

**NRMS 232**

Spring 2014 9:10-10:00AM TTH

**Forest Insects and Disease**

FOR301

2 credits

Instructor: Diana L. Six

Office hours: Tues. 10-11 and by appointment (email)  
Office: BioResearch 104 (across from Health Sciences)  
Tel: 243-5573 (last resort)  
email: diana.six@cfc.umt.edu (best way to contact me!!!)

**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 OBJECTIVES and outcomes: 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 and a final (not cumulative) will be given (each worth 30% of the total grade). Test questions will come directly from my 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 COLLECTION: 10% of your grade will be based on your field collection. Due May 5.

GRADING SCALE:

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

- Please note, this class is offered for traditional letter grade only, it is not offered under the credit/no credit option.

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. **I do not post notes or give out copies of mine.**

***Academic honesty***

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> **Cheating WILL get you an F in this course and will be reported to the registrar's office.**

***Students with disabilities***

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommason 154 or 406 243 2243. I will work with you and DSS to provide an appropriate accommodation.

***Important Dates Restricting Opportunities to Drop a Course Spring 2014:***

To 15 <sup>th</sup> instructional day	Students can drop classes on cyberbear	February x = last day
16 <sup>th</sup> to 45 <sup>th</sup> instructional day	Drop requires form with instructor and advisor signature, a \$10 fee from registrar's office, student will receive a 'W'.	February x through April x
Beginning 46 <sup>th</sup> instructional day	Students are only allowed to drop a class under very limited and unusual circumstances. Not doing well in the class, deciding you are concerned about how the class grade might affect your GPA, deciding you did not want to take the class after all, and similar reasons are not among those limited and unusual circumstances. If you want to drop the class for these sorts of reasons, make sure you do so by the end of the 45 <sup>th</sup> instructional day of the semester.	April x

## **NRMS 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 and guilds
5	2/10	Forest insect management, Part I
6	2/12	Forest insect management, Part II
7	2/17	Forest insect management, Part III
8	2/19	Forest insect management, Part IV - exotics
9	2/24	MIDTERM I
10	2/26	Forest Insects: Mining, gall, and sap-sucking insects; Seed and cone insects
11	3/3	Forest insects: Shoot and root insects, defoliators
12	3/5	Forest insects: Defoliator management
13	3/10	Forest insects: Phloem and wood-boring insects: Bark beetles Reading assignment: mountain pine beetle
14	3/12	Mountain pine beetle
15	3/17	Bark beetle management
16	3/19	NO CLASS
17	3/24	Forest insects: Phloem and wood boring insects. Ambrosia beetles, borers, etc.
18	3/26	MIDTERM II
19	3/30-4/3	SPRING BREAK

20	4/7	Introduction to forest pathology, causes of disease
21	4/9	Diagnosis/disease management
22	4/14	NO CLASS
23	4/16	Abiotic causes of disease, vertebrate damage
24	4/21	Foliage diseases and rusts
25	4/23	Cankers, stem pathogens
26	4/28	Decays/forest declines/global tree die-offs
27	4/30	Root diseases
28	5/5	Mistletoes
29	5/7	Anthropogenic change and forest health
30	TBA	Final exam