Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

1. This request is submitted by the Department of Ecosystem Science and Management

2. Course prefix, number and complete title of course: FRSC 602, Advanced Silviculture

3. Change requested
   a. Prerequisite(s): From: ___________________________ To: ___________________________
   b. Withdrawal (reason): ___________________________
   c. Cross-list with: ___________________________

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 4; enter proposed course title and proposed course description in item 5.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 6. Attach a course syllabus.

4. Complete current course title and current course description:

5. Complete proposed course title and proposed course description (not to exceed 50 words):

6. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
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<tbody>
<tr>
<td>FRSC</td>
<td>602</td>
<td>ADVANCED SILVICULTURE</td>
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<th>Lab</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
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b. Change to:

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<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
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<tbody>
<tr>
<td>ESSM</td>
<td>615</td>
<td>ADVANCED SILVICULTURE</td>
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<th>Lab</th>
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<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
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Approval recommended by: ___________________________
Head of Department Date: 8/7/08

Chair, College Review Committee Date: 9/10/08

Dean of College Date: ___________________________

Submitted to Coordinating Board by: ___________________________
Associate Director, Curricular Services Date: ___________________________

Effective Date: ___________________________

Questions regarding this form should be directed to Sandra Williams at 845-8201.
Curricular Services – 11/07
ESSM 615 – ADVANCED SILVICULTURE
SYLLABUS
Spring 20XX

SCHEDULE   Monday, Wednesday, Friday 9:10 - 10:00, 105 HFSB

COURSE DESCRIPTION
The goal of this course is to provide you with a clear understanding of silviculture and its role in modern forest management. This will be accomplished by explaining the relationship of silviculture to other sciences, both basic and applied; by demonstrating that most silvicultural practices simply imitate natural processes; and by presenting the traditional techniques of silviculture applicable over a wide range of forest types.

PREREQUISITES
FRSC 305 or equivalent.

LEARNING OUTCOMES
Following this course, you should be able to:
• Describe the techniques used by foresters to manage forest stands for a variety of purposes.
• Write a silvicultural prescription for a specific management objective.
• Interpret stand data necessary for environmentally and economically sound forest management.

INSTRUCTOR
Mike Messina   Office:  311 HFSB, 845-2547, m-messina@tamu.edu
Office Hours:   By appointment.

TEXTBOOKS

GRADING POLICY
Course grades are based upon two semester exams (25%) each, a final exam (25%), and a course project consisting of a written paper and an oral presentation of that paper (25%). Attendance in lecture is not mandatory, but is highly encouraged. As always, classroom participation is welcomed. Late work will be accepted and missed work may be made up only in extenuating circumstances. Grading will be based on the traditional basis of ≥90=A, 80-89=B, 70-79=C, etc.

AMERICANS WITH DISABILITIES ACT (ADA) STATEMENT
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637.

ACADEMIC INTEGRITY STATEMENT AND POLICY

For any other questions or concerns, please refer to http://student-rules.tamu.edu
COURSE TOPICS AND SCHEDULE (Specific exam dates and due dates will be decided as a class)

Week 1 -- Discussion of possible course content; Overview of Stand Development Patterns; Temporal and Spatial Patterns of Tree Invasion

Week 2 -- Stand Initiation Stage: Single-Cohort Stands; Stem Exclusion Stage: Single-Cohort Stands, Single-Species Stands

Week 3 -- Stem-Exclusion Stage: Single-Cohort Stands, Mixed-Species Stands; Understory Reinitiation Stage; Old Growth Stage

Week 4 -- Multicohort Stands: Behavior of Component Cohorts; Development of Multicohort Stands

Week 5 -- Stand Edges, Gaps, and Clumps; Quantification of Stand Development; Exam 1

Week 6 -- Forest Ecology and Genetics; Protective Functions of Managed Forests; Protecting Forests Against Damage; Relation of Silviculture to Forest Management

Week 7 -- Clearcutting System; Shelterwood Systems: Uniform System

Week 8 -- Shelterwood Systems: Group System; Irregular System; Strip Systems; Tropical Shelterwood Systems

Week 9 -- Selection System; Group Selection System; Accessory Systems

Week 10 -- Coppice System; Coppice Selection System; Coppice with Standards; Conversion; Exam 2

Week 11 -- Wildlife and Silviculture: Diversity; Species Composition; and Age Structure

Week 12 -- Wildlife and Silviculture: Spatial Heterogeneity; Edges; Islands; Fragments; Shores

Week 13 -- Wildlife and Silviculture: Dying, Dead, and Down Trees; Vertical Structure; Intensive Silviculture; Special Species; written projects due

Week 14 -- Student Presentations