

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: FOREST ENTOMOLOGY

Code No.: FOR 112-3

Program: FORESTRY

Semester: TWO

Date: JULY, 1985

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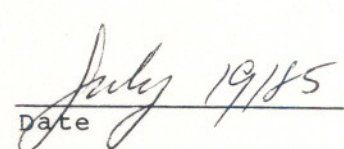
New: _____ Revision: X

APPROVED:

Chairperson



Date



CALENDAR DESCRIPTION

FOREST ENTOMOLOGY

FOR 112-3

Course Name

Course Number

PHILOSOPHY/GOALS: The course focuses on: insect classification, reproduction, damage effect on trees, control - biological and chemical; and interrelationships between insects and disease. The student will study insect problems under hosts, range, life cycle, feeding type and control, with emphasis on the immature (feeding) stage of development.

METHOD OF ASSESSMENT (GRADING METHOD):

Test #1	20%
Test #2	30%
Test #3	40%
Lab Assignments	10%
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	100%
General Performance	10%
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	110% (65% is a pass)

BONUS:

Performance - punctuality
- interest
- initiative
- reliability
- attitude

Start with 10 marks: 1 mark is lost for each late lab or is absent without a good reason.

5 marks are lost for entering lectures late.

Bonus marks up to five in total may be added for outstanding performance, participation, effort or initiative.

TEXTBOOK(S):

Insects of Eastern Pines

FOR 112-3 COURSE OUTLINE...3

(6.01)

1. Identify to a 60% accuracy, 20-30 forest insects of Ontario - Lepidoptera, Coleoptera, Hymenoptera, Diptera, Hemiptera, Homoptera. Under each of the above there would be a specific list of insects, modified annually according to projected forecast.
2. Identify to a 60% accuracy by stating common and/or scientific names of 20-30 forest insects of Ontario by specimens/slide.
3. State the natural succession of insect and disease organisms related to
 - 1) fire
 - 2) the establishment of monoculture
 - 3) harvesting
 - 4) open spaces
4. Describe the impact of temperature, humidity, precipitation and wind on insect outbreaks and/or natural control
5. Recognize and/or describe signs and symptoms to a 60% accuracy, injurious forest insects of Ontario by slides/specimens.

FOR 112-3 COURSE OUTLINE...4

LEARNING OBJECTIVES	CONDITIONS	ACCURACY
List and describe equipment and procedures used in insect population surveys, including traps, foliage, sampling, beater mats	Includes recognize from slides	60%
Describe FIDS procedure for collecting, preserving and recording data	Includes under field conditions	
List and describe "x" (6.02) methods of prevention, e.g. suit sp. to site, discourage monoculture, encourage uneven aged stands, promote vigour	Classroom	
Describe purpose of following: Pest Control Product Act, Environmental Protection Act, Forest Tree Pest Control Act	Classroom	
Safe Use of Pesticides		
Describe the four (6.04) methods of remedial action - exclusion, eradication, protection and resistance - and give a specific example of use of each		
Describe method by which forest pests change species composition and resulting economic and aesthetic value with three examples of each - birch leaf miner - birch leaf skeletonizer - mountain ash sawfly		

FOR 112-3 COURSE OUTLINE...5

LEARNING OBJECTIVES

CONDITIONS

ACCURACY

Describe and give examples of six methods of applied biological control, e.g., virus, pheromone, fungi, parasites, predators, bacteria, hormones

Describe and give at least one example for "x" methods of silvicultural control, e.g., prescribed burn, leader clipping, colony control, (multi) culture

Describe life cycle of 20-30 forest pests of Ontario

Includes recognition in field and by slide/specimen

Five shade tree insects - common name - describe: host, range, life cycle, feeder types and control, birch leaf skeletonizer, birch leaf miner, eastern tent caterpillar, mountain ash sawfly and mites, aphids, scales, bronze birch borer, carpenter ants

Specimens/slides
Field