Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. This request is submitted by the Department of
   Soil and Crop Sciences

2. Course prefix, number and complete title of course:
   SCSC 625 • Biofuels and the Environment

3. Catalog course description (not to exceed 50 words):
   Biofuel crop use and disposal; production systems; conversion technologies; impacts of bioenergy production on sustainability, environment, and soil and water quality; carbon and energy budgets.

4. Prerequisite(s):
   SCSC 301 or approval of instructor

5. Is this a variable credit course?  ☑ Yes  ☐ No
   If yes, from ________ to ________

6. Is this a repeatable course?  ☑ Yes  ☐ No
   If yes, this course may be taken ________ times.
   Will this course be repeated within the same semester?  ☑ Yes  ☐ No

7. Has this course been taught as a 489/689?  ☑ Yes  ☐ No
   If yes, how many times?  1
   Indicate the number of students enrolled for each academic period it was taught.  08C - 4

8. This course will be:
   a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)
   No
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   M.S. and Ph.D. in Soil Science and Agronomy

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix  Course #  Title (excluding punctuation)
    SCSC  6 2 5  BIOFUELS AND ENVIRONMENT

    Lect.  Lab  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  ECE Code
    0 2 0 0 0 2 0 1 1 1 0 2 0 0 0 5 2 6 2 0 9 0 1 0 0 3 6 3 2

    Approval recommended by:
    Wayne Smith  2-26-08

    Department Head - Type Name & Sign  Date

    Department Head - Type Name & Sign
    (if cross-listed course)  Date

    Submitted to Coordinating Board by:
    Date

    Associate Director, Curricular Services

    Date

    Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 12/08
BIOFUELS AND THE ENVIRONMENT
AGRO 625
FALL 2008
TR 11:10 AM - 12:00 PM

Instructor: Dr. Terry Gentry (Heep Center 550A, 845-5323, tgentry@ag.tamu.edu)
Dr. Frank Hons (Heep Center 618B, 845-3477, fhons@ag.tamu.edu)

Office Hours: By appointment

Textbook: No textbook. Readings will consist of articles from the scientific literature, governmental publications, and popular press.

Prerequisites: SCSC 301 or approval of instructor

Class Website: [http://biofuel.tamu.edu](http://biofuel.tamu.edu) (Username: agro489689  Password: pump4less)

### Class Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Class Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 26</td>
<td>Introduction</td>
<td>Gentry/Hons</td>
</tr>
<tr>
<td>28</td>
<td>Types of biofuels</td>
<td>Gentry/Hons</td>
</tr>
<tr>
<td>Sep. 2</td>
<td>Cropping systems</td>
<td>Wight</td>
</tr>
<tr>
<td>4</td>
<td>Cropping systems</td>
<td>Gentry/Hons</td>
</tr>
<tr>
<td>9</td>
<td>Farm tour</td>
<td>Gentry/Hons</td>
</tr>
<tr>
<td>11</td>
<td>Biological conversions</td>
<td>Engledow</td>
</tr>
<tr>
<td>16</td>
<td>Biological conversion tour</td>
<td>Gentry/Hons</td>
</tr>
<tr>
<td>18</td>
<td>Thermochemical conversion</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Economics</td>
<td>McCarl</td>
</tr>
<tr>
<td>25</td>
<td>To be determined</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Soil issues - chemical &amp; physical</td>
<td>Katie</td>
</tr>
<tr>
<td>Oct. 2</td>
<td>Soil issues - biological</td>
<td>Katrina</td>
</tr>
<tr>
<td>7</td>
<td><em>ASA Meetings – No Class</em></td>
<td>N/A</td>
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<tr>
<td>9</td>
<td><em>ASA Meetings – No Class</em></td>
<td>N/A</td>
</tr>
<tr>
<td>14</td>
<td>Water issues - quantity</td>
<td>John</td>
</tr>
<tr>
<td>16</td>
<td>Water issues - quality</td>
<td>Scott</td>
</tr>
<tr>
<td>21</td>
<td>Greenhouse gas issues/Life cycle analysis</td>
<td>Joe</td>
</tr>
<tr>
<td>23</td>
<td>Greenhouse gas issues/Life cycle analysis</td>
<td>Ping</td>
</tr>
<tr>
<td>28</td>
<td>By-product utilization</td>
<td>Ronnie</td>
</tr>
<tr>
<td>30</td>
<td>Biodiversity</td>
<td>Ray</td>
</tr>
<tr>
<td>Nov. 4</td>
<td>Energy politics</td>
<td>Robert</td>
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<tr>
<td>6</td>
<td>Food versus fuel</td>
<td>Travis</td>
</tr>
<tr>
<td>11</td>
<td>Global perspectives</td>
<td>Aaron</td>
</tr>
<tr>
<td>13</td>
<td>Economics and policy</td>
<td>Bryant</td>
</tr>
<tr>
<td>18</td>
<td>Algae</td>
<td>Phillip</td>
</tr>
<tr>
<td>20</td>
<td>GIS for feedstock production</td>
<td>Lucas</td>
</tr>
<tr>
<td>25</td>
<td>Emerging issues</td>
<td>Maiko</td>
</tr>
<tr>
<td>27</td>
<td><em>Thanksgiving Holiday - No Class</em></td>
<td>N/A</td>
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<tr>
<td>Dec.  2</td>
<td>Summary and review</td>
<td>Gentry/Hons</td>
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<tr>
<td>4</td>
<td><em>Reading Day – No Class</em></td>
<td>N/A</td>
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<tr>
<td>5</td>
<td>Final Exam (3:00 - 5:00 pm)</td>
<td>N/A</td>
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AGRO 625 EVALUATION CRITERIA:

I. Class presentation (100 points)

II. Discussion Topics (200 points)
   [20 @ 10 points each]

III. Quizzes (100 points)
   [5 @ 20 points each]

IV. Review paper (100 points)

V. Final exam (150 points)

TOTAL = 650 points

GRADING SCALE:

≥585 points  (≥90%)  A
520-584 points  (80 - 89%)  B
455-519 points  (70 - 79%)  C
390-454 points  (60 - 69%)  D
<390 points  (<60%)  F

* Additional requirements
AGRO 625 will include extra questions on the final exam and writing a review paper on a topic
(to be chosen in consultation with the instructors) related to biofuels and the environment.

Attendance and Homework Policy
Due to the participatory nature of this class, attendance is expected. Excused absences for class activities are subject to TAMU
rules and guidelines please see: http://student-rules.tamu.edu/rule7.htm for details.

Academic Integrity Statements ✓
AGGIE HONOR CODE

"An Aggie does not lie, cheat, or steal or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code,
to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to
state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any
member of the TAMU community from the requirements or the processes of the Honor System.

For additional information please visit: http://www.tamu.edu/aggiehonor/

Americans with Disabilities Act (ADA) Policy Statement ✓
The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the University
Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for
information.

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 granted a
learning environment that provides for reasonable accommodation of their disability. If you believe you have a disability
requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room
B118 Cain Hall or call 845-1637.