

COURSE SYLLABUS

COURSE TITLE: BIOL 312 Life in the North

COURSE CODE: 25835

COURSE CREDITS: 3.0

CLASS SECTION: 01

CLASS LOCATION: THORV 124

CLASS TIME: MWF 8:30 to 9:20 am

WEBSITE: via Blackboard

TERM: 2014-2015 Term 2

DELIVERY: Lecture

START DATE: 5 January 2015

LAB LOCATION: N/A

LAB TIME: N/A

Course Description

Provides students with a greater understanding of the complexity of important concepts and issues related to the land and environment of the North. The course focuses on the impacts of ecological and physical changes of northern ecosystems on the peoples. Emphasis is given to the challenges of sustainability of ecosystems in the Circumpolar North, and to the need for long-term and international stewardship.

Prerequisites: NRTN 101 and 6 credit units in Science (Biol 107, 108, 120 and 121 recommended).

Note: Students enrolled in a B.Sc. Four Year, Three-year or Honours in Biology can use BIOL 312 only to fulfill degree requirement #7 of the B.Sc. This course meets the science requirement for Programs A, B, D.

Learning Outcomes

By the completion of this course, students will be expected to:

1. Have a more detailed ecological and biological knowledge of the general concepts underlying natural resources.
2. Appreciate how scientific studies contribute to the understanding of resource management, ecosystem functioning, and biohazards.
3. Have insight into the complexity of environmental and human systems, and the effects of change on northern ecosystems.
4. Develop interdisciplinary understanding of relationships between cultures of the north, stewardship values, and scientific knowledge.
5. Develop critical thinking, research, and presentation skills.

Information on literal descriptors for grading at the University of Saskatchewan can be found at:
<http://students.usask.ca/current/academics/grades/grading-system.php>

Please note: There are different literal descriptors for undergraduate and graduate students.

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at:
http://www.usask.ca/university_secretary/council/academiccourses.php

The University of Saskatchewan Learning Charter is intended to define aspirations about the learning experience that the University aims to provide, and the roles to be played in realizing these aspirations by students, instructors and the institution. A copy of the Learning Charter can be found at: http://www.usask.ca/university_secretary/LearningCharter.pdf

University of Saskatchewan Grading System (for undergraduate courses)

Exceptional (90-100) A superior performance with consistent evidence of

- a comprehensive, incisive grasp of the subject matter;
- an ability to make insightful critical evaluation of the material given;
- an exceptional capacity for original, creative and/or logical thinking;
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently.

Excellent (80-90) An excellent performance with strong evidence of

- a comprehensive grasp of the subject matter;
- an ability to make sound critical evaluation of the material given;
- a very good capacity for original, creative and/or logical thinking;
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently.

Good (70-79) A good performance with evidence of

- a substantial knowledge of the subject matter;
- a good understanding of the relevant issues and a good familiarity with the relevant literature and techniques;
- some capacity for original, creative and/or logical thinking;
- a good ability to organize, to analyze and to examine the subject material in a critical and constructive manner.

Satisfactory (60-69) A generally satisfactory and intellectually adequate performance with evidence of

- an acceptable basic grasp of the subject material;
- a fair understanding of the relevant issues;
- a general familiarity with the relevant literature and techniques;
- an ability to develop solutions to moderately difficult problems related to the subject material;
- a moderate ability to examine the material in a critical and analytical manner.

Minimal Pass (50-59) A barely acceptable performance with evidence of

- a familiarity with the subject material;
- some evidence that analytical skills have been developed;
- some understanding of relevant issues;
- some familiarity with the relevant literature and techniques;
- attempts to solve moderately difficult problems related to the subject material and to examine the material in a critical and analytical manner which are only partially successful.

Failure <50 An unacceptable performance

Course Overview

The course consists of 50 minute lectures every Monday, Wednesday, and Friday for a total of 37 days. This will result in approximately 30 hours of face-to-face instruction in the lectures. In addition to the lectures, the course includes a written research paper and a presentation, which will be prepared by the students outside of lecture time.

Class Schedule

Week	Module	Readings (Arctic Flora and Fauna)	Evaluation Due Date
1 Jan 5 th - 9 th	Land and Environment	Box 1, 2, 5, 12, & 13 Pages 12, 13, 25, 44, & 45	
2 Jan 12 th - 16 th	Biocomplexity in the North	Box 11, 28, 30, & 31 Pages 41, 88-89, 96, & 93	
3 Jan 19 th - 23 rd	Fisheries	Box 14, 39, 49, 55, 61, 62, 68 Pages 46, 108, 142, 166, 186, 192, 204 Oceans and Seas, pages 183-195	
4 Jan 26 th - 30 th	Fisheries Marine Mammals	Same as Above	
5 Feb 2 nd - 6 th	Industry and Natural Resources	Same as Above	Outline Feb 6 th
6 Feb 9 th - 13 th	Industry and Natural Resources Midterm Examination	Same as Above	Midterm Examination Feb 13 th
Break Feb 16 th - 20 th	Midterm Break		
7 Feb 23 rd - 27 th	Water supply and waste treatment	Same as Above	

8 Mar 2 nd - 6 th	Stewardship	Box 27 Page 86	
9 Mar 9 th - 13 th	Food webs, food, and diet		
10 Mar 16 th - 20 th	Food contamination		Research Paper Mar 20 th
11 Mar 23 rd - 27 th	Radioecology		
12 Mar 30 th – Apr 1 st	Community Health Review		
13 Apr 6 th – 8 th	Presentations		Presentations
	FINAL EXAM		

Midterm and Final Examination Scheduling

Midterm and final examinations must be written on the date scheduled.

Final examinations may be scheduled at any time during the examination period, April 11th – 30th; students should therefore avoid making prior travel, employment, or other commitments for this period. If a student is unable to write an exam through no fault of his or her own for medical or other valid reasons, documentation must be provided and an opportunity to write the missed exam may be given. Students are encouraged to review all examination policies and procedures:

<http://www.usask.ca/calendar/exams&grades/examregs/>

Instructor Information

Contact Information

Mr Paul Dick

Biology 150

716-0946

paul.dick@usask.ca

Office Hours

The instructor will be available by appointment, which can be set by phone call or, preferably, by email. Email responses to specific questions about course materials will be available within one business day or 48 hours, whichever is less.

Instructor Profile

Mr Dick holds an advanced degree (MSc) and teaches undergraduate biology in a number of areas, including introductory biology and animal physiology.

Required Resources

Readings/Textbooks

Arctic Flora and Fauna: Status and Conservation. 2001. Helsinki: Edita (ISBN 9979-9476-5-9).

Available free online at: <http://library.arcticportal.org/1295/>

2 copies are also on reserve at the Sciences library.

Electronic Resources

The written assignment and presentation for this course will require a working knowledge of computers and various computer programs, most notably word processing and presentation software. In addition, students will be required to use online databases to do research for their paper, including the University library website.

Downloads

These will be available as appropriate through the course Blackboard. The only required document is the course syllabus. The instructor's Powerpoint slides may be provided as a courtesy. You are not required to download or print these slides.

Grading Scheme

Research Paper	20%
Research Paper Outline	10%
Presentation	10%
Midterm Exam	20%
Final Exam	40%
Total	100%

Evaluation Components

Research Paper

Value: 20% of final grade

Due Date: See Course Schedule

Description: Student will prepare research paper on a topic of interest related to the course. Students may choose their own topic, to be approved by the instructor. Further details will be provided in class, including format and reference style.

Research Paper Outline

Value: 10% of final grade

Due Date: See Course Schedule

Description: Students will prepare a one or two page outline of their research paper, including references. Further details will be provided in class.

Presentation

Value: 10% of final grade
Due Date: See Course Schedule
Description: A 10 minute oral presentation on the written research paper, presented to the class. Details will be provided in class.

Midterm Exam

Value: 20% of final grade
Date: See Course Schedule
Length: 50 minutes
Format: Short answer and multiple choice questions; marked by instructor
Description: Will include all lecture material to the end of.

Final Exam

Value: 40% of final grade
Date: See Course Schedule
Length: 1.5 hours
Format: Short answer and multiple choice questions; marked by instructor
Description: The exam will focus on material covered after the midterm exam.

Submitting Assignments/Student Feedback

Assignments must be submitted electronically through Blackboard by 4:30 on the day they are due. They will be graded and returned within 2 weeks, barring unforeseen circumstances.

Late Assignments

Assignments will be docked 10% of the final mark for each day are late, including weekends and holidays.

Criteria That Must Be Met to Pass

Students must write the final exam in order to pass the course. Students who do not write the final exam will be assigned a final course grade of 49% or lower, depending on their performance in other aspects of the course, along with a grade comment of ING (Incomplete Failure). The final grade will be adjusted if a deferred final exam is written (see below).

Attendance Expectations

Students are expected to attend all scheduled lectures. Examinations must be written on the date scheduled. If a student is unable to write a midterm exam through no fault of his or her own for medical or other valid reasons, documentation must be provided and an opportunity to write the missed exam may be given. **Students who miss the final exam must contact the College and apply for a deferred final exam.** Deferred exams may utilize a different format than the regular exam, at the sole discretion of the instructor.

Students are encouraged to review all University examination policies and procedures at <http://policies.usask.ca/policies/academic-affairs/academic-courses.php#examinations>

Integrity Defined (from the Office of the University Secretary)

The University of Saskatchewan 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 Student Conduct & Appeals section of the University Secretary Website and avoid any behavior that 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 should read and be familiar with the Regulations on Academic Student Misconduct (http://www.usask.ca/university_secretary/honesty/StudentAcademicMisconduct.pdf) as well as the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals (http://www.usask.ca/university_secretary/honesty/StudentNon-AcademicMisconduct2012.pdf)

For more information on what academic integrity means for students see the Student Conduct & Appeals section of the University Secretary Website at:
http://www.usask.ca/university_secretary/pdf/dishonesty_info_sheet.pdf

Examinations with Disability Services for Students (DSS)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Disability Services for Students (DSS) if they have not already done so. Students who suspect they may have disabilities should contact DSS for advice and referrals. In order to access DSS programs and supports, students must follow DSS policy and procedures. For more information, check <http://www.students.usask.ca/disability/>, or contact DSS at 966-7273 or dss@usask.ca.

Students registered with DSS may request alternative arrangements for mid-term and final examinations. Students must arrange such accommodations through DSS by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by DSS.