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: RLEM 603, Range and Forest Watershed Management

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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<tr>
<td>RLEM</td>
<td>603</td>
<td>RNGE &amp; FRST WTR SHD MGT</td>
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<td>Lect.</td>
<td>Lab</td>
<td>SCH CIP and Fund Code</td>
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<tr>
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<td>03 03 02 05 00 05 08 41 00 36 32</td>
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<tr>
<td>Admin. Unit</td>
<td>FICE Code</td>
<td>Level</td>
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<td>08 41</td>
<td>00 36 32</td>
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b. Change to:

<table>
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<td>RNGE &amp; FRST WTR SHD MGMT</td>
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<td>08 41</td>
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Approval recommended by: J. W. __________ Date 8/7/08

Head of Department

Chair, College Review Committee

Dean of College

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845.8201.
Curricular Services – 11/07
RANGE & FOREST WATERSHED MANAGEMENT  
ESSM 636  
Taught by Distance in the 10-week Summer Term  
Credits 3 (3-0)

Description

Management of range and forest watersheds; influence of range and forest practices on runoff, interception, infiltration, erosion and water quality; current literature and research advances.

Learning Outcomes:

1. To be able to describe the hydrologic cycle and its components with special emphasis on the role of vegetation  
2. To be able to describe the impacts of range and forest practices on water quality and quantity basis for land use decisions.

Instructor:

Robert W. Knight  
Ecosystem Science and Management  
Animal Industries 322E  
Phone 979-845-5557  
Cell 979-324-6980 Before 10:00 p.m.  
E-mail: bob-knight@tamu.edu

Grades:

Two exams: 50%  
Term paper: 25%  
Class discussion and homework: 25%

Grading policy: Missed tests and late work will be handled according to University Rule 7. Late work for unexcused absences will be penalized 10% of the total points per day late. There will be no makeup exams for unexcused absences. Grades will follow A=100%-90%, B=89.5%-80%, C=79.5%-70%, F=<69.5% (http://student-rules.tamu.edu/rule7.htm)

Text:

No assigned text. Required readings will be posted on WebCT.
Watershed Management
ESSM 636

Topic Outline

I. Introduction
   a) Definitions (Week 1)
   b) Historical Development (Week 1)
   c) Importance, Distribution and Problems (Readings) (Week 1)
   d) Water Law (Readings) (Week 2)

II. Hydrologic Cycle – Overview of Processes, Measurement and Analysis of:
   a) Hydrologic Cycle (Week 2)
   b) Precipitation (Week 2)
   c) Interception (Readings) (Week 2)
   d) Evapotranspiration (Readings) (Week 3)
   e) Infiltration (Readings) (Week 3)
   f) Runoff (Week 3)
   g) Groundwater (Week 4)

III. Erosion – Overview of Processes, Measurement and Analysis of:
    a) Surface (Readings) (Week 5)
    b) Mass Movement (Week 5)
    c) Channel (Week 5)

Test 1 (Week 6)

IV. Hydrologic Models (Readings) (Week 7)
V. Influence of Vegetation Manipulation on Water Yield
   a) Forestland (Readings) (Week 7)
   b) Rangeland (Readings) (Week 7)

VI. Water Quality Criteria
    a) Physical Parameters (Week 8)
    b) Chemical Parameters (Week 8)
    c) Biological (Week 8)

VII. Impacts of Land Management Practices on Water Quality
    a) Forest – Roads, Logging, Planting (Readings) (Week 9)
    b) Range – Grazing, Improvement Practices (Readings) (Week 9)
    c) Recreation and Urbanization (Week 9)

Test 2 (Week 10)

Paper Due (Week 10)
Exam Dates:

Exam 1       June 27, Friday
Exam 2       August 5, Friday

Term Paper:

June 23 – Proposed paper title, one paragraph description of paper and 10 references
August 4 – Final paper due by 5:00 p.m.

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 Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity:

For additional information please visit: http://www.tamu.edu/aggiehonor
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Helpful Websites

Academic Calendar http://admissions.tamu.edu/Registrar/General/Calendar.aspx
Final Exam Schedule http://admissions.tamu.edu/Registrar/General/FinalSchedule.aspx
On-line Catalog http://www.tamu.edu/admissions/catalogs/
Student Rules http://student-rules.tamu.edu/