Division of Applied Science & Management
RRMT 121
3 Credit Course
Fall, 2019

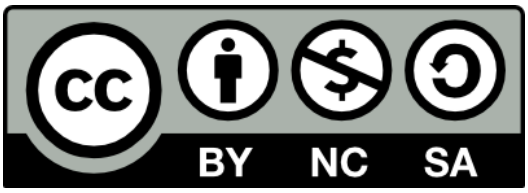
COURSE OUTLINE
RRMT 121

Northern Field Biology Lecture
Northern Field Biology Laboratory

3 CREDITS

PREPARED BY: Darrell Otto, Instructor DATE: August 30, 2019
APPROVED BY: Name, Title

APPROVED BY ACADEMIC COUNCIL:
RENEWED BY ACADEMIC COUNCIL:



Northern Field Biology

INSTRUCTOR: Darrell Otto
OFFICE LOCATION: A2303
E-MAIL: dotto@yukoncollege.yk.ca
TELEPHONE: 867.668.8868

CLASSROOM: Lecture: A2210, Lab: A2805
TIME: see schedule below
DATES: Sept. 6 – Dec 6, 2019

COURSE OFFERINGS (Days and Times)

Lectures: Tuesdays/Fridays: 1030 – 1155h
Room: A2210
Duration: Sept. 6 to Dec. 6, 2019
Labs: Thursday 1000-1255h
Room: A2805
Duration: Sept. 5 to December 5, 2019

COURSE DESCRIPTION

This is a one-term introduction to biology focusing on establishing an academic base for the acquisition of skills and knowledge of particular use to field workers in the North. Studies concentrate at the organismal and community level and provide a thorough appreciation of the diversity of northern organisms, community structure and processes. Included are aspects of taxonomy, anatomy, physiology, evolution, genetics and animal behaviour necessary to understand the functioning of northern ecosystems.

LEARNING OUTCOMES

On successful completion of this course students will:

- Understand the principles of biology required for technical fieldwork related to renewable resources management at the organismal through ecosystem scale.
- Possess skills to classify macro-organisms, collect field data and perform basic analyses of ecosystem processes.

DELIVERY METHODS/FORMAT

The course is delivered by lectures/discussions, labs, field studies, and assigned readings. Discussion and small group learning will be encouraged. There are many opportunities for evaluation of lab and fieldwork including a major project/essay, mid-term exam, lab reports, weekly lecture quizzes, and a final exam.

PREREQUISITES

Registration in the Renewable Resources Management program or permission of the instructor is required.

EQUIVALENCY/TRANSFERABILITY

None at this time

COURSE REQUIREMENTS/EVALUATION

ATTENDANCE

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

EVALUATION: (negotiable with majority agreement during initial class meeting)

Essay	15%
Lab Reports	25%
Mid-term Exam	20%
Lecture/Readings Quizzes	5%
Lab Exam	10%
Final Exam	25%
Total	**100%**

LATE ASSIGNMENT POLICY

Deadlines given for laboratory reports will normally be two weeks from the date of the lab. The due date for the major project/essay will be November 19, 2015. Unless there are documented extenuating circumstances, all deadlines are firm and assignments not received by 2359h on the due date may be given a grade of 0.

REQUIRED TEXTBOOKS/MATERIALS

There is no formal text for the course. Readings will be provided.

A plant identification or "field book" specific to the Northern Boreal Forest would be helpful but is not necessary.

Readings and references from other sources may be assigned, either by putting them on reserve in the library or in the form of photocopies.

NOTEBOOKS

For the laboratory sessions you will require a notebook with blank pages as well as a soft pencil and eraser for drawings.

Outdoor Clothing:

Some of our laboratory session will be held outdoors and will proceed regardless of weather conditions. You should check the lab session scheduled each week and bring appropriate footwear and clothing to the lab session.

The Yukon College Renewable Resources policy on alcohol and drug use applies during all field trips.

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.

SYLLABUS

The major course topics and scheduling are detailed below:

LECTURES AND LESSONS:

TENTATIVE CLASS SYLLABUS

WEEK ENDING	LECTURE TOPICS	READINGS	LAB
Sept 6	Course introduction. Biology and the scientific process.		No Lab.
Sept. 13	Organism Classification - Viruses, Prokaryotes		Wetland Plant Families
Sept 20	Plant Characteristics, nonvascular plants, seedless vascular plants, seed plants. Animal evolution/classification. Invertebrates.		Ecosystem Classification
Sept. 27	Molluscs, Annelids and Arthropods Echinoderms and Chordates		Stream and Pond Invertebrates
Oct.4	Vertebrate Evolution Early developmental stages.		Mollusc Dissection
Oct 11	Patterns of gene inheritance. Molecular basis of inheritance		Plant Reproduction.
Oct. 18	**Mid-term Exam.** Evolution of life		
Oct 25	Speciation and classification Tissues		Vertebrate Dissection - Muscles I
Nov. 1	Nutrition and Digestion Respiration and Circulation		Vertebrate Dissection – Muscles II

Nov. 8	Excretion???? Reproduction??? **Essays Due Nov. 19**		Vertebrate Dissection - Digestion
Nov 15	Animal behaviour Population Ecology		Vertebrate Dissection - Circulation
Nov 22	Ecosystem Concepts The Northern Boreal Forest/Taiga	Readings on library reserve	Winter Ecology
Nov. 29	Tundra Plants in Winter	**Readings on library reserve** **Marchand Ch. 3** *On library reserve*	Winter Ecology II
Dec. 6	Animals in Winter	**Marchand Ch. 4** *On library reserve*	**Lab Exam**