

APPLIED SCIENCE AND MANAGEMENT
BIOL 230
Credit Course
Winter 2020



COURSE OUTLINE

BIOL 230

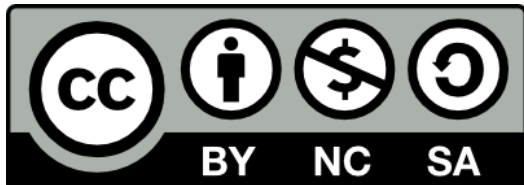
CONSERVATION BIOLOGY

3 CREDITS

PREPARED BY: Larry Gray, Instructor
DATE: January 3, 2020

APPROVED BY: Stephen Mooney, Dean
DATE: January 10, 2020

APPROVED BY ACADEMIC COUNCIL: Click or tap to enter a date
RENEWED BY ACADEMIC COUNCIL: Click or tap to enter a date



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BIOL 230 CONSERVATION BIOLOGY

INSTRUCTOR: Larry Gray	OFFICE HOURS: Mon, Wed, 1 - 2:30 pm.
OFFICE LOCATION: A2303	CLASSROOM: A2402
E-MAIL: lgray@yukoncollege.yk.ca	TIME: M, W 10:30 am. - noon
TELEPHONE: 867-456-8607	DATES: Jan. 6 - April 15

COURSE DESCRIPTION

This is an introductory course assessing the essentials of a fairly 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; and Class interaction and discussion skill.

PREREQUISITES

BIOL 102 or equivalent. Alternatively, 2nd year standing and permission of the instructor.

RELATED COURSE REQUIREMENTS

Attendance and Participation

Attendance at all videoconference sessions is mandatory. Unexcused absences in excess of 10% of scheduled activities may result in dismissal from the course at the instructor's discretion.

EQUIVALENCY OR TRANSFERABILITY

This course is new/newly developed/recently re-developed, and its transferability is still being evaluated. Receiving institutions always determine course transferability. Further information and assistance with transfers may be available from the School of X.

LEARNING OUTCOMES

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

- Students will be able to clearly understand the nature of and the reasons for the biodiversity crisis faced by life on earth. The places on the planet where biodiversity is greatest and under the greatest threats will be understood.
- Students will be able to understand and verbalize ethical debates about the role of humans in creating biodiversity collapse.
- The nature of the threats to all life on earth by the loss of diversity will be understood. Arguments against the threats posed by the loss of diversity will be exposed clearly.

- d) The process of extinction and the nature of population, community and ecosystem collapse will be understood.
- e) Methods for using statutes and other public processes for cataloguing, assessing, and listing species according to the risks they are under for extinction will be understood and applied.
- f) The basic recovery strategies for species at risk will be understood.
- g) Students will learn to use the concepts of defending and proposing management strategy addressing biodiversity crisis in verbal presentation and debate in small public forum.

COURSE FORMAT

There will be two 1 ½ hour lectures each week, a course website and at least 1 field trip.

ASSESSMENTS:

Students will keep a journal and undertake a major research project.

EVALUATION:

ASSIGNMENT	%
Journal	45%
Advocacy Paper, Poster, Presentation	45%
Council of All Beings	10%
TOTAL	100%

REQUIRED TEXTBOOKS AND MATERIAL

There is no formal textbook. A compendium of selected readings and on-line resources will form the text for the course.

ACADEMIC AND STUDENT CONDUCT

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/ Admissions & Registration web page.

PLAGIARISM

Plagiarism is a serious academic offence. Plagiarism occurs when a student submits work for credit that includes the words, ideas, or data of others, without citing the source from which the material is taken. Plagiarism can be the deliberate use of a whole piece of work, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Students may use sources which are public domain or licensed under Creative Commons; however, academic documentation standards must still be followed. Except with explicit permission of the instructor, resubmitting work which has previously received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the course. Plagiarism may also result in dismissal from a program of study or the College.

YUKON FIRST NATIONS CORE COMPETENCY

Yukon College recognizes that a greater understanding and awareness of Yukon First Nations history, culture and journey towards self-determination will help to build positive relationships among all Yukon citizens. As a result, to graduate from ANY Yukon College program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see www.yukoncollege.yk.ca/yfnccr.

ACADEMIC ACCOMMODATION

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon College Academic Regulations (available on the Yukon College website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, he/she should contact [the Learning Assistance Centre \(LAC\): lac@yukoncollege.yk.ca](mailto:the.Learning.Assistance.Centre@yukoncollege.yk.ca).

TOPIC OUTLINE

WEEK	DATE	TOPIC
1	January 6, 8	Course Introduction What is Conservation Biology?
2	January 13, 15	What is Biodiversity? Where is the World's Biodiversity Found?
3	January 20, 22	Ecological Economics
4	January 27, 29	Indirect Use Values Ethical Values
5	February 3, 5	Extinction
6	February 10, 12	Vulnerability to Extinction
7	February 17, 19	Habitat Destruction, Fragmentation, Degradation and Global Climate Change
10	February 24, 26	Overexploitation, Invasive Species and Disease
11	March 2, 4	Problems of Small Populations Applied Population Biology
12	March 9, 11	Establishing New Populations
13	March 16, 18	READING WEEK - NO CLASSES ☹
	March 23, 25	Ex Situ Conservation Strategies
14	March 30, April 1	An Agenda for the Future
15	April 6, 8	Course Review Council of All Beings