Course number, title, and credit hours:
FWF 312  Principles of Silviculture (3 hours)

Catalog description:
A study of ecologically-based manipulations for treating forest stands to achieve desired management objectives. 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.  1 lab.

Prerequisites:  FWF 313  Measurements (concurrent)
FWF 212  Dendrology (must have completed beforehand)

Background:  Ecology (various courses)

This course satisfies part of the writing obligations for the UT General Education requirements.

Course objectives:

1.0 Know silvicultural terminology
   1.1 Define terms and processes important to tree growth
   1.2 Define silviculture/stand terms
   1.3 Identify functional components of silvicultural systems

2.0 Understand silviculture principles
   2.1 Explain tree growth functions by structural units
   2.2 Understand stand density effects upon tree and stand growth
   2.3 Describe stand growth as a functional unit and as a composite of individual trees
   2.4 Describe silvicultural tools appropriate for intermediate silvicultural operations
   2.5 Describe silvicultural systems using principles within stand regeneration methods

3.0 Apply silvicultural principles to field situations
   3.1 Use silvicultural principles to accomplish selected owner objectives including wildlife and recreation
   3.2 Modify silviculture systems to fulfill stand growth and regeneration requirements
   3.3 Analyze stand regeneration prescriptions critically
3.4 Demonstrate the effects of stand density changes upon stand growth and individual tree growth
3.5 Modify silvicultural operations/plans to accommodate wildlife habitat requirements
3.6 Demonstrate silvicultural operations compatible with wildlife and wildland recreation objectives


Other References:


These texts/references are on the reserve at the Ag/Vet Library. A variety of articles from periodicals, chapters from books and reports from research centers will be available online to present and illustrate the application of concepts and to amplify theoretical considerations.

Laboratory: Labs are designed to compliment and illustrate concepts presented in lecture. Lab reports and abstracts compose 34% of the final grade

Grading policy:

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Hourly Exam #1* (Feb. 5)</td>
<td>20%</td>
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<td>Hourly Exam #2* (Feb 26)</td>
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<td>Hourly Exam #3* (Apr. 1)</td>
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<td>Final Exam (May 4)</td>
<td>24%</td>
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<tr>
<td>Lab Exercises &amp; Reports</td>
<td>36%</td>
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<td>Total</td>
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Grading Scale:

- > 90% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- <60% = F
The lowest grade of the items marked with an asterisk will be dropped. All exams are in short answer format. **Each student must complete Final Exam, Lab Reports and 2 of 3 of the hourly exams.** The final exam is comprehensive. No make-up exams will be given unless there are extraordinary circumstances.

“Issues related to grades or academic coursework should first be addressed with the course instructor, then the appropriate department head, and finally the dean of the college in which the course is offered. If an appropriate solution cannot be reached through discussions with these individuals, the Director of the Student Success Center (for undergraduate students) or the staff of the Office of Graduate Student Services (for graduate students) can offer assistance regarding the best “next steps” for problem resolution. Issues related to academic advising should be addressed first with the advisor, then the director of the appropriate advising center, then the dean of the appropriate college, and finally with the Assistant Provost for Student Success.” From UT Hill Topics

**Instructors:**

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**Comments:**

FWF 312 is a 3-hour course consisting of approximately 2 hours of lectures and 3 hours of laboratory per week. During the semester, the lecture contact amounts to 30+ hours. This period of contact is supplemented by 10 or more lab periods. What you get out of this course depends mainly on what you bring to it and what you put into it. This course addresses concepts and strives to develop an understanding of them rather than skills or how methods are implemented. The student should develop a fresh perspective on forest dynamics.

**Academic Integrity / Plagiarism:**

Academic dishonesty/plagiarism is commonly defined as passing off someone else's words, writings, ideas, etc. as one's own. Plagiarism is tantamount to lying and stealing. In order to avoid plagiarism, properly credit material drawn from other sources. Instructors will be using software to monitor and indicate whether lab reports and abstracts are similar to submissions from other students in the class, not just your lab section and from lab reports written by students in previous years. Thus, do your own work and writing and do not copy from a classmate! We expect sections of your reports (especially the objectives and procedures) to be similar since the data are collected in student groups. However, interpretation, analyses, and presentation of the results and discussion of each report should be your own work. If you plagiarize, you will receive a zero for that assignment.
**Plagiarism and the UT Honor Statement:**
“An essential feature of the University of Tennessee, Knoxville is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the university, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.” (from UT Hilltopics)

**UT Canvas **** Because of issues associated with multiple labs, we do not use CANVAS in FWF 312. However, the lecture PPTs, associated handouts with lectures and Lab handouts/instructions are posted at the following website for student access.

https://ag.tennessee.edu/fwf/Pages/FWF312.aspx

If you have questions about handout materials or grades to date, please contact the instructor or your teaching assistant. **You are expected to be familiar with the lab instructions/handouts before each lab, whether accessing online at the site above or making your own hard copies.**