



UNIVERSITY OF
ALBERTA



RENR 364 / BIOL 230 PRINCIPLES OF MANAGING NATURAL DIVERSITY / CONSERVATION BIOLOGY

In Winter 2021, BIOL 230, *Conservation Biology*, is being offered at Yukon University concurrent with the University of Alberta's RENR 364, *Principles of Managing Natural Diversity*, as part of the Northern Environmental and Conservation Sciences, B.Sc. Program. All students registered in BIOL 230 or RENR 364 must adhere to requirements outlined in this course syllabus. University of Alberta students must also be aware of, and adhere to, the University's Code of Student Behaviour, referenced in the outline; Yukon University students must be aware of, and adhere to, Yukon University Academic Regulations, also referenced in the outline.

INSTRUCTOR:	Tara Stehelin, PhD Instructor, Biology, Yukon University
OFFICE HOURS:	Thursdays 12:30-2:00
OFFICE LOCATION:	A2806
TELEPHONE/E-MAIL:	456-8607 / tstehelin@yukonu.ca

DAYS & TIMES:	Mondays 1:00 – 2:30 (synchronous, online via Zoom) Wednesdays, asynchronous (online via Moodle video)
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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; class interaction and discussion skill.

STUDENT LEARNING OUTCOMES AND COMPETENCIES

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 (3-0-0)

The course content will be covered in one 1.5 hour synchronous lecture using Zoom and one asynchronous lecture or activity online per week, and possibly two short field trips during class time (TBA depending on Covid-19 restrictions)

Due to public health measures of Covid-19 to prevent the spread of the SARS-Cov2 virus, this course will be taught online using Zoom and Moodle platforms for the Winter 2021 offering. Students planning to take this course are required to have access to a computer with internet. It is the student's responsibility to be familiar with accessing course materials via YukonU's Moodle system and how to use the Zoom video conferencing platform. YukonU's Information Technology Services website contains information on support for how to use Moodle and Zoom platforms <https://www.yukonu.ca/student-life/technical-resources>

PREREQUISITES

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

For students taking the course as RENR 364: Registration in YukonU/University of Alberta Environmental and Conservation Sciences degree program, and successful completion of UofA BIOL 108 or YU BIOL 101, or equivalent.

REQUIRED TEXTBOOKS OR MATERIALS

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

Selected readings (textbook not needed) from

Schneider, R. R. 2019. *Biodiversity Conservation in Canada, from Theory to Practise*, Publisher: The Canadian Centre for Translational Ecology
ISBN: 978-1-9995078-0-0

UNIVERSITY OF ALBERTA ACADEMIC INTEGRITY AND CODE OF STUDENT BEHAVIOUR

Academic Integrity

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at <http://www.governance.ualberta.ca/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx>) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All students at the University of Alberta are subject to the Code of Student Behaviour, as outlined:

<https://www.ualberta.ca/governance/resources/policies-standards-and-codes-of-conduct/code-of-student-behaviour>.

Please familiarize yourself with it and ensure that you do not participate in any inappropriate behavior as defined by the Code. Key components of the code include the following statements.

30.3.2(1) No Student shall submit the words, ideas, images or data of another person as the Student's own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study.

30.3.2(2) No Student shall in the course of an examination or other similar activity, obtain or attempt to obtain information from another Student or other unauthorized source, give or attempt to give information to another Student, or use, attempt to use or possess for the purposes of use any unauthorized material.

30.3.2(2) b No Student shall represent or attempt to represent him or herself as another or have or attempt to have himself or herself represented by another in the taking of an examination, preparation of a paper or other similar activity. See also misrepresentation in 30.3.6 (4).

30.3.2(2) c No student shall represent another's substantial editorial or compositional assistance on an assignment as the Student's own work.

YUKON UNIVERSITY ACADEMIC STANDARDS AND REGULATIONS

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 (section 4.0 on Academic conduct)

https://www.yukonu.ca/sites/default/files/policies/Academic%20Regulations_Effective%20Jul%201%202020%20-%20Dec%2031%202020.pdf

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 University.

YUKON FIRST NATIONS CORE COMPETENCY

Yukon University 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 University program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see www.yukonu.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 University Academic Regulations. 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@yukonu.ca.

EQUIVALENCY/TRANSFERABILITY

BIOL 230 transfers as: UBC, UVIC, UNBC, SFU: 3 Credits, 200 level.

For current information on course transferability see <http://www.bctransferguide.ca>

Or see the Yukon University Website for information on transferability:

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

COURSE REQUIREMENTS/EVALUATION

Course participation – active participation in and listening to discussions/debates, including some previously conducted research on a particular viewpoint (20%)

Midterm exam (15%)

Advocacy Paper, Presentation & Poster (35%): Students will be required to prepare an advocacy paper and will present on this topic in a 10-15 minute oral presentation on a conservation biology issue (may be species or ecosystem focused). The report will summarize the scientific knowledge about a particular species or ecosystem followed by a persuasive explanation and argument for some recommended conservation action which the student is

urging the assembled ‘decision makers’ to adopt. The paper and presentation will also be summarized in the form of a poster for public display.

Credit for ENCS 364 will involve successfully preparing and presenting a comprehensive research paper as part of this project: details will be provided in class.

Final Exam (30%)

Assignment of grades

The total numerical score will be converted to a letter grade on Yukon University’s letter grading system.

Topic Outline

WEEK	TOPIC	Chapters and notes
1	Course Introduction <i>First class Jan. 4th</i>	CH 1
2	What is <i>Biodiversity</i> ? Where is the greatest biodiversity found?	CH 1 CH 2
3	Values of biodiversity	CH 3
4	Threats to biodiversity Extinction Problems of small populations	CH 4 CH 5
5	Conserving populations and species Applied population biology	CH 6
6	Vulnerability to extinction <i>Midterm Exam Feb 17th</i>	CH 7
	READING WEEK – NO CLASSES	<i>Feb. 22 – 25th</i>
8	Legal protection of species Protecting biodiversity and bringing species back from the brink	CH 7
9	Protected areas Landscape ecology	CH 8
10	Managing protected areas Ex Situ Conservation strategies	
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	CH 12
	<i>Final Exam between Apr. 14th – 27th</i>	