NR 1 INTRODUCTION TO FORESTRY Syllabus

Course 52344 for spring 2021 Lecture Tuesday 3 - 4:50 Room FEM 7 Laboratory Thursday 1 - 3:50 PM Room FEM 7 Plus Some Required Activities and Field Trips

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VIRUS WARNING- BECAUSE OF SERIOUS RISK OF COVID-19 VIRUS TRANSMISSION ALL PERSONS ARE EXPECTED TO ABIDE BY SAFETY PROTOCOLS AT ALL TIMES THROUGHOUT THE SEMESTER

DO NOT ATTEND ON-CAMPUS CLASSES IF YOU ARE ILL, IF YOU HAVE SYMPTOMS OF INFECTION OR HAVE BEEN IN CONTACT WITH ANYONE BELIEVED TO BE INFECTED WITH COVID-19.

You are required to wear a cloth face covering over your mouth and nose while in face-to-face portions of this class and while inside of school buildings, near the entry doors and when outside but near other people. You are required to wear facial coverings during laboratory exercises whenever other people are present in your area.

You are required to take action to sterilize equipment or other items that you handle before leaving an area and before allowing other people to touch those items.

Course Objectives

- 1. Use comparisons of texture, density, color and scent to identify wood species.
- 2. Identify 30 forestry tools.
- 3. Distinguish characteristics resulting in defects of wood.
- 4. Construct a list of State and Federal agencies and explain their responsibilities in resource management.
- 5. Determine land area in acres by pacing.
- 6. Determine common land and timber measurements.
- 7. Compare and contrast conservation versus preservation management practices.
- 8. Examine the effects of historical forest policy and regulations on the resources.

CSLOs

NR-1 SLO1: Compare the difference between multiple use and preservation management.

NR-1 SLO2: Explain specified public and private timber resource entities' authority in the management of natural resources in the United States.

NR-1 SLO3: Prepare equipment for safe operation to fell and buck trees.



Text Book

Pattern of the Land: The Search for Home in an Altered Landscape, Eileen Apperson, iUniverse, March 13, 2012, ISBN-13: 9781469782218. (**Required**)

Introduction to Forests and Renewable Resources, latest Edition, G. Sharpe, McGraw Hill. (Recommended)

The Greatest Good, A Centennial History. James Lewis, Forest History Society. ISBN 9780890300657, <u>www.foresthistory.org</u>. (Recommended)

The Dictionary of Forestry, 2nd edition, Robert Deal. ISBN 978-0-939970-63-6. (Available on the Society of American Foresters website: <u>www.eforester.org</u>.) (Recommended)

Attendance

You should come to every assigned class whether face-to-face or virtual, and be in there on time. Arrival after roll is taken will be considered as a tardy. Two tardies will count as one absence. The success of this or any other course depends on the presence and active participation of each student. It is the responsibility of the student to check on class meeting changes for the following week if a class session is missed. Contact the instructor in the event of an absence.

The responsibility to drop the course for any reason, including lack of attendance, lies with the student. Late work should be made up within one week. Any assignment submitted after the due date will have 10% of the possible score automatically deducted.

Cancelled Class Policy

If classes must be cancelled the instructor will attempt to post the announcement on the course electronic media site (CANVAS). A notice will be posted on the door of the classroom. Be aware that schedule modifications and field trips may be announced during class by the instructor. It is the responsibility of the student to be present during classes and pay attention to such announcements and to check announcements on CANVAS daily.

Drop Deadline

Drop deadline is January 29 to avoid a "W".

Laboratory Clothing and Safety Equipment

You are required to wear a cloth face covering over your mouth and nose while in faceto-face portions of this class and while inside of school buildings, near the entry doors, or outside near other people. You are required to wear facial coverings during outdoor laboratory exercises whenever other people are present in your area.

You are required to take action to sterilize equipment or other items that you handle before leaving an area and before allowing other people to touch those items.

While you are working with equipment in an outdoor setting wear long pants and long sleeve shirts (also warm clothing or rain gear when appropriate). You must also have a hardhat, leather gloves, safety glasses, and boots (hiking boots or fire boots are acceptable). This is for protection while working with equipment and vegetation. This personal safety equipment will be required during laboratory exercises.

You must have a <u>hardhat</u>, <u>gloves</u>, <u>safety glasses</u>, <u>boots and hearing protection</u>. <u>If you do no not have safety equipment for labs you will not be allowed to</u> <u>participate and you will receive no credit</u>.

Reedley College Policies

To receive a grade for this course, students must complete all assigned work. Cheating or plagiarism will result in removal from the class and you will receive an "F".

Please be courteous to everyone in class. Courtesy includes an honest effort at sensitivity to others' individual characteristics or known triggers.

Please place cell phones on silent mode in class. No use of tobacco products is allowed in class or during laboratory and field trip exercises.

Accommodations

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Grades

Exams = 25%	
Examination I	10%
Examination II	15%
Final Exam = 20%	
Field Work = 15%	
Timber Cruising	10%
Land Measurement	5%
<u>Skill Demonstrations = 10%</u>	
Tool Use Field Demonstration	5%
Map Use	5%
Essays = 20%	
History Report	10%
Land Manager Objectives Report	2%
Professional Organizations Report	2%
Resource Agency Structure Report	2%
Parks and Forests Maps	2%
Summary of Management Philosophy	2%
<u>Presentations = 10%</u>	
Forest Practice Rules Exercise	5%
Dendrology Exercise	5%

<u>Total = 100%</u>

Possible 5% extra credit for outstanding class participation.

Cumulative course grade will be based upon the following

А	90 - 100%
В	80 - 89
С	70 - 79
D	50 - 69
F	49 or less

TENTATIVE SCHEDULE (SUBJECT TO CHANGE UPON NOTICE)

	Lecture	Laboratory	ASSIGNMENT DUE by THIS DATE
WEEK 1 1/12 & 1/14	Overview of NR Program/NR Degree Planning and Success/PPE; Forests and Parks in California and Oregon	Tool identification; Tragedy of the Commons exercise	Obtain required safety equipment/PPE
WEEK 2 1/19 & 1/21	History of natural resources management ONLINE	Presentation of "The Greatest Good" in Forum Hall 1 6pm – 8pm (No regular lab meeting)	Parks and Forests Maps Due in CANVAS by 3pm on 1/19
WEEK 3 1/26 & 1/28	Resource Agency Structure and Function ONLINE	Job Hazard Analysis and Safety; Chainsaw Use <mark>ONLINE</mark>	
WEEK 4 2/2 & 2/4	Professional Organizations; Private Sector Natural Resources Consultants ONLINE	Outdoor Recreation; Conflict Resolution; Professionalism ONLINE	Resources Agency Structure Report due in CANVAS by 3pm on 2/2
WEEK 5 2/9 & 2/11	Fire; Pests; Disease <mark>ONLINE</mark>	Watershed Restoration (on campus field trip) – Safety equipment required	Professional Organizations Report due in CANVAS by 3pm on 2/9
WEEK 6 2/16 & 2/18	Forest Ecology; Conservation strategies; Trusts/Easements; Resource law enforcement ONLINE	Scientific Journals and Peer Reviewed Research; Virtual library tour <mark>ONLINE</mark>	
WEEK 7 2/23 & 2/25	Employment opportunities in forestry and natural resource management ONLINE	Exam Preview Presentation by Kip Van de Water, Klamath NF; Mapping resource management Objectives Across CA Forest Land ONLINE	Summary of land management philosophy due in CANVAS by 3pm on 2/23
WEEK 8 3/2 & 3/4	Exam I Online	Land and Resource Measurement (in the field)	Land manager objectives report due in CANVAS by 3pm on 3/2
WEEK 9 3/9 & 3/11	Timber Production; They Felled the Giants Documentary <mark>ONLINE</mark>	Units Conversion; Legal Land Descriptions; Topographic Maps; Latitude, Longitude, UTM	History Report due in CANVAS by 11:59pm on 3/12
WEEK 10 3/16 & 3/18	Parliamentary Procedure; Public Hearings/Comment Periods ONLINE	Compass Use (in the field)	
WEEK 11 3/23 & 3/25	California Forest Practice Rules	Forest Practice Rules Exercise (in the field)	
WEEK 12 4/6 & 4/8	<i>Exam preview</i> Timber Cruising	Timber Cruising (in the field) – Safety equipment required	Forest Practice Rules Exercise due in CANVAS by 3pm on 4/6
WEEK 13 4/13 & 4/15 WEEK 14	Exam II Online Renewable Energy; Water Allocation	Exam Review; Lumber Characteristics; Sawmills Plant Identification	
4/20 & 4/22 WEEK 15 4/27 & 4/29	Utility Forestry, Aboriculture, and Urban Forestry	Field Trip – details TBA	
WEEK 16 5/4 & 5/6	Range Management; Soils	Backpacking; Wilderness safety	
WEEK 17 5/11 & 5/13	Final Exam Preparation ONLINE	Forest Products	
WEEK 18 5/18	Final Exam	No Lab Class	

TOOL IDENTIFICATION LABORATORY

ABS pipe allen wrench anemometer back pump ball peen hammer bench grinder bolt cutter bow saw brush hook cable hoist (grip hoist) carpentry saw chain tape chainsaw chainsaw chain chainsaw chaps chainsaw combination wrench (scrench) chainsaw guide bar chainsaw file chainsaw file guide choker cable claw hammer clinometer combi tool crosscut saw cruiser's stick (Biltmore stick) cruiser's axe diameter tape double-bit axe log chain drill bit (twist drill) drill press acetylene gas cutting torch drip torch ear protectors engineer's tape falling axe falling wedge fire rake fire shelter fire shovel fire swatter fixed radius plot tape flagging tape flat (bastard) file flat head screwdriver forester's hand compass fussee galvanized pipe GPS receiver hacksaw hard hat hand shears hazel hoe hex bolt hex nut hoedad increment borer laser rangefinder level (bubble level) leveling rod log carrier/tongs logger's tape loppers/pruning shears McLeod MIG welder stick welder

Nomex fire clothing oxy/acetylene torch OSB (oriented strand board) pack test vest peavey pickaxe pitchfork planimeter plumb bob planting bar plywood phillips screwdriver pole saw post driver power pruner pruning saw Pulaski **PVC** pipe relaskop rhino tool rock bar rock rake scaling stick scoop shovel single-bit axe sledge hammer sling psychrometer shovel handle rivet socket wrench soil auger standard #2 shovel wood planer

splitting maul splitting wedge square (carpenter/framing) square point shovel stereoscope "Super P"(ulaski) survey pins survey stake table saw tire lug nut tire lug wrench tree caliper tree injector tree marking gun tree planting bag tree planting bar tree/pole climbers/spurs tool handle metal wedge tool handle wooden wedge torx screw driver vise-grip pliers water filter wedge prism weedeater wheel caliper wood chisel wood rasp 2"x4" wooden board 2"x6" wooden board 1"x12" wooden board Plywood Oriented Strand Board OSB band saw

table saw