

**NRMT /Biol 3217
Forest Entomology
Course syllabus
Winter 2017**

INSTRUCTORS: Dr Victoria Te Brugge (Lectures)
Orillia: OA 3021
Phone: (705) 330-4008 ext 2613
Email: vtebrug@lakeheadu.ca
OFFICE HOURS: Email or phone

Steven Beery (Thunder Bay Laboratories)
Thunder Bay: CB1011
email: sbeery@lakeheadu.ca
OFFICE HOURS: TBA

TEXTS: Required: None

Suggestions: Forest Entomology, A global perspective. William Ciesla
2011, Wiley-Blackwell. 416 pp.

Insects: Their natural history and diversity: With a
photographic guide to insects of eastern North America.
Stephen Marshall, Firefly books, 2006, 720 pp.

How to Know the Insects. Bland and Jaques.
W.C. Brown Co., Dubuque Iowa. 1978, 409 pp.

Photographic Atlas of Entomology & Guide to Insect
Identification, Castner, J.A. 2001.

Lab Manual: Posted on the course website (Modified from L. Sevean,
Forest Entomology Laboratory Guide)

LECTURES: Monday and Wednesday 5:30-7:00 pm

LABORATORY: Tuesday 8:30-11:30 am, BB1006
First lab: January 17

EVALUATION:

Lecture midterm test	13%
Insect research presentation 1	8%
Insect research presentation 2	12%
Participation	7%
Lecture final exam	20% (comprehensive)
Lab assignments	3%
Quizzes	7%
Lab midterm	15%
Lab Final	15%

COURSE OBJECTIVES:

This course examines the theory and practice of Forest Entomology. In the course you will become familiar with the major insect orders and some families. Emphasis will be placed on the biology, ecology and damage caused by insect species that threaten or cause damage to forests. You will become familiar with current methods and strategies for controlling these insects and limiting the damage they cause to forests. Laboratory periods will focus on insect anatomy and classification. At the end of the course you should be able to identify and recognize select insect orders, families and species.

Important things to remember

1. Attend Lectures and Laboratories
2. Make good notes /ask questions
3. Read your lecture and laboratory materials
4. Make a list of scientific terms
5. Be prepared for laboratories
6. Keep neat, clear and detailed notes

Attendance in class is important because you get additional information through questions and discussions. Laboratories will not be available for missed material.

If a test or due date is missed because of medical or compassionate reasons (documentation may be required), you must contact the instructor as soon as possible.

Prior permission is required to miss a test or exam due to any other reasons and it is at the instructor's discretion.

Be courteous to others in class. Unnecessary noise, comments and any kind of distractions in class will not be tolerated. Cell phones should be turned off during lectures and labs.

A lab notebook is suggested (available at the campus bookstore) to be brought with you to all laboratories.

In both the lecture and laboratory there are assignments to be handed in. For all lecture and laboratory assignments be aware that plagiarism is an extremely serious academic offense and carries penalties. Students are encouraged to review the University Regulations regarding academic dishonesty. See LAKEHEAD CALENDAR 2016-2017 University Regulations IX Academic Misconduct (<http://mycoursecalendar.lakeheadu.ca/pg39.html>).

Lecture schedule*

Jan 9/11	Introduction to Forest Entomology/ Insect anatomy external
Jan 16/18	Insect anatomy/physiology
Jan 23/25	Insect reproduction
Jan 30/Feb 1	Insect populations
Feb 6/8	Defoliators
Feb 13	Mid-term
Feb 15	Defoliators

Reading week Feb 20-24

Feb 27/Mar 1	Defoliators
Mar 6/8	Cone and seed eaters
Mar 13/15	Weevils
Mar 20/22	Borers
Mar 27/29	Bark insects
Apr 3/5	Invasive species

Final exam TBA

* There may be some modifications to the lecture topic/schedule.

Lab schedule

Jan 17	Dissection Microscope and External Insect Anatomy
Jan 24	Arthropod Classification and Exopterygotes
Jan 31	Quiz+ Endopterygota
Feb 7	Immature Insects
Feb 14	Quiz+ Defoliation insect and Hardwood defoliators
Feb 20-24	Reading week
Feb 28	Mid-Term Lab Exam
Mar 7	Softwood Defoliators
Mar 14	Quiz+ Beneficial Insects
Mar 21	Leaf Mining Insects, Sap-sucking Insects, Gall Forming Insects
Mar 28	Quiz +Phloem Borers and Xylem Borers
April 4	Final Lab Exam