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: [AGRO 637 Environmental Microbiology]


4. Prerequisite(s) [Cross-listed with] [Cross-listed courses require the signature of both department heads]

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 the course be repeated within the same semester/term? [ ] Yes [ ] No

7. Has this course been taught as a 289/489/689? [X] Yes [ ] No [ ] If yes, how many times? 1 [ ] Indicate the number of students enrolled for each academic period it was taught. 12

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   [ ]
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   M.S. & Ph.D. in Soil Science; M.S., M.Ag., & Ph.D. in 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)
    AGRO 637 | Environment Microbiology

    Lect. | Lab | SCH | Subject Matter | Content Code | Admin. Unit | Acad. Year | FICE Code |
    0 | 3 | 0 | 0 | 3 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 5 | 2 | 6 | 2 | 0 | 8 | 0 | 9 | 0 | 0 | 3 | 6 | 3 | 2 | Level 6

Approval recommended by:
[Signature] 1-14-08
Head of Department
Date

Chair, College Review Committee
[Signature] 4/16/08
Date

Dean of College
[Signature] 5-18-08
Date

Dean of College
[Signature] 6/15/08
Date

Submitted to Coordinating Board by:

Director of Academic Support Services
Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8836.
OAR/AS – 04/07
ENVIRONMENTAL MICROBIOLOGY  
AGRO 637  
FALL 2008  
WF 11:30 AM - 12:20 PM  
F 12:40 PM – 1:30 PM

Instructor: Dr. Terry Gentry (Heep Center 550A, 845-5323, tgentry@ag.tamu.edu)  
Office Hours: By appointment  

Class Website:  http://terrygentry.tamu.edu

Class Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter Assignment</th>
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<tbody>
<tr>
<td>Aug. 29</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Microbes in the Environment &amp; Microbial Growth</td>
<td>2 &amp; 3</td>
</tr>
<tr>
<td>Sep. 5</td>
<td>Terrestrial &amp; Aquatic Environments</td>
<td>4 &amp; 6</td>
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<tr>
<td></td>
<td>Aeromicrobiology, Microbial Transport, &amp; Sample Collection</td>
<td>5, 7, &amp; 8</td>
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<td></td>
<td>Cultural &amp; Physiological Methods</td>
<td>10 &amp; 11</td>
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<tr>
<td></td>
<td>Microscopic &amp; Immunological Methods*</td>
<td>9 &amp; 12</td>
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<tr>
<td></td>
<td>Nucleic Acid &amp; Protein Methods</td>
<td>13</td>
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<tr>
<td></td>
<td>Nucleic Acid &amp; Protein Methods**</td>
<td></td>
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<tr>
<td></td>
<td>Biogeography &amp; Bioprospecting*</td>
<td></td>
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<tr>
<td></td>
<td>Bioinformatics &amp; Community Analysis Methods</td>
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<tr>
<td>Oct. 3</td>
<td>Exam 1</td>
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<tr>
<td></td>
<td>Biogeochemical Cycling*</td>
<td>14 &amp; 15</td>
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<tr>
<td>5</td>
<td>Microorganisms &amp; Organics</td>
<td>16</td>
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<tr>
<td>12</td>
<td>Microorganisms &amp; Organics**</td>
<td></td>
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<tr>
<td>17</td>
<td>Microorganisms &amp; Metals</td>
<td>17</td>
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<tr>
<td>19</td>
<td>Microorganisms &amp; Metals**</td>
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<tr>
<td>24</td>
<td>Microorganisms &amp; Agriculture (Bioenergy)</td>
<td>18</td>
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<tr>
<td>26</td>
<td>Microorganisms &amp; Agriculture (Bioenergy)**</td>
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<tr>
<td>31</td>
<td>Environmentally Transmitted Pathogens</td>
<td>19</td>
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<tr>
<td>Nov. 2</td>
<td>Environmentally Transmitted Pathogens**</td>
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<tr>
<td>7</td>
<td>SSSA Meetings – No Class</td>
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<tr>
<td>9</td>
<td>Indicator Microorganisms &amp; Microbial Source Tracking*</td>
<td>20</td>
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<tr>
<td>14</td>
<td>Indicator Microorganisms &amp; Microbial Source Tracking*</td>
<td></td>
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<tr>
<td>16</td>
<td>Waste &amp; Water Treatment*</td>
<td>21, 22, &amp; 23</td>
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<tr>
<td>21</td>
<td>Research Presentations</td>
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<tr>
<td>23</td>
<td>Thanksgiving Holiday - No Class</td>
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<td>28</td>
<td>Research Presentations</td>
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<td>30</td>
<td>Research Presentations</td>
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<tr>
<td>Dec. 3</td>
<td>Research Presentations</td>
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<tr>
<td>5</td>
<td>Reading Day – No Class</td>
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<tr>
<td>10</td>
<td>Final Exam (10:30 am-12:30 pm)</td>
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* Discussion of current research paper
EVALUATION CRITERIA:

I. Exams (250 points)
   [Exam 1 = 100 points; Exam 2 = 150 points]

II. Research Paper Summary/Critique (100 points)

III. Research Presentation (100 points)

IV. Homework (50 points)

TOTAL = 500 points

GRADING SCALE:

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>≥450</td>
<td>(≥90%)</td>
<td>A</td>
</tr>
<tr>
<td>400-449</td>
<td>(80 - 89%)</td>
<td>B</td>
</tr>
<tr>
<td>350-399</td>
<td>(70 - 79%)</td>
<td>C</td>
</tr>
<tr>
<td>300-349</td>
<td>(60 - 69%)</td>
<td>D</td>
</tr>
<tr>
<td>&lt;300</td>
<td>(&lt;60%)</td>
<td>F</td>
</tr>
</tbody>
</table>

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.

Attendance and Homework Policy

Due to the participatory nature of this class, attendance is expected. Excused absences for class activities (lectures, field trips, exams) are subject to TAMU rules and guidelines please see: [http://student-rules.tamu.edu/rule7.htm](http://student-rules.tamu.edu/rule7.htm) for details. A 10% reduction in grade will occur for every calendar day an assignment is late. Exceptional situations will be considered.

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/](http://www.tamu.edu/aggiehonor/)
From: "Mark Zoran" <zoran@mail.bio.tamu.edu>
To: "C. Wayne Smith" <cwsmith@tamu.edu>
Date: 3/18/2008 1:16 PM
Subject: Re: AGRO 637 proposed

Wayne,

The College of Science and the microbiology program in Biology does not have issues of overlap with AGRO 637, thus we will not have a problem support the course. See the comments of Michael Benedik, Graduate Advisor in Biology, below. He raises an issue regarding whether the course title accurately reflects the course content.

Mark

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Mark,

I don't think there is any significant content overlap with any of our courses. However I am a little less happy about the title, that course seems to be more Soil Microbiology. The term Environmental Microbiology covers a much much broader content area than what is found in that course, and in fact usually implies quite other things.

I realize we are only concerned with COS, but I wonder if Plant Path/Micro has been consulted, they would be the most likely to have a possible objection since they have an entire program in Environmental Microbiology.

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Michael Benedik, Ph.D.
Professor and Graduate Advisor
Department of Biology
Texas A&M University
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College Station, TX 77843- 3258
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tel: 979/845- 5776
cell: 979/220- 1923
fax: 979/845- 2891

Mark J. Zoran, PhD
Associate Professor of Biology and Neuroscience
Adjunct Associate Professor of Psychology
Associate Dean for Graduate Studies
Texas A&M University, College Station

Phone: 979-845-8099
Email: zoran@mail.bio.tamu.edu

>>> "C. Wayne Smith" <cwsmith@tamu.edu> 03/18/08 10:20 AM >>>
Mark,

Dr. Terry Gentry, Soil Microbiologist in Soil and Crop Sciences, has proposed to teach a course entitled Environmental Microbiology (syllabus attached). We are seeking your input and approval (email should be sufficient) for SCSC to teach this course as we direct the paperwork through the GPC and Faculty Senate. I checked on line and Biology does not teach a graduate level course of this title and apparent design. We also would welcome the opportunity to cross list the course if you think that appropriate.

Wayne

C. Wayne Smith
Professor and Associate Head
Department of Soil and Crop Sciences
2474 TAMU
Texas A&M University
College Station, TX 77843-2474
979.845.2459
979.845.3450
cwsmith@tamu.edu
From: "Kenerley, Charles M" <c-kenerley@neo.tamu.edu>
To: C Smith <csmith@neo.tamu.edu>
Date: 4/15/2008 5:39 PM
Subject: course

Dear Wayne,

The Department of Plant Pathology & Microbiology has no objections to the course AGRO 637 (Environmental Microbiology) taught by Dr. Terry Gentry.

Cheers,
Chuck Kenerley
Associate Department Head