



## REN R 464

### Renewable Resources (REN R) 464 Conservation and Management of Endangered Species

In Winter 2018, the University of Alberta's REN R 464 is being offered as part of the Northern Environmental and Conservation Sciences, B.Sc. Program at Yukon College. All students registered 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 this outline.

---

**INSTRUCTOR:** Dave Mossop  
Emeritus professor, biology

**OFFICE HOURS:** most mornings, (Fridays often in field)

**OFFICE LOCATION:** Yukon Research Centre office 08

**TELEPHONE/E-MAIL:** (867) 668-8736 dmosso@yukoncollege.yk.ca

---

**CLASS DAYS & TIMES:** Tuesdays and Wednesdays 13:00 to 14:30

**CLASS LOCATION:** A2315

---

#### **COURSE DESCRIPTION:**

This course is designed to have students gain hands-on experience applying theoretical considerations for assessing the risk status of natural populations and species. Canadian, and international strategies will be applied and assessed. Factors contributing to species vulnerability, decline and extinction risk are discussed. Focus is primarily on sub-arctic and arctic species, primarily those in the Pacific North-west.

#### **COURSE PREREQUISITES:**

Yukon College BIO 230 (Conservation Biology) or U of A REN R 364 (Managing Natural Diversity) or equivalent introductory conservation biology course.

**COURSE FORMAT:**

The course requires that students apply and synthesize knowledge gained from previous courses and their own experience. Two 1.5 hr lecture periods a week include lectures by the course instructor as well as guest lectures from outside experts and course projects that involve teamwork and collaboration with fellow students.

In the course assignments, students will experience the entire Canadian species-at-risk designation and recovery process, from status report writing to species assessment meetings, and finally, to producing a recovery strategy. Students can work collaboratively in teams and complete 3 assignments on a species 'at-risk': 1) write a species viability assessment, 2) give and defend the assessment in a class presentation (mock COSEWIC assessment meeting), and 3) write a recovery strategy

**STUDENT LEARNING OUTCOMES AND COMPETENCIES:**

Focus is on the natural vulnerability and anthropogenic factors leading to the designation of species as 'at risk' of extinction, as well as strategies for their recovery. At course completion students will have an understanding of:

- The extent and history of Canadian species at risk
- The processes of determining if species are at risk of becoming endangered through science-based viability analysis
- Policy, legislation and regulations: international, national, and territorial provisions
- An overview of international species-at-risk conservation initiatives
- An in-depth knowledge of the Canadian and species-at-risk conservation and management processes
- Recovery planning including monitoring strategies, captive breeding programs; habitat restoration, removal of invasive exotics, and control of human caused mortality.
- Species vs. systems approaches to conservation of endangered wildlife.

**REQUIRED TEXTBOOKS/MATERIALS:**

Students in this course should keep their introductory texts from the prerequisite courses handy. Concepts and materials from earlier encountered study will probably be necessary for review.

- Additional reading material will be provided in class or put on reserve in the library.

## **UNIVERSITY OF ALBERTA/YUKON COLLEGE ACADEMIC INTEGRITY AND CODE OF STUDENT BEHAVIOUR**

### **Academic Integrity**

The University 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 [www.governance.ualberta.ca](http://www.governance.ualberta.ca)) and avoid any behavior 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.

### **Code of Student Behaviour**

All students are subject to the Code of Student Behavior, as outlined at: <http://www.governance.ualberta.ca/en/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx> 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) c. No Student shall represent another's substantial editorial or compositional assistance on an assignment as the Student's own work.

## **PROFESSIONALISM AND CLASSROOM RULES OF ENGAGEMENT**

Students are expected to attend all lectures and field trips, be engaged and courteous in all course activities, and to be on time for class. Please do not use cellular phones during class. Laptops are permitted for note taking and in-class work; however, please do not use laptops in class for non-class-related activities.

## **COURSE REQUIREMENTS/EVALUATION:**

### **Exams**

Two term exams will test understanding of lecture material, one at the half way point in the course and one at the end.

## **Due Dates and Late Assignments**

Assignments are due on the dates given in class and will be deemed late if more than one lecture period late, (one mark forfeit for each lecture period) and will be deemed unacceptable if four lecture periods late (two weeks).

## **Field trips:**

Attendance at field trip portions of the course is mandatory; no alternative activity will be provided; students must be prepared to forfeit marks involved in field activities are not attended.

**ELECTRONIC DEVICES:** none in exam periods

## **RECORDING OF LECTURES, LABS, ETC.:**

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

## **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](http://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:lac@yukoncollege.yk.ca).

### **Marking and Grading**

Mid-term Exam: in class	<b>15%</b>
End-term Exam: (room TBA)	<b>20%</b>
Assignments:	
Part 1: Status summary report (due in class, time assigned)	<b>20%</b>
Part 2: Presentation/participation at mini-COSEWIC mtg in class) -	<b>20%</b>
Part 3: Recovery plan (Due date assigned)	<b>20%</b>
Team (self) evaluation (Due via email)	<b>5%</b>

### **TENTATIVE SCHEDULE OR TOPIC OUTLINE:**

The following is a tentative schedule of lecture topics (guest lectures additional)

#### **Lecture**

#### **TOPIC**

Review concepts:

- Introduction; Biodiversity Crisis
  - What is Conservation Biology; basic concept review
- Vulnerability concept and criteria
- Risk concept and factors causing
- Concept and application of species viability analysis

The processes of species at risk management:

- Endangered species legislation
- Assessment process – IUCN, Canada, possibly other provinces
- Assessment (EXAMPLES and workshop lecture)
  
- Recovery Planning
- Mini COSEWIC
- Multispecies Recovery
- Ex-situ conservation
- Assessment elsewhere – European, Australia