CATALOG YEAR __2011________
(Please use separate form for each add/change)

COLLEGE/SCHOOL/SECTION: ___College of Arts and Sciences__________

Course: Add: _X_ Delete: ___
(check all that apply)
Number ___
Title ___
SCH ___
Description ___
Prerequisite ___
New course will be part of major _ENSC__ minor ENSC__ as a required _X__
or elective ___ course
New course will introduce _X__, reinforce ___, or apply ___ concepts

If new, provide Course Prefix, Number, Title, Measurable Student Learning Outcomes, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current online catalog, provide change and attach text with changes in red and provide a brief justification.

Program: Delete: ___ Add: ___ Change: ___ Attach new/changed Program of Study description and 4-year plan. If in current catalog, provide change and attach page with changes in red.

Minor: Add: ___ Delete: ___ Change: ___ Attach new/changed minor. If in current catalog, provide change and attach page with changes in red.

Faculty: Add: ___ Delete: ___ Change: ___ Attach new/changed faculty entry. If in current catalog, provide change and attach page with changes in red.

College Introductory Pages: Add information: ___ Change information: ___
Attach new/changed information. If in current catalog, provide change and attach page with changes in red.

Other: Add information: _X_ Change information: ___ Attach new/changed information. If in current catalog, provide change and attach page with changes in red.
Add ENSC to options in Natural Science component of Core.

APPENDIX A Core Curriculum and Optional Course Information

COMPONENT AREA COURSE OPTIONS SCH
Natural Science** ASTR, BIOL, CHEM, ENSC, EPSC, GEOL or PHYS 8

COURSE SELECTIONS TO FULFILL CORE OPTIONS
ENSC 1301
Introduction to Environmental Systems

I. Course Description: An introductory course for majors and non-majors that applies the principles of the scientific method and critical thinking to environmental issues through a multidisciplinary approach. Students will gain an understanding of biotic interactions in environmental systems and the human impact as it relates to public policy and natural resource use. The course will focus on environmental sustainability and the ecological principles essential to understanding processes in environmental systems. This is a prerequisite course for Environmental Science (ENSC/BIOL 3401) and must be taken concurrently with the laboratory course ENSC 1101.

II. Learning Outcomes

Students will be able to:

• Relate ecological principles to environmental systems.
• Interpret the human impact on biological processes in environmental systems.
• Identify environmentally sustainable solutions to environmental problems.

III. TEXTBOOK


IV. INSTRUCTIONAL ACTIVITIES AND METHODS

• The lectures will be available online but attendance is required to receive supplementary material and to participate in class activities. The course will be taught by PowerPoint, videos, and discussions.

Exams (4) 60%
Final 20%
Class Activities 10%
Group Presentation 10%

Students will present an assessment of an environmental issue and possible solutions as a group presentation (at least 3 students). The Final Exam is mandatory and cumulative.
## TENTATIVE LECTURE AND EXAM SCHEDULE

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
<th>REQUIRED READING</th>
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<tr>
<td>1</td>
<td>Introduction &amp; Procedure, Environmental Problems, Their Causes and Sustainability, Environmental Problems, Their Causes and Sustainability</td>
<td>Chapter 1</td>
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<td>2</td>
<td>Science, Systems, Matter, &amp; Energy</td>
<td>Chapter 2</td>
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<td>3</td>
<td>Ecosystems: What are they and how do they work? EXAM #1 Group Presentations</td>
<td>Chapter 3</td>
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<td>4</td>
<td>Evolution and Biodiversity Biodiversity, Species Interactions and Population Control</td>
<td>Chapter 4-5</td>
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<td>5</td>
<td>The Human Population and its Impact Climate and Biodiversity</td>
<td>Chapter 6-7</td>
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<td>6</td>
<td>Biodiversity Discussion and Review EXAM #2 Group Presentations</td>
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<td>7</td>
<td>Aquatic Biodiversity Sustaining Biodiversity: The Species Approach</td>
<td>Chapter 8-9</td>
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<td>8</td>
<td>Sustaining Terrestrial Biodiversity: The Ecosystem Approach Sustaining Aquatic Biodiversity</td>
<td>Chapter 10-11</td>
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<td>Sustainability of Biodiversity &amp; Review EXAM #3 Group Presentations</td>
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<td>10</td>
<td>Food, Soil, and Pest Management</td>
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<td>Environmental Hazards and Human Health Environmental Toxicology and Risk Management</td>
<td>Chapter 17</td>
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<td>Climate Disruption and Ozone Depletion Impacts of climate change</td>
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<td>EXAM #4 Group Presentations Economics, Environment, and Sustainability</td>
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<td>Politics, Environment and Sustainability</td>
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<td>15</td>
<td>Environmental Worldviews, Ethics, and Sustainability and Review Group Presentations</td>
<td>Chapter 25</td>
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<td>16</td>
<td>EXAM #5 (FINAL)</td>
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