The Biology of Peatlands
Biology 3xxx

change to 4610?

COURSE OUTLINE SPRING 2017

Instructor:
Dr. Susanne Walford
Department of Biology, CB3014A
Phone: 343-8593
Email: swalford@lakeheadu.ca

Office hours:
Private chatroom, Friday 9-12 am or by appt.

Prerequisites:
Biology 1130FA, or equivalent basic botany or general science course with botany content

Course description:

Examine a broad and diverse range of topics investigating the biology and ecology of peatland ecosystems. Study how they are formed, how they function, their role in the global economy and their role in global carbon cycling. Understand how to best manage, conserve and restore these global resources. Students will complete a major poster presentation encompassing major themes examined throughout the course.

Course Goals:

After successful completion of this course you will be able to...

- Describe and assess peatland forms and functions.
- Explain the role of *Sphagnum* sp. in building and maintaining peatlands.
- Describe how peatlands develop and their relevance as archeological records.
- Describe and assess the biology, hydrology, geology, and chemistry of peatlands.
- Explain common practices used to manage, conserve, and restore the world's peatlands used for economic purposes.
- Describe the role of peatlands in the global carbon cycle as it relates to climate change.

Structure:

- **Textbook readings:** Readings from the textbook will be assigned each week. for most lectures.
- **Additional readings:** Additional readings from peer reviewed journals, government publications, and interest groups are assigned for current interest topics.
- **Online discussions:** Students are expected to participate in all scheduled chat room sessions and contribute to on-line discussion topics by posting relevant content and thoughts.
- **On-line assessments:** There are weekly online quizzes which ensure students have read and comprehend all material. The quizzes will consist of multiple-choice, multi-select, matching, and/or short answer questions.
- **Major presentation:** Each student is expected to prepare a poster on a peatland of their choice. Peatlands must be approved by the instructor to ensure there are no duplicates. Poster content is to consist of major headings supplied by the instructor.

Performance Evaluation:

Activity	Weight
Discussion participation	20%
On-line assessments	30%
Poster presentation	50%

MyCourseLink:

Since this is an online course, access to the instructor and course materials is exclusively delivered through BrightSpace's Desire to Learn platform accessible through MyCourseLink.

Text (mandatory):

Rydin, H. and Jeglum, J.K. The Biology of Peatlands, 2nd ed., 2013. Oxford University Press.

Schedule for Lectures: (*adjust dates for Summer semester as required*)

Week of	Topic of Lecture	Text
May 1	Habitats, diversity, adaptations	Chapters 1-3
	Select poster peatland	Chapter 11
May 8	Sphagnum, soils, archives	Chapters 4-6
May 15	Succession, hydrology, nutrients, light, temperature	Chapters 7-9
May 22	Hydrology, hydromorphology, patterns	Chapter 10
May 29	Productivity and peat accumulation	Chapter 12
June 5	Management, conservation, restoration, climate change	Chapters 13-14
June 12	Last day of classes	Poster due at noon!
June 19	Marks due	

Academic Dishonesty and Plagiarism:

This course will have a zero-tolerance for academic dishonesty and plagiarism. For further information, please refer to the Code of Student Conduct and the Lakehead University Calendar (Section IX).

Plagiarism is taking the ideas or words of others and passing them off as your own. Plagiarism is a type of intellectual theft. Plagiarism can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. Plagiarism can have serious consequences, so it is important that students be aware of what it is, and how to avoid it. If you are citing information from other's on tests and assignments, REFERENCE IT!

It is also plagiarism when you submit an assessment item that has already been submitted for academic credit elsewhere, or to knowingly permit your work to be copied by another student.

There are very serious penalties for plagiarism, ranging from re-submission, reduction of marks (including to zero), failure of the course, and exclusion from the university