiversity collapse,
3. understand and pose arguments of threats to and the nature of the threats to all life on earth by the loss of diversity,
4. understand the process of extinction and impacts to population, community and ecosystem,
5. understand and apply methods for using statutes and other public processes for cataloguing, assessing, and listing species according to the risks for extinction, and outlining basic recovery strategies for species at risk, and
6. utilize the practise of defending and proposing management strategies to address biodiversity crises in verbal presentation and debate in a small public forum.

COURSE FORMAT

This course will be delivered with the following breakdown per week: three hours of lecture (in two 1.5-hour blocks), and at least one field trip per semester. Although it will vary from individual to individual, students should expect to spend 4 hours on course material outside of the classroom time per week on studying or completing assignments.

Delivery format

This course will be delivered in a face-to-face (in person) format. However, lectures may be attended remotely and recorded to be watched later (upon request). Students will be expected to access the YU online learning platform for additional material (Moodle).

EVALUATION

The course grade will be determined as follows:

Midterm Exam	15 %
Course and Discussion participation	20 %
Advocacy Paper, Presentation and/or Poster	35 %
Final Exam	30 %
Total	100%

Students are expected to participate actively in classroom discussions and debates, including presenting an informed viewpoint based on previously-conducted research. A portion of the marks will be assigned based on active classroom participation.

COURSE WITHDRAWAL INFORMATION

The Last date to withdraw without academic penalty is Mar. 11, 2022. The Last date to apply to graduate is Feb. 15, 2022. Refer to the YukonU website for other important dates.

<https://www.yukonu.ca/admissions/important-dates>

TEXTBOOKS & LEARNING MATERIALS

Students are required to purchase a textbook; either as a hard copy from the YU bookstore, or another source if they prefer.

Sher, A and R. Primack. 2020. *Introduction to Conservation Biology, 2nd Edition*. Oxford University Press. ISBN-13: 9781605358970

Students will be expected to read and understand scientific articles relating to course material.

ACADEMIC INTEGRITY

Students are expected to contribute toward a positive and supportive environment and are required to conduct themselves in a responsible manner. Academic misconduct includes all forms of academic dishonesty such as cheating, plagiarism, fabrication, fraud, deceit, using the work of others without their permission, aiding other students in committing academic offences, misrepresenting academic assignments prepared by others as one's own, or any other forms of academic dishonesty including falsification of any information on any Yukon University document.

Please refer to Academic Regulations & Procedures for further details about academic standing and student rights and responsibilities. <https://www.yukonu.ca/policies/academic-regulations>

www.yukonu.ca

ACADEMIC ACCOMMODATION

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this course. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon University Academic Regulations (available on the Yukon University website). It is the student's responsibility to seek these accommodations by contacting the Learning Assistance Centre (LAC): LearningAssistanceCentre@yukonu.ca.

TOPIC OUTLINE

WEEK	TOPIC	Chapters and notes
1	Course Introduction <i>First class Jan. 5th</i>	CH 1
2	What is biodiversity? Where is the greatest biodiversity found? Values of biodiversity Ecological Economics	CH 2 CH 3
3	Threats to biodiversity Overexploitation, invasive species and Disease	CH 4
4	Extinction Measuring extinction	CH 5
5	Problems of small populations	
6	Conserving populations and species Applied population biology Midterm Exam Feb 16th	CH 6
	READING WEEK – NO CLASSES	Feb. 21 – 24th
8	Legal protection of species Protecting biodiversity and bringing species back from the brink Habitat destruction, fragmentation, Degradation and global climate change	CH 6, <i>continued</i> CH 7
9	Protected areas Landscape ecology Managing protect areas	CH 8
11	Ecosystem management Restoration ecology	CH 9 CH 10
12	The challenges of sustainable development	CH 11
13	An agenda for the future Council of all Beings Course Review, <i>Last class April 11th</i>	CH 12
	Final Exam during Apr. 13th – 23th	