

NRMT/BIOL 2050/2051 - Flowering Plant Taxonomy

COURSE OUTLINE WINTER 2019 (ON DESIRE2LEARN)

Lectures: Dr. Ashley Thomson, BB101D, athomson@lakeheadu.ca, 343-8442

Laboratories: Keri Pidgen, BB 1011F, kpidgen@lakeheadu.ca, 343-8519

Teaching Assistant: Masumi Hisano, Mhisano@lakeheadu.ca

Lecture schedule: Mon. & Wed., 4:30 PM– 5:30 PM RB 3049

Laboratory schedule: W1 - Mondays from 9:00 AM – 12:00 PM, BB 1061

INTRODUCTION

This course introduces students to the evolutionary relationships among the flowering plants and the processes that gave rise to their existing taxonomic hierarchy. The systematic identification of Ontario's major flowering plant families is learned in labs. The methods, rules and history of flowering plant taxonomy are presented in lectures. An individual herbarium project is also completed.

LEARNING OUTCOMES

By the end of the course, you should be able to:

- Define the principles and rules of plant nomenclature
- Describe the various forms of taxonomic evidence used to classify flowering plants
- Recognize and describe the key characteristics of different flowering plant families, including their morphological characteristics, ecology, distribution, and principal uses
- Explain the principles of phylogenetic reconstruction and how understanding of evolutionary relationships is applied to the study of plant systematics
- Discuss how variation in reproductive biology, ecology, and chromosome number have contributed to the diversification of flowering plants
- Use an herbarium and know how to access herbarium databases
- Apply taxonomic methodology to identify unknown plant species
- Prepare botanical illustrations and floral diagrams
- Construct your own plant descriptions using botanical vocabulary

ASSIGNMENTS AND EVALUATIONS

Item	Date	Value
Midterm exam	February 13th	20%
Herbarium project	March 20th	10%
Lab assignments and quizzes	TBA	20%
Lab practical	Week of April 1st	20%
Final exam	TBA	30%
Total		100%

WITHDRAWAL DEADLINE: Friday March 8, 2019.

MID-TERM EXAM: A mid-term exam will be held on Wednesday, February 13th. All material covered in the course to this date will be considered when setting the exam.

REQUIRED TEXTS:

Gleason, H.A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. Second Edition. The New York Botanical Garden, Bronx, NY. 910 pp.

Simpson, Michael G. 2010. Plant Systematics. Second Edition. Elsevier Inc, Burlington, MA. 740 pp.

COURSE POLICIES**Attendance**

While there is no formal assessment of attendance in this course, students are encouraged to attend all lecture and laboratory periods to maximize their learning benefit. Students who cannot attend class for legitimate reasons are asked to contact the course instructor immediately to catch up on any material that they might have missed.

Students who miss class due to illness will be asked to provide a doctor's note if they wish to be given the opportunity to complete any missed assignments or quizzes. Varsity athletes may be asked to provide notes from their coaches to verify the legitimacy of absences associated with their participation in university sporting events.

Assignments and Exams

Completion of the herbarium project, midterm and final exams, and lab practical exams is mandatory to pass the course. Otherwise, an incomplete mark will be assigned for the course.

Quizzes will be administered each week at the start of the laboratory period (9:00 AM sharp!). Quizzes missed due to tardiness or unexplained absences will receive a grade of zero.

Lab assignments are due on the same day that they are assigned and must be handed in before leaving the laboratory. Late assignments will not be accepted.

The herbarium assignment must be submitted on D2L before 11:59 PM on March 20th, 2019. Late assignments will be accepted up to 24 hours past the due date at a penalty of 30%. Assignments that are more than one day late will not be accepted.

Laboratories

Students should come prepared to lab each week with the textbook (Plant Systematics), blank paper for botanical drawings, a pencil (2b or hb), eraser, and the printed lab assignment from D2L. In addition, there will be a quiz at the beginning of lab each week based on last week's material.

Regulations

General Information from the [Academic Calendar](#):

“It is the responsibility of each student registered at Lakehead University to be familiar with, and comply with all the terms, requirements, regulations, policies and conditions in the Lakehead University Academic Calendar. This includes, but is not limited to, Academic Program Requirements, Academic Schedule of Dates, University and Faculty/School Policies and Regulations and the Fees and Refund Policies and Schedules.”

Plagiarism and Academic Misconduct

The University takes a most serious view of offences against academic honesty such as plagiarism, cheating and impersonation. Plagiarism of any form will not be tolerated and penalties for dealing with such offences will be strictly enforced. First infractions will result in a mark of zero for the affected assignment and any subsequent infractions will be reported to the Natural Resources Management Dean's office for disciplinary procedures.

Plagiarism is defined in [University Regulation IX](#) with additional examples in Article I, Section 1 of The Code. Sanctions associated with Academic Misconduct are defined in Article II of The Code and Enforcement Procedures are outlined in Article III of The Code.

Students wishing to learn more about Academic Misconduct are encouraged to read the [University and relevant Faculty Regulations](#) and The Code (noted above), access other resources on the [Teaching Commons](#) website, or come and speak with me during office hours.

University Policies

All University Policies can be found [here](#). Pay attention to those found under the Category of “Regulations” and “Student-Related”.

Support for Students

There are many resources available to support our students. These include but are not limited to:

- [Health and Wellness](#)
- [Student Success Centre](#)
- [Student Accessibility Centre](#)
- [Library](#)
- [Academic Support Zone](#)

Inclusivity

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities and/or medical conditions to ensure they have an equitable opportunity to participate in all their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to register with Student Accessibility Services (SAS) as soon as possible. For more information, please contact Student Accessibility Services (SC0003, 343-8047 or sas@lakeheadu.ca) <http://studentaccessibility.lakeheadu.ca>