Course Title: Forestry 6934/4934 – Longleaf Pine: Ecology, Management and Restoration (2 credits)

Taught as a “Maymester” course at the Jones Ecological Research Center
May 10-15, 2015

Desired Prerequisites: Students should have a background course in ecology, soils, silviculture

Instructor: Dr. Eric J. Jokela, Professor
353 Newins-Ziegler Hall
846-0890
e-mail: ejokela@ufl.edu

Text: Assigned readings from the primary literature and textbooks such as:


Purpose and Objectives:

1) Knowledge of fundamental ecological, silvicultural and habitat management concepts used in the management and restoration of longleaf pine communities;

2) To provide field examples and practical experience in the design, prescription, and implementation of applied silvicultural techniques for managing longleaf pine forests for conservation and restoration objectives;

3) To read and critically analyze the primary literature in longleaf pine management and ecology.

Methods of Instruction:

1) Lectures Major source of theory and technical information

Discussion: To emphasize important topics
Answer questions
Provide information from recent research
Read and discuss assigned papers
2) Laboratory - Major source of practical and applied information;

3) Textbook - **REQUIRED READINGS** - assigned pages in texts and supplemental papers.

4) Field trips - to observe habitat management practices and meet with natural resource management professionals working in longleaf pine ecosystems.

**Evaluation:**

1) Final Essay

2) Discussion participation (readings, assignments, daily Quizzes, field exercises)

3) Grade Assignments - The boundaries for each grade (% of total points) are:

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<th>Percent (%)</th>
<th>Grade</th>
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<tr>
<td>93.4 - 100</td>
<td>A</td>
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<td>90.0 - 93.3</td>
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<td>86.7 - 89.9</td>
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<td>83.4 - 86.6</td>
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<td>80.0 - 83.3</td>
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<td>76.7 - 79.9</td>
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<td>73.4 - 76.6</td>
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<td>70.0 - 73.3</td>
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<td>66.7 - 69.9</td>
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<td>63.4 - 66.6</td>
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<td>60.0 - 63.3</td>
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<tr>
<td>Less than 60%</td>
<td>E (Fail)</td>
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**ACADEMIC HONESTY**

**Plagiarism will not be tolerated!**

The University of Florida requires all members of its community to be honest in all endeavors. Cheating, plagiarism, and other acts
diminish the process of learning. When students enroll at UF they commit themselves to honesty and integrity. Your instructor fully expects you to adhere to the academic honesty guidelines you signed when you were admitted to UF. As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University." Furthermore, on work submitted for credit by UF students, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is to be assumed all work will be completed independently unless the assignment is defined as a group project by the professor. Examples of academic dishonesty would include, but not be limited to taking of information, tendering of information, plagiarism, conspiracy and bribery. When you use information from a source, provide a full literature citation. Copying information from other documents (whether they are websites, newspaper articles, or anything) is plagiarism and will not be tolerated. This policy will be vigorously upheld at all times in this course.

Software Use

All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

UF Counseling Services

Resources are available on-campus for students having personal problems or lacking clear career and academic goals which interfere with their academic performance. These resources include:

1. University Counseling Center, 301 Peabody Hall, 392-1575, personal counseling;

2. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;

3. Sexual Assault/Abuse Recovery Education, Student Health Care Center, 392-1161 x231, assist with sexual assault issues;

4. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.
Accommodations for Students with Disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

LECTURE OUTLINE

Sunday, May 10
Jones Center introduction, course overview

Monday, May 11
Longleaf Pine (LLP) History and Conservation Status
LLP Natural History
LLP Communities
Fire Ecology
LLP Soils
Disturbance Ecology
Field Tour - Ichauway LLP Communities
(moisture gradient, mixed LLP/HW, wetlands, stocking structure, ground cover, soils, etc.)
Prescribed Fire Management
Natural Regeneration
Silvicultural Systems
Stoddard-Neel Approach (concepts)

Tuesday, May 12
Artificial Regeneration
Old Field
Cutover
Planting Stock
Understory Restoration
Ichauway Restoration Sites Field Tour
Carbon Cycling Overview

LLP Wetlands

Field Tour (Rhexia Pond and Red Dirt Tower)
- Wetlands/Plant Diversity
- Carbon Research/Modeling/Towers
- Carbon Policy and Science

Wednesday, May 13

LLP Wildlife - Non-herps overview, game management

LLP Wildlife - LLP herpetofauna overview

Wildlife Management Tour
- Gopher Tortoise
- Quail Management
- RCW biology and Management

Depart for Overnight Field Tour
- Greenwood Plantation Old Growth LLP
- Depart for St. Marks

Thursday, May 14

Meet with USFWS personnel for St. Mark’s NWR field tour

Meet USFS personnel for Apalachicola NF field tour

Depart for Ichauway

Friday, May 15

Economics -

Stoddard-Neel Approach (application), overview of marking

Marking Exercise -

Review Marking Exercise

- Field Tour
- Species Conversion
- LLP plantation management - thinning and groundcover restoration
- Vegetation Management
- Herbicides
- Mechanical
- Invasives
NOTE: THERE WILL BE A $150 FEE PAID DIRECTLY TO THE JONES ECOLOGICAL RESEARCH CENTER FOR LODGING, LUNCHES, TRANSPORTATION AND COURSE MATERIALS. YOU WILL BE RESPONSIBLE FOR BRINGING YOUR OWN FOOD (BREAKFASTS/DINNERS), SLEEPING BAG, AND TOWEL.

ADDITIONAL REQUIRED READINGS

Preliminary Readings Prior to Course


Readings During Course

Jokela:


McIntyre:


Mitchell:


10


