FOR 350 – Silviculture (4 Credits)

Course Syllabus
Fall 2018

Time/Place: 109 T.P. Cooper, 10:00 am - 10:50 am MWF
220 T.P. Cooper, 1:00 pm to 3:50 pm M

Instructor: Dr. John Lhotka
Office: 210 T. P. Cooper
Office Phone: 257-9701
Email: john.lhotka@uky.edu
Office Hours: MWF noon to 1:00 pm

Waveland Press, Long Grove, IL. 680 p. TEXTBOOK IS OPTIONAL

Course Website: www.uky.edu/~jmlhot2/courses/for350/for350.html

COURSE OVERVIEW

Course Description
A study of ecologically based manipulations of forests to achieve desired management objectives. Students will learn how to develop and apply silvicultural prescriptions and learn the effects of these prescriptions on timber and non-timber forest benefits, forest health and biodiversity, soil, and water resources as well as their effect on broader social, economic, and ecological issues.

Course Objectives
1. Describe common silvicultural terms and techniques used in establishing and influencing composition, growth, and quality of forests.
2. When given a silvicultural prescription, you will be able to describe how the silvicultural prescription influences timber production, forest health, biodiversity, soil and water resources, and non-timber products/benefits. You will also be able to describe how the silvicultural prescription influences social, economic, and ecological issues.
3. When given land management objectives, you will be able to develop silvicultural prescriptions using various silvicultural concepts.
4. When given a silvicultural practice, you will be able to analyze the interconnections between biological principles and the silvicultural practice.
5. Describe the ecology and management of forest ecosystems common to Kentucky and the surrounding region.

6. When given inventory data, you will be able to perform statistical calculations for projecting future forest, stand, and tree conditions and use computer simulations to understand temporal aspects of silviculture.

Grading Procedures – Assignments, Grading Criteria, Letter Grades

Course grade will be based upon performance on the following evaluations:

- Hourly exams: 60%
- Comprehensive final exam: 20%
- Laboratory assignments: 20%

Letter Grades*
A = 90 to 100; B = 80 to 89; C = 70 to 79; D = 60 to 69; E = <60

*Standard mathematical rounding protocol (i.e., 0.6 round-up) will be used when determining final letter grade. A grading curve may be applied to the final course grade at the discretion of the instructor.

Tentative Course Outline (and Textbook Chapters)
Week 1 – What is silviculture? (Chap. 1, 2, 3)
Week 2 – Forest stand dynamics, growth, and yield (Chap. 9, 12, 15)
Week 3 – No Class September 3 (Labor Day), Thinning methods (Chap. 17, 18, 19)
Week 4 – Thinning regimes (Chap. 19), Stand Stocking, Exam 1
Week 5 – Release treatments (Chap. 16), Other intermediate treatments (Chap. 20, 22)
Week 6 – Concepts of regeneration (Chap. 4, 9)
Week 7 – No lecture (Oct 1 and 3), Exam 2
Week 8 – Even-aged regeneration methods (Chap. 13, 14, 24)
Week 9 – Multiaged and irregular silviculture (Chap. 10, 11, 12, 23), Stand rehabilitation (Chap. 24)
Week 10 – Site preparation, Prescribed fire (Chap. 6)
Week 11 – Exam 3, Artificial regeneration (Chap. 5, 7, 8)
Week 12 – Silviculture of the Central Hardwood Forest Region
Week 13 – Bottomland ecology and silviculture
Week 14 – Exam 4, Thanksgiving (Academic Holiday: November 21 to 23)
Week 15 – Southern pine plantation management
Week 16 – Quiz-bowl style review
Week 17 – Comprehensive final exam: Thursday, 12/13/2018, 8:00 am
COURSE POLICIES

Department Forestry and Natural Resource Student Norms
Students in the professional forestry degree program and those enrolled in forestry courses are expected to adhere to norms of academic etiquette in the classroom, lab, and field. These norms are consistent with UK and professional standards that promote a culture consistent with a positive learning environment and demonstrate appropriate respect for students, faculty and staff.

These norms include:
- No use of unapproved electronic devices including cell phones, laptops, tablets and similar devices
- Arriving on time to avoid interruption
- Avoiding leaving class prematurely without consent of the instructor
- Avoiding distracting behaviors including, but not limited to talking
- Engaging in a positive manner in class activities
- Providing proper respect for faculty, staff and fellow students

Student behavior inconsistent with these norms can result in actions to ensure a productive academic and professional environment.

Students that have disabilities or conditions that are an impediment to achieving these norms are required by the university to advise and provide the instructor with professional documentation associated with the condition within the first two weeks of class. Faculty and staff in the department will work to help students who already have engaged with appropriate university resource(s) to achieve their academic potential while ensuring the overall integrity of the instructional environment for all students. Faculty and staff will also assist students to find appropriate university resources that can help them achieve their academic potential and improve the overall academic environment for all students.

Attendance and Excused Absences

Attendance is mandatory. It is course policy that following five unexcused absences the student’s final course grade will be reduced by 2% for each subsequent unexcused absence. If you must miss a class, communicate with your instructor immediately and honestly. An unexcused absence in class (lecture or lab) on a day when a quiz or exam is given or when information for an assignment is collected will result in no grade for that assignment.

University of Kentucky S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: 1) serious illness; 2) illness or death of family member; 3) University-related trips; 4) major religious holidays; 5) interviews for full-time job opportunities post-graduation and for graduate or professional school; 6) other circumstances the instructor finds to be "reasonable cause for nonattendance".
Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud, [http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php](http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused) per University policy.

Per Senate Rule 5.2.4.2, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

**Verification of Absences**

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness, or death in the family. Appropriate notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.

**Academic Integrity**

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: [http://www.uky.edu/Ombud](http://www.uky.edu/Ombud). A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Senate Rules 6.3.1 (see [http://www.uky.edu/Faculty/Senate/ for the current set of Senate Rules](http://www.uky.edu/Faculty/Senate/)) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.
Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

Accommodations Due to Disability
If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is http://www.uky.edu/DisabilityResourceCenter.

Emergency Information
If an emergency arises in this classroom, building or vicinity, your instructor will advise you of actions to follow to enhance your safety. If a situation requires emergency shelter (i.e., during a severe weather event), the nearest shelter location is the basement of the T.P. Cooper Building. If building evacuation occurs (i.e., fire alarm), follow posted evacuation routes and assemble on the sidewalk across Rose St. in front of the T.P. Cooper Building so the instructor can help ensure their students have evacuated the building safely and they are not hindering emergency personnel access to the building. If you may require assistance during an emergency, notify the instructor at the beginning of the semester. In order to prepare for emergencies while on campus please continue to the below links for detailed emergency response guidelines: the UK Division of Crisis Management & Preparedness website (http://www.uky.edu/EM/emergency-response-guide.html) and the College of Agriculture, Food and Environment (http://www.ca.uky.edu/). To receive emergency messages, sign up for UK Alert (http://www.uky.edu/EM/UKAlert). Always turn cellular phones to silent mode when entering the classroom. If you observe or receive an emergency alert, immediately and calmly inform your instructor.