CROP SCIENCES, B.S., AGROECOLOGY CONCENTRATION

The Agroecology Concentration addresses ecologically based management of cropping systems, stewardship of the environment, and sustainable food production systems. The intersection between crop plants and their environment is emphasized in this concentration. Graduates of the Agroecology concentration are prepared for careers in integrated plant health management, government regulatory and environmental agencies or for entrance into graduate or professional school.

Prescribed Courses including Campus General Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>RHET 105</td>
<td>Writing and Research</td>
<td>4</td>
</tr>
<tr>
<td>or equivalent - see College Composition I requirement (3 or 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMN 101</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Composition

Select from campus approved list. 3-4

Cultural Studies

Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. 9

Foreign Language

Coursework at or above the third level is required for graduation.

Quantitative Reasoning I

Select one of the following: 4-5

- MATH 220  Calculus
- MATH 221  Calculus I
- MATH 234  Calculus for Business I

Quantitative Reasoning II

CPSC 241  Intro to Applied Statistics 3

Natural Sciences and Technology

See Specific Concentration Requirements

Humanities and the Arts

Select from campus approved list 6

Social and Behavioral Sciences

ACE 100  Agr Cons and Resource Econ 1 3-4

or ECON 102 Microeconomic Principles

Select from campus approved list. 3-4

ACES required

ACES 101  Contemporary Issues in ACES 2

Required Concentration 58-79

Concentration prescribed courses. See specific concentration requirements.

Total Hours 126

1  ACE 100 or ECON 102 are not required for the Biological Sciences Concentration.

Information listed in this catalog is current as of 01/2019

Crop Sciences, B.S., Agroecology Concentration

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 102 &amp; CHEM 103</td>
<td>General Chemistry I &amp; General Chemistry Lab I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104 &amp; CHEM 105</td>
<td>General Chemistry II &amp; General Chemistry Lab II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 232</td>
<td>Elementary Organic Chemistry I or CPSC 38:Organic Chem of Biol Processes</td>
<td>3-4</td>
</tr>
<tr>
<td>IB 103</td>
<td>Introduction to Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>IB 150</td>
<td>Organismal &amp; Evolutionary Biol</td>
<td>4</td>
</tr>
<tr>
<td>IB 203</td>
<td>Ecology</td>
<td>4</td>
</tr>
<tr>
<td>MCB 150</td>
<td>Molec &amp; Cellular Basis of Life</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following: 4-5

- MCB 100  Introductory Microbiology
- & MCB 101  and Intro Microbiology Laboratory
- IB 104  Animal Biology

Agroecology Concentration Required

CPSC 112  Introduction to Crop Sciences 4
CPSC 226  Introduction to Weed Science 3
CPSC 270  Applied Entomology 3
CPSC 336  Tomorrow’s Environment 3
CPSC 431  Plants and Global Change 3
CPSC 437  Principles of Agroecology 3
CPSC 498  Crop Sci Professional Development 1
NRES 201  Introductory Soils 4
NRES 474  Soil and Water Conservation 3
or NRES 488 Soil Fertility and Fertilizers
PLPA 204  Introductory Plant Pathology 3

Select one course from three of the following groups: 9-12

- ACE 210  Environmental Economics
- or ACE 3  Natural Resource Economics
- CPSC 412  Principles of Crop Advising
- or CPSC 414  Forage Crops and Pasture Eco
- or CPSC 415  Bioenergy Crops
- or CPSC 418  Crop Growth and Management
- CPSC 426  Weed Mgt in Agronomic Crops
- CPSC 473  Mgmt of Field Crop Insects
- NRES 401  Watershed Hydrology
- or NRES 488 Soil Ecosystems
- or NRES 489 Soil and Sustainable Dev
- or NRES 488 Soil Fertility and Fertilizers
- PLPA 401  Plant Pathogenic Fungi
- or PLPA 412 Topasitic Nematodes
- or PLPA 414 Plant Virology
- or PLPA 417 Disease Diagnosis & Mgmt
- or PLPA 418 Plant Bacteriology
- or PLPA 419 Diseases of Field Crops

Select one of the following: 3-4

- ANSC 100  Intro to Animal Sciences
- FSHN 101  Intro Food Science & Nutrition
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HORT 100</td>
<td>Introduction to Horticulture</td>
</tr>
<tr>
<td>NRES 102</td>
<td>Introduction to NRES</td>
</tr>
<tr>
<td>TSM 100</td>
<td>Technical Systems in Agr</td>
</tr>
</tbody>
</table>

Total ACES prescribed and elective courses must total 35 hours, of which 20 hours must be completed in residence.