# Master of Science in Ecology, Human-Environment Interaction Specialization

**Effective Spring 2009**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOL 505</td>
<td>Foundations of Ecology</td>
<td>2</td>
</tr>
<tr>
<td>ECOL 571</td>
<td>Advanced Topics in Ecology</td>
<td>2</td>
</tr>
<tr>
<td>ECOL 592</td>
<td>Interdisciplinary Seminar in Ecology</td>
<td>1</td>
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<tr>
<td>ECOL 693</td>
<td>Research Seminar</td>
<td>1</td>
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## Ecology Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ANTH 572</td>
<td>Human Origins</td>
</tr>
<tr>
<td>BSPM 570</td>
<td>Chemical Ecology</td>
</tr>
<tr>
<td>BZ 526/</td>
<td>Evolutionary Ecology</td>
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<tr>
<td>BSPM 526</td>
<td></td>
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<tr>
<td>BZ 530</td>
<td>Ecological Plant Morphology</td>
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<tr>
<td>BZ 535</td>
<td>Behavioral Ecology</td>
</tr>
<tr>
<td>BZ 548</td>
<td>Theory of Population and Evolutionary Ecology</td>
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<tr>
<td>BZ 555</td>
<td>Reproductive Biology of Higher Plants</td>
</tr>
<tr>
<td>BZ 578/</td>
<td>Genetics of Natural Populations</td>
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<td>MIP 578</td>
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| ECOL 600    | Community Ecology 

(continued)

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<tbody>
<tr>
<td>FW 544</td>
<td>Ecotoxicology</td>
</tr>
<tr>
<td>FW 662</td>
<td>Wildlife Population Dynamics</td>
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## Group A: Organism/Population (Select a minimum 3 credits)

1. ANTH 572 Human Origins
2. BSPM 570 Chemical Ecology
3. BZ 526/ Evolutionary Ecology
4. BZ 530 Ecological Plant Morphology
5. BZ 535 Behavioral Ecology
6. BZ 548 Theory of Population and Evolutionary Ecology
7. BZ 555 Reproductive Biology of Higher Plants
8. BZ 578/ Genetics of Natural Populations
9. MIP 578

## Group B: Community/Ecosystem (Select a minimum 3 credits)

1. ANTH 515 Culture and Environment
2. ANTH 530 Human-Environment Interactions
3. ANTH 545 Global Mental Health: Theory and Method
4. ANTH 555 Paleoindian Archaeology
5. ANTH 571 Anthropology and Global Health
6. ATS 760 Global Carbon Cycle
7. BZ 561 Landscape Ecology
8. ECOL 600 Community Ecology
9. ECOL 610 Ecosystem Ecology
10. ECOL 620 Applications in Landscape Ecology
11. ESS 660 Biogeochemical Cycling in Ecosystems
12. F 624 Fire Ecology
13. FW 540 Fisheries Ecology
14. FW 555 Conservation Biology
15. NR 578 Ecology of Disturbed Lands
16. RS 630 Ecology of Grasslands and Shrublands

## Group C: Quantitative/Qualitative Tools (Select a minimum 6 credits)

1. BZ 548 Theory of Population and Evolutionary Ecology
2. ESS 575 Models for Ecological Data
3. FW 663 Sampling and Analysis of Vertebrate Populations
4. NR 523/ Quantitative Spatial Analysis
5. STAT 523
6. NRRT 665 Survey Research and Analysis
7. NRRT 765 Applied Multivariate Analysis
8. POLS 621 Qualitative Methods in Political Science
9. SOC 610 Seminar in Methods of Qualitative Analysis
10. STAT 511 Design and Data Analysis for Researchers I
11. STAT 512 Design and Data Analysis for Researchers II
12. STAT 544/ERHS 544 Biostatistical Methods for Quantitative Data

**Electives, Independent Study, and Research**

4 credits

**Program Total Credits**

30 credits

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A minimum of 30 credits are required to complete this program.

1. The distribution lists contain suggestions for appropriate courses and are not complete lists. Other courses that fit within these categories may be taken to satisfy the credit requirement. This approach ensures that all students have a fundamental background in ecology while also permitting them to tailor a program to their interests. No specific distribution of ecology courses beyond the required courses is expected by GDPE; the appropriate course work is determined by the student, advisor, and committee.

2. ECOL 600 can be used to meet either Group A or Group B requirements, but not both.

3. 3 of the 6 credits must be in a qualitative methods course (Group C, either POLS 621 or SOC 610).

4. Select from a combination of elective courses, ECOL 695, ECOL 698, and ECOL 699 with approval of advisor and committee.