

Forestry 232

Spring 2009 9:10-10:00AM TTH

Forest Insects and Disease

2 credits

Instructor: Diana L. Six

Office hours: Tues. 10-11, Fri 1-2 and by appointment
Office: BioResearch 104 (across from Health Sciences)
Tel: 243-5573 (last resort)
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TA: Tracy Dahl email:

Office hours:
Office:

Text: A Field Guide to Diseases and Insects of Northern and Central Rocky Mountain Conifers. 2003. Hagle, Gibson and Tunnock. Available from instructor. *Must be returned or you will receive an incomplete in the class.*

CLASS OBJECTIVE: To present a general overview of the major insects and pathogens affecting western North American forests and an introduction to their ecology and management.

EXAMS: Two midterms will be given (each worth 30% of the total grade) and a final (worth 30%). Test questions will come directly from lectures and from handouts and readings. Example exams will be available at least one week before each exam.

NO make-ups will be given without **PROOF** of **EXTREME** hardship!!

FIELD TRIPS: 5% of your grade will be based on field trip attendance. Each student is **required** to attend the field trip that will be offered near the end of the quarter. **No make-ups!**

WRITING ASSIGNMENT: A two-page writing assignment will constitute 5% of your grade. Consequently, it is expected to be complete, well organized, and very well written. One re-grade of the assignment is allowed. The re-grade can be used to gain *up to* 3 points missed in the initial grading of the paper. **No late papers** will be accepted. ***Paper due Feb. 26 in class.***

GRADING SCALE:

100-90%	A
90-80%	B
80-70%	C
70-60%	D
60-0%	F

Your attendance is a critical factor affecting your ability to learn the subject matter and to do well on exams. If you miss a class, make certain you see me to get handouts. Also be certain to get a copy of the notes from someone in attendance that day.

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

All students need to be familiar with the Student Conduct Code. The Code is available for review online at <http://www.umt.edu/SA/VPSA/index.cfm?page?1321>.

Forestry 232 Forest Insects and Disease-Course Outline

<u>Lecture</u>	<u>Date</u>	<u>Topic</u>
1	1/27	Intro to the course: objectives, expectations, reading materials, exams, grading, etc. Importance of insects and pathogens in forest ecosystems
2	1/29	Insect life cycles and biology, Part I
3	2/3	Insect life cycles and biology, Part II
4	2/5	Insect classification, guilds
5	2/10	Forest insect management, Part I. **Reading: Chapter 19 in Forest Health and Protection by Edmonds, Agee, and Gara
6	2/12	Forest insect management, Part II. **Reading: Article: Nealis, V.G. 1991. Natural enemies and forest pest management. The Forestry Chronicle. 67: 500-504
7	2/17	Forest pest management - exotics
8	2/19	MIDTERM I
9	2/24	Forest Insects: Mining, gall, and sap-sucking insects
10	2/26	Forest Insects: Seed and cone
11	3/3	Forest insects: Shoot and root insects
12	3/5	Forest insects: Defoliators
13	3/10	Forest insects: Defoliator management
14	3/12	Forest insects: Phloem and wood-boring insects. Bark beetles
15	3/17	Bark beetle management **Reading: Article: Goyer, RA, MR Wagner and T. Schowalter. Current and Proposed technologies for bark beetle management. Journal of Forestry.

16	3/19	Forest insects: phloem and wood boring insects. Ambrosia beetles, borers, etc.
17	3/24	MIDTERM II
	3/26	NO CLASS
	3/31 - 4/2	SPRING BREAK
18	4/7	Introduction to forest pathology. Causes of disease, epidemiology
19	4/9	Forest pathology methods
20	4/14	Disease management **Reading: Chapter 9 in Principles of Forest Pathology by Tainter and Baker.
21	4/16	Abiotic diseases, vertebrate damage
22	4/21	Mistletoes
23	4/23	Rusts and foliage diseases
24	4/28	Cankers and declines
25	4/30	Decays
26	5/5	Root diseases
27	5/7	Review session
28	TBA	FINAL EXAM

**Reading assignments – these can be found on ERES (the electronic reservation system of the Mansfield Library). The password is: bugs