

**Biology / NRM 3217  
Forest Entomology  
Course syllabus  
Winter 2015**

FILE COPY

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**TEXTS:** Required: None

Suggested:

Forest Entomology  
Bland, R.G. and H.E. Jaques. 1978. How to Know the Insects.  
W.C. Brown Co. Dubuque Iowa. 409 pp.

Castner, J.A. 2001. Photographic Atlas of Entomology & Guide to  
Insect Identification [Spiral-bound]

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

**LECTURES:** Tuesday and Thursday 4:00-5:30 pm  
Thunder Bay, AT 1010

**LABORATORY:** Monday 8:30 – 11:30 am  
Thunder Bay, BB1006  
**First lab: week of January 12**

<b>EVALUATION:</b>	Lecture Midterm	15% (TBA)
	Lecture Final	30% (TBA, comprehensive)
	Insect research paper/ Presentation	15%
	Lab Assignments	3%
	Quizzes	7%
	Lab midterm	15%
	Lab Final	15% (TBA)

### **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 harvestable and saleable timber. You will become familiar with current methods and strategies for controlling these insects and limiting the damage they cause to standing and cut timber. Laboratory periods will focus on insect anatomy. 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 and learn them**
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 2014-2015 University Regulations IX Academic Misconduct (<http://mycoursecalendar.lakeheadu.ca/pg39.html>).

#### Lecture schedule\*

Jan 6/8	Introduction to Forest Entomology/ Insect anatomy external
Jan 13/15	Insect anatomy/physiology
Jan 20/22	Insect reproduction
Jan 27/29	Insect populations
Feb 3/5	Defoliators
Feb 10	Mid-term
Feb 12	Defoliators
<b>Reading week Feb 17-20</b>	
Feb 24/26	Defoliators
Mar 3/5	Cone and seed eaters

Mar 10/12 Weevils  
Mar 17/19 Borers  
Mar 24/26 Bark insects  
Mar 31/Apr 2 Invasive species

**Final exam TBA**

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

Lab schedule

Jan 12 Dissection Microscope and External Insect Anatomy  
Jan 19 Arthropod Classification and Exopterygotes  
Jan 26 Quiz+ Endopterygota  
Feb 2 Immature Insects  
Feb 9 Quiz+ Defoliation insect and Hardwood defoliators  
Feb 17-21 Study break  
Feb 23 Mid-Term Lab Exam  
Mar 2 Softwood Defoliators

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Mar 9	Quiz+ Beneficial Insects
Mar 16	Leaf Mining Insects, Sap-sucking Insects, Gall Forming Insects
Mar 23	Quiz +Phloem Borers and Xylem Borers
Mar 30	<b>Final Lab Exam</b>