MEMORANDUM

TO: Craig Beyrouty  
   Dean, College of Agriculture and Natural Resources

FROM: Elizabeth Beise  
       Associate Provost for Academic Planning and Programs

SUBJECT: Proposal to Modify the Bachelor of Science in Environmental Science and Policy  
         (PCC Log No. 15052)

At its meeting on March 4, 2016, the Senate Committee on Programs, Curricula and Courses approved the proposal to modify the Bachelor of Science in Environmental Science and Policy. A copy of the proposal is attached.

The change is effective Fall 2016. Please ensure that the change is fully described in the Undergraduate Catalog and in all relevant descriptive materials, including the undergraduate program’s four-year plan (contact Lisa Kiely at lkiely@umd.edu for more information).

MDC/  
Enclosure

cc: Andrew Harris, Chair, Senate PCC Committee  
    Barbara Gill, Office of Enrollment Management  
    Reka Montfort, University Senate  
    Erin Taylor, Division of Information Technology  
    Pam Phillips, Institutional Research, Planning & Assessment  
    Anne Turkos, University Archives  
    Linda Yokoi, Office of the Registrar  
    Cynthia Stevens, Office of Undergraduate Studies  
    Evelyn Cooper, College of Agriculture & Natural Resources  
    Joseph Sullivan, Environmental Science and Policy
College/School:
Please also add College/School Unit Code-First 8 digits: 01202500
Unit Codes can be found at: https://hvpprod.umd.edu/Html_Reports/units.htm

Department/Program:
Please also add Department/Program Unit Code-Last 7 digits: 1250104

Type of Action (choose one):
X Curriculum change – ENSP Core
• Curriculum change for an LEP Program
• Renaming of program or formal Area of Concentration
• Addition/deletion of formal Area of Concentration
• Suspend/delete program

Italics indicate that the proposed program action must be presented to the full University Senate for consideration.

Summary of Proposed Action:

Action: Add a new category called “Applied Science and Policy,” which will replace an old category called “Government and Policy,” and revise course selections to reflect changes and additions in current course offerings.

Rationale: Learning assessments have indicated that students in ENSP400 have absorbed the perspective of their areas of concentration (science or policy) to the degree that they have a difficult time utilizing resources in the other area (policy or science, respectively). By adding intermediate-level courses that apply science and policy to specific environmental problems, we hope students will improve their ability to work in cross-disciplinary environments.

Departmental/Unit Contact Person for Proposal: ____________________________

APPROVAL SIGNATURES - Please print name, sign, and date. Use additional lines for multi-unit programs.

1. Department Committee Chair
   Signatures: Andrew Harris 1/28/16
2. Department Chair
   Signatures: Joe H. Sullivan 1/28/16
3. College/School PCC Chair
   Signatures: 2/16/16
4. Dean
   Signatures: 3/4/16
5. Dean of the Graduate School (if required)
6. Chair, Senate PCC
   Signatures: 4/17/16
7. University Senate Chair (if required)
8. Senior Vice President and Provost
**ENSP Major Core - Current**

Approved - 01.14.2008

**UM Core:**
- ENGL 101 (HL)
- (HA)
- (HL/HA/HO/IE)
- (SH)
- Diversity
- Adv. Writing
- Adv. Studies
- (SB)
- (SB/IE)

**Grading Policy:**
Environmental Science and Policy students must earn C grades or higher in all ENSP core courses and in all required courses and restricted electives of the selected area of concentration.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Grade</th>
<th>Completed</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>All three:</td>
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<tr>
<td>ENSP 101 (PS)</td>
<td>Intro. to Environmental Science</td>
<td>3</td>
<td>F</td>
<td>-</td>
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<tr>
<td>ENSP 102</td>
<td>Intro. to Environmental Policy</td>
<td>3</td>
<td>Sp</td>
<td>-</td>
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<tr>
<td>ENSP 400 (AS)</td>
<td>Capstone in Env. Sci &amp; Policy</td>
<td>3</td>
<td>Sp, F</td>
<td>Senior year; ENSP 101 and 102</td>
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<tr>
<td>Calculus:</td>
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<tr>
<td>MATH 140 (MS)</td>
<td>Calculus I (recommended)</td>
<td>4</td>
<td>Sp, F, Su</td>
<td>dept. perm. or MATH 115 w/C or better</td>
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<tr>
<td>MATH 220 (MS)</td>
<td>Elementary Calculus I</td>
<td>3</td>
<td>Sp, F, Su</td>
<td>dept. perm. or MATH 113, or 115</td>
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<tr>
<td>Statistics (one):</td>
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<tr>
<td>BIOM 301</td>
<td>Introduction to Biometrics</td>
<td>3</td>
<td>Sp, F</td>
<td>MATH 115</td>
<td></td>
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<tr>
<td>ECON 321</td>
<td>Economic Statistics</td>
<td>3</td>
<td>Sp, F</td>
<td>ECON 200, 201, MATH 220</td>
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<tr>
<td>GEOG 306</td>
<td>Introduction to Quant. Methods</td>
<td>3</td>
<td>F</td>
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<tr>
<td>PSYC 200</td>
<td>Statistical Methods in Psychology</td>
<td>3</td>
<td>Sp, F, Su</td>
<td>PSYC 100, MATH 111 or 140 or 220</td>
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<tr>
<td>SOCY 201</td>
<td>Intro. Statistics for Sociology</td>
<td>4</td>
<td>Sp, F, Su</td>
<td>SOCY 100 and MATH 111 or equiv.</td>
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<tr>
<td>STAT 400</td>
<td>Applied Prob and Statistics I</td>
<td>3</td>
<td>Sp, F, Su</td>
<td>MATH 141</td>
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</table>

And: One (1) course each from 5 of the next 6 groups → BSCI 106, GEOG 201/211 and AREC 240 recommended:

| Biology: | | | | | | |
| BSCI 106 (LL) | Principles of Biology II | 4 | Sp, F, Su | placement in MATH 110 or higher | | |
| Chemistry: | | | | | | |
| CHEM 131/132 (PL) | General Chemistry I | 3/1 | Sp, F, Su | | | |
| Earth Sciences: | | | | | | |
| ENST 200 (LL) | Fundamentals of Soil Science | 4 | Sp | CHEM 131/132 or dept. perm. | | |
| GEOL 100/110 (PL) | Physical Geology/Lab | 3/1 | Sp, F, Su | | | |
| GEOL 120/110 (PS) | Environmental Geology/Lab | 3/1 | Sp, F, Su | | | |
| GEOG 201/211 (PL) | Geography of Env. Systems/Lab. | 3/1 | Sp, F | | | |
| AOSC 200/201 (PL) | Weather and Climate/Lab | 3/1 | Sp, F | MATH 110 or 115. | | |
| Economics: | | | | | | |
| AREC 240 (SB) | Intro. to Economics and the Envir | 4 | Sp, F | MATH 220 or higher recommended | | |
| ECON 200 (SB) | Principles of Micro-Economics | 4 | Sp, F | MATH 110 or higher | | |
| Geography: | | | | | | |
| GEOG 100 (SB) | Intro to Geography | 3 | F, Su | | | |
| GEOG 123 (PS) | Causes and Impl of Global Chng | 3 | Sp | | | |
| GEOG 130 (SB/D) | Developing Countries | 3 | Sp | | | |
| GEOG 140 (PS) | Coastal Environments | 3 | F | | | |
| GEOG 202 (SB) | World in Cultural Perspective | 3 | Sp | | | |
| Govt & Politics: | | | | | | |
| MOVE & RENAME THIS CATEGORY | | | | | | |
| AREC 332 | Intro. to Natural Resource Policy | 3 | Sp | AREC 240 or ECON 200 | | |
| ENSP 330 | Introduction to Environmental Law | 3 | Sp | Permission of dept; Junior standing. | | |
| GVPT 273 | Intro. to Environmental Politics | 3 | Sp, F | GVPT 170 or ENSP 102 (recommended) | | |
# ENSP Major Core - Proposed

Reviewed - 01.27.15 - WW

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Cr</th>
<th>Offered</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>All three:</td>
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</tr>
<tr>
<td>ENSP 101 (NS)</td>
<td>Intro. to Environmental Science</td>
<td>3</td>
<td>F</td>
<td>-</td>
</tr>
<tr>
<td>ENSP 102 (HS)</td>
<td>Intro. to Environmental Policy</td>
<td>3</td>
<td>Sp</td>
<td>-</td>
</tr>
<tr>
<td>ENSP 400 (SP)</td>
<td>Senior Capstone in Env. Sci &amp; Policy</td>
<td>3</td>
<td>Sp, F</td>
<td>Senior year; ENSP 101 and 102</td>
</tr>
</tbody>
</table>

## Applied Science & Policy (choose one):

- **Drop – AREC332**
- **Add – ENSP305**
- ENSP330
- **Add – ENSP340**
- **Add – ENSP342**
- **Add – ENSP350**
- **Drop – GYPT273 (SP)**

## Calculus (one):
- MATH 140 (MA) or MATH 220 (MA)

## Statistics (choose one):
- BIOM 301 (AR)
- **Add - ECON230**
- ECON 321
- GEOG 306 (AR)
- PSYC 200 (AR)
- SOCY 201 (AR)
- **Drop – STAT 400**

## Calculus (one):
- Calculus I (recommended)
- Elementary Calculus I

## Statistics (choose one):
- Introduction to Biometrics
- Applied Econometrics Statistics
- Economic Statistics
- Introduction to Quant. Methods
- Statistical Methods in Psychology
- Intro. Statistics for Sociology
- Applied Prob and Statistics I

## Prerequisites:
- No longer offered
- ENSP 101, 102; Statistics; and Calculus
- Junior year; ENSP 101 and 102.
- Junior year; ENSP 101 and 102.
- Junior year; ENSP 101 and 102.
- Junior year; ENSP 101 and 102.
- Move to Conc. in Env Politics & Policy
- dept. perm. or MATH 115 w/C or better
- dept. perm. or MATH 113, or 115
- MATH 115
- MATH110
- ECON 200, 201, MATH 140 and 141
- MATH220
- PSYC 100, MATH 111 or 140 or 220
- SOCY 100 and MATH 111 or equiv.
- Has rarely, if ever, been selected.

PROPOSED: Choose four (4) courses from the following 5 groups → BSCI106, GEOG201/211, and AREC240 or 241 recommended.

## Biology:
- BSCI 106 (NL)

## Chemistry:
- CHEM 131/132 (NL)

## Earth Sciences (one):
- ENST 200 (NL)
- GEOL 100/110 (NL)
- GEOL 120/110 (NS)
- GEOG 201/211 (NL)
- GEOG 200/201 (NL,IS)

## Economics (one):
- AREC 240 (HS)
- **Add – AREC241 (SP, IS)**
- ECON200

* Note that credit cannot be earned for more than one of these courses.

## Geography (one):
- **Drop – GEOG 100 (HS)**
- **Drop – GEOL 123**
- GEOG 130 (HS or SP)
- GEOG 140 (IS)
- **Add – GEOG 170 (NS)**
- GEOG 202 (CC)

## Prerequisites:
- No longer offered
- No longer co-sponsored by Geography