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 623, Ecophysiology

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>RLEM</td>
<td>623</td>
<td>ECOHYDROLOGY</td>
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<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
<th>Level</th>
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b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
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<tbody>
<tr>
<td>ESSM</td>
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<td>ECOHYDROLOGY</td>
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<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
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Approval recommended by: ___________________________

Head of Department ___________________________
Date 8/17/08

Chair, College Review Committee ___________________________
Date 9/14/07

Head of Department (if cross-listed course) ___________________________
Date

Dean of College ___________________________
Date

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

1 of 6 C35
Ecohydrology
ESSM 635—Fall 2008

TIME  In class  Mondays  4:00-6:00 pm  ANIN 229

COURSE WEBPAGE:

COURSE DESCRIPTION
The course will focus on providing an in-depth coverage of the interaction of water and vegetation at multiple scales. In other words, we will be examining how vegetation affects water and visa versa. In the process, students will also gain an in-depth knowledge of basic hydrological processes. Case studies will be utilized throughout the semester with an emphasis on student lead syntheses and participation. Critical thinking and analysis will be emphasized.
Prerequisites: Graduate Classification

COURSE GOAL
By the end of the course, students will have an understanding of landscape hydrology and how changing land cover and biota will affect hydrologic processes.

INSTRUCTOR
Dr. Bradford Wilcox  Department of Rangeland Ecology & Management
Office: 205 ANIN  Phone: 458-1899  Email: bwilcox@tamu.edu

READINGS
Selected Readings:—to be provided

GRADING

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<table>
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<tbody>
<tr>
<td>Synthesis Assignments</td>
<td>70%</td>
</tr>
<tr>
<td>Participation and Discussion</td>
<td>10%</td>
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<tr>
<td>Presentations</td>
<td>20%</td>
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</tbody>
</table>

A-90-100%
B 80-90%
C 70-80%
D 60-70%
F 0-60%

Synthesis Writing Assignment
A large part of the course will be based the student ability to synthesize material and distill the most critical ideas. These assignments will vary in length from 1-3
pages. The assignments will be based on readings that are provided specifically for that assignment. The major objectives of the exercises are that of mastering the material and also better developing critical thinking and assessment skills. Each assignment will be due one week after it has been assigned. Late assignments will not be accepted.

A core philosophy of this class is that we will be teaching each other. Accordingly, (for the students taking the course on campus), each student will have the opportunity to develop and present a lecture that summarizes that weekly papers. The lecture will be of professional quality and about 45 minutes in length. Depending on the number of students in the class, each student will present 1-2 lectures.

**Learning Outcomes:**
At the completion of this course students will have a basic understanding of how land management and cover alter the water cycle. In addition, they will be adept at evaluating research papers, determining the salient points and providing a succinct but complete summary of the major points.

**Topics**

**Topic 1: Introduction**

**Topic 2: Local Water Budgets**

**Topic 3: Global Water Budget and Land Cover**
**Topic 4: Evapotranspiration**


**Topic 5: Interception**

**Topic 6: Runoff and Scale**

**Topic 7: Recharge**

**Topic 8: Forests and Water**

**Topic 9: Shrublands and Water**
Topic 10: Plantations and Streamflow

Topic 11 Degradation and the Water Cycle

Lesson 12: Complex Interactions

Americans with Disabilities Act (ADA) Policy 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
“An aggie does not lie, cheat, or steal or tolerate those who do”. More information on the Honor Council Rules and Procedures can be found at www.tamu.edu/aggiehonor.

For any other questions or concerns, please refer to http://student-rules.tamu.edu