

SAMPLE COURSE OUTLINE

Creation date: Jan 10, 2020

Revision date: April 15, 2020

Course Code, Number, and Title:

BIOL 2440: Biology of Algae, Bryophytes and Fungi

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 4.0 h + Lab 2.0 h

Credits: 3

Transfer Credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

Students survey some of the major groups of photoautotrophic organisms including cyanobacteria, algae and bryophytes. They also examine the heterotrophic slime molds and fungi. Major evolutionary themes are covered such as the evolution of multicellular organisms from unicellular cells, the theory of endosymbiosis and horizontal gene transfer, and adaptation to land from a water environment. Emphasis is placed on the evolutionary patterns and processes to explain variations found in their reproductive, life history and growth characteristics. Students participate in a field trip to a regional research station.

Prerequisite: a minimum 'C' grade in both BIOL 1115 and BIOL 1215

Corequisite: BIOL 2105

Learning Outcomes:

Upon successful completion of this course, students will be able to

- Describe how evolution entails changes in the genetic composition of populations.
- Describe the Hardy Weinberg principle and explain the consequence of violating each of the five assumptions.
- Explain the role of natural selection and mutations in speciation.
- Be able to read and construct a phylogenetic tree.
- Describe the theory of endosymbiosis and how it explains the evolution of the chloroplast.
- Discuss the role of symbioses in the evolution of biodiversity.
- Broadly describe the following major groups of organisms: cyanobacteria, phototrophic protists, algae, bryophytes and fungi.
- Define the following genetic terms: alleles, genes, loci, phenotype, genotype, heterozygous, homozygous, quantitative trait, gene pool, and population.
- Obtain practical experience with literature search and presentation skills.

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- Obtain basic laboratory and field skills necessary to continue in botany and mycology.

Instructor(s): TBA

Office: TBA

Phone: (604) 323-XXXX

Email: TBA

Office Hours: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

Biology – R.F. Evert, and S.E. Eichorn. 2012. Raven Biology of Plants, 8th Ed.

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: *This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.*

Assessments and Weighting:

(An example of assessments might be:) %

First midterm: 12.5%

Second midterm: 12.5%

Final exam: 30%

Quizzes: 5%

Projects: 10%

Lab: 30%

Grading System: Letter grade

Specific grading schemes will be detailed in each course section outline.

Information unavailable, please consult Department for details

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

Information unavailable, please consult Department for details

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

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College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

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