Reedley College – Natural Resources/Forestry

Spring 2017: 1/11/2017 to 5/17/2017

**FOREST PROTECTION**

**NR 22 – Section 59333**

Wednesdays 6:00 PM – 8:50 PM

Instructor: Michelle Latsch

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Office Hours: By appointment **only**. Instructor is not available on campus except during class hours, so make an appointment. The best method of contact is through email.

Drop Deadline: 3/10/2017

Textbook:  *None Required.*  Additional assigned readings will be given as handouts or provided for download from course site on Canvas.

**Course Description**

This course will cover major forest disease and insect problems, with an emphasis on their recognition and management. It will also include wildland fire prevention and management.

**Course Objectives**

This course is designed to provide students with the principles to evaluate the health of a forest, such as the characteristics of a healthy forest and the possible causes of forest health issues. Students will become familiar with different management treatments for major forest disease and insect problems as well as be able to explain forest disturbances.

This course focuses on the ecological aspects of forest health science and disturbance ecology and how it relates to information that land managers, biologists, and policy makers are likely to require when making decisions associated with forest health.

**Course Outcomes**

In the process of completing this course, students will:

1. Identify different forest diseases and insects

2. Analyze and determine forest health management strategies

3. Determine mechanisms and genetics of disease resistance

4. Identify and explain interactions among various organisms sharing woody plant hosts

**Attendance and Participation**

To be considered present, students should be in class, attentive, properly attired, and ready for classroom or field activities regardless of weather. Missed field trips or exercises cannot be made up. Personal Protective Equipment (PPE) is mandatory for all field exercises. Students who fail to be prepared with all PPE for field trip/exercises will not be allowed to participate, will be dismissed from the day’s exercise, and will be counted as absent for the day. This requirement is for student safety.

**Behavioral Standards**

Students and teachers greatly appreciate attention to appropriate classroom courtesy. Please take care of personal needs before class begins. Foul language or disruption to the class will not be tolerated. There will be no tobacco use in any building or school farm. Safety rules must be strictly followed, including the use of PPE and cautious behavior. Please turn off or silence cell phones when entering the class. Students may not use cell phones during class—this may be considered academically dishonest and is grounds for a failing grade on an assignment or exam. It is not acceptable to bring guests to class. Make every effort to come to class on time. If you are late, it is your responsibility to ensure that you are counted for attendance after class.

**Academic Dishonesty**

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share responsibility to ensure that this education is honestly obtained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonestly in any form is a very serious offense and will incur serious consequences. Refer to the college catalog for further details surrounding actions that will be implemented regarding academic dishonesty.

Plagiarism is the adoption or reproduction of the ideas or words or statements of another person without due acknowledgment. Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers in an attempt to gain an unearned academic advantage. Cheating can take the form of the storing of information in graphing calculators, pagers, cell phones, and other electronic devices. Therefore, no items of any kind may be on the desktop, including water bottles, during testing. Students may not wear hats/caps during testing. Incidents of cheating and plagiarism may result in a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course at the discretion of the instructor and depending upon the severity and frequency of the incidents.

**Accommodations for Students with Disabilities**

If you have a verified need for an academic accommodation or materials in alternate media (e.g. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact me as soon as possible. **A formal counseling assessment to determine the appropriate accommodation is required before any accommodation can be made. The counseling center facilitates the process.**

**Grading Policy**

Grading will be based on the results of assignments/quizzes, field trip summary paper, midterm, and final exams. Assignments must be submitted on the due date or earlier.

Grade Distribution:

A: 315 - 350 points (90-100%)

B: 280 - 314 points (80-89%)

C: 245 - 279 points (70-79%)

D: 210 - 244 points (60-69%)

F: Below 210 points (below 60%)

**Field Trip**

One possible field trip to Reedley College Forest or another appropriate venue will be required. Students will be able to view forest health issues first-hand.

**Required PPE**

Each student must have the following field and protective gear for field exercises.

1. Hard hat

2. Leather gloves

3. Water containers with water adequate for field conditions (1 quart for class period)

4. Boots with leather uppers and rubber non-skid soles

5. Long pants with belt, no cuffs, no holes

6. Long-sleeve cotton work shirt, no holes

7. Food, if necessary

**Term Paper**

One research paper on the forest health topic of your choice will be required to earn up to 100 points during the course of the class. Topics are available on a first-come, first-served basis, so have a backup topic ready when you contact the professor to sign up for a topic. **Final topic selections are due on 1/25/2017**.

The term paper must be 10 pages, not including bibliography. **A rough draft is due on 3/1/2017**. On that day, **bring 4 copies** of your rough draft to class. The class will be participating in peer review of each others’ papers, which will count for 20 points towards the final paper grade.

Other points will be awarded for thoroughness of research and communication of topic, accuracy of ideas, and proper grammar and punctuation of the document.

Bibliography format must utilize MLA format. A guide can be found at: <https://owl.english.purdue.edu/owl>. In-text citations, as described on the aforementioned website, should be formatted as such: Ratio of mature to large trees is a useful measure for quantifying stage of stand development (Lorimer and Frelich 1998).

You may not submit a paper researched entirely online. The professor or the Reedley College Library can suggest sources for you to find appropriate sources.

Professor will be scanning submitted papers for plagiarism. If you have any questions or doubts about whether you are presenting ideas that should be cited as someone else’s ideas or work, please contact the professor. If you read it somewhere, it is not your idea, and you should not be taking credit for that. It is perfectly acceptable for your term paper to not have your original ideas in it because you are learning and research a new topic that you (hopefully) have an interest in. The important idea in this case is that you cite everything you have read in another publication.

**(Class Schedule can be found on following page)**

**Class Schedule**

Subject to change based on instructor’s schedule and discretion. Changes will be communicated in advance of class periods.

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| --- | --- | --- | --- |
| **Class Date** | **Class Topic** | **Assignment** | **Points Available** |
| 1/11/2017 | Introductions/Survey Review of Course Objectives and Syllabus Vocabulary Assignment | Vocabulary Assignment | 20 |
| 1/18/2017 | Healthy and Unhealthy Forests |  |  |
| 1/25/2017 | Term Paper Topics Due Forest Disturbances - Wind, Flood, Herbivory, Earthquakes, Volcanoes, Anthropomorphic |  |  |
| 2/1/2017 | Forest Disturbances - Fire |  |  |
| 2/8/2017 | Introduction to Forest Entomology Forest Pests Biological Control Programs Management of Forest Diseases and Deterioration of Wood Products | Quiz | 10 |
| 2/15/2017 | Forest Pathogens Managing Healthy Forests Pesticides in Forests |  |  |
| 2/22/2017 | Instructor Out Career Day? |  |  |
| 3/1/2017 | Rough Draft of Term Paper Due - bring 4 copies to class Peer Reviews of Term Papers | Quiz | 10 |
| 3/8/2017 | Status of California Forest Health Forest Health Monitoring Midterm Review |  |  |
| 3/15/2017 | **MIDTERM** | Midterm | 100 |
| 3/22/2017 | Foliage Diseases and Rusts Insect Defoliators |  |  |
| 3/29/2017 | Stem and Branch Diseases |  |  |
| 4/5/2017 | Root Diseases and Mycorrhizae |  |  |
| 4/12/2017 | Nursery Diseases Insects of Seed Orchards, Nurseries, and Young Plantations | Quiz | 10 |
| 4/19/2017 | **Spring Break: No Class** |  |  |
| 4/26/2017 | Instructor Out Work on term papers? |  |  |
| 5/3/2017 | Instructor Out Field Trip to Reedley College forest? Work on term papers? |  |  |
| 5/10/2017 | Term Papers Due Final Exam Review | Term Paper | 100 |
| 5/17/2017 | **FINAL EXAM** | Final Exam | 100 |