



All students must complete two Global Issues courses (▲). All students must take a Social Diversity requirement in the GE by completing Rural Sociology 1500 or Sociology 1101.

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|--|---------------|---|-----------------|
| FAES 1100 (0.5 cr hr) and HCS 1100 (0.5 cr hr) | .5, .5 | Social Science 2 (AED Econ 2001 or Econ 2001) | 3 |
| Writing Level 1 (English 1110) | 3 | Historical Study (see approved CFAES GE List) | 3 |
| Writing Level 2 (2367) see approved CFAES GE List | 3 | Culture & Ideas or Historical Study (see approved CFAES GE List) | 3 |
| Agr Comm 3130 or Comm 2110 | 3 | Literature (see approved CFAES GE List) | 3 |
| Math 1130, 1148, 1150, 1151, or 1156 | 4 or 5 | Art (see approved CFAES GE List) | 3 |
| Data Analysis (HCS 2260 recommended) | 3 | Contemporary Issues (see approved CFAES GE List) | 3 |
| Physical Science Chem 1110, 1210, or 1220 | 5 | Internship (FAES 3191 and HCS 4191.01) | 0, 2 |
| Biological Science (Bio 1113 req'd) | 4 | TOTAL GE Credit Hours | 57 or 58 |
| Add'l. Sci. (HCS 2201 Ecol of Mng'd Plt Sys. Req'd) | 4 | 4 SPS – Agroecology Specialization | 42-43 |
| Opt. 1 (HCS 2202 Form and Function in Cult Plt req'd) | 4 | SPS – Minor Equivalent | 15-18 |
| Social Science 1 (Rural Soc 1500 or Sociol 1101) | 3 | Electives | 2-7 |
| | | TOTAL | 121 |

⁴Prerequisites include ENR 3000 and ENR 3500

AGROECOLOGY SPECIALIZATION 42-43

Required Courses – Agroecology Specialization 36

| | | |
|-----------------|---|---|
| BIO 1114 | Form, Function, Diversity, and Ecology | 4 |
| HCS 3100 | Introduction to Agronomy | 3 |
| or HCS 3200 | Introduction to Horticulture | 3 |
| HCS 3220 | Crop Origins and Diversity | 2 |
| HCS 3310 | Crop Responses to the Environment | 3 |
| HCS 3320 | Plant Propagation | 3 |
| or HCS 3420 | Seed Science | 3 |
| HCS 5422 | Biol. & Mgmt. of Weeds and Inv. Plants | 3 |
| HCS 5411 | Domestic. & Util. Agron. Crops | 3 |
| or HCS 5412 | Agroecol. of Grasslands and Prairies | 3 |
| or HCS 5450 | Vegetable Crop Production & Physiology | 3 |
| or HCS 5460 | Fruit Crop Physiology & Production | 3 |
| HCS 5602 | Ecology of Agriculture (Capstone) | 3 |
| or HCS 5100 | Advanced Cropping Systems (Capstone) | 3 |
| or HCS 5200 | Advanced Horticultural Systems (Capstone) | 3 |
| EEOB 3310.01 | Evolution | 4 |
| or EEOB 3310.02 | Evolution | 4 |
| EEOB 3410 | Ecology | 4 |
| ENR 3000 | Soil Science | 3 |
| ENR 3001 | Soil Science Laboratory | 1 |

Elective Courses – Agroecology Specialization 6-7

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|-----------------|--|------|
| HCS 2307 | Sustainable Ag. Practical Experience | 2 |
| HCS 3380 | Latino Workforce in Land Based Industry | 2 |
| HCS 3488.01 | Profess. Devel. in Hort and Crop Science | 1-3 |
| HCS 3521 | Greenhouse Systems and Management | 2 |
| HCS 3522 | Sustainable Irrigation | 3 |
| HCS 4193 | Individual Studies | 1-3 |
| HCS 4325 | Plant Genetics | 3 |
| HCS 4300 | Hydroponic Crop Production | 2 |
| HCS 4301 | Hydroponics Crop Production Lab | 1 |
| HCS 4560 | Creating a Virtual Perspective | 3 |
| HCS 4998 | Undergraduate Research ¹ | 1-12 |
| HCS 4999 | Research with Distinction ¹ | 1-12 |
| HCS 4999H | Honors Research with Distinction ¹ | 1-12 |
| HCS 5097.01-.04 | Study Abroad Pre-Departure Course | 1 |
| HCS 5797.01-.04 | Study Abroad | 3 |
| HCS 5306 | Sustainable Veg Prod Practicum | 3 |
| HCS 5601 | Digital Portfolio Development | 1 |
| HCS 5621 | Physiology of Cultivated Plants | 3 |
| HCS 5622 | Biochem. Processes in Cultivated Plants ² | 3 |
| HCS 5887 | Intro to Experimental Design | 3 |

¹Students may take up to 12 credits of any combination of 4193, 4998, 4999, or 4999H, but only up to 6 credits can count towards the major electives

²Prerequisite of CHEM 2310 or 2051.

³Prerequisites include ENR 2100 & ENR 2300 or permission of instructor

MINOR EQUIVALENT 15-18

Soil Ecology and Management 5-9

| | | |
|--------------|---|---|
| AGSYSMT 2580 | Introduction to Digital Agriculture | 2 |
| AGSYSMT 2580 | UAS and Remote Sensing in Ag. | 3 |
| ENR 3285 | Watershed Hydrology | 3 |
| ENR 3700 | Intro to Spatial Infor. for ENR | 3 |
| ENR 4260 | Soil Resources Management | 3 |
| ENR 5260 | Soil Landscapes: Morphology, Genesis & Classification | 3 |
| ENR 5263 | Biology of Soil Ecosystems | 3 |
| ENR 5268 | Soils and Climate Change | 2 |
| ENR 5270 | Soil Fertility | 3 |
| ENR 5279 | Urban Soils and Ecosystem Services | 3 |

Biotic Interactions in Agroecosystems 5-9

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|--------------|--|---|
| ANIMSCI 3400 | Mgmt. Intensive Grazing | 2 |
| ENTMLGY 2200 | Beekkeeping | 3 |
| ENTMLGY 4600 | Introduction to Insect Science | 1 |
| ENTMLGY 4601 | General Insect Pest Management | 2 |
| ENTMLGY 5420 | Insect Behavior | 3 |
| ENTMLGY 5500 | Biological Control | 3 |
| ENTMLGY 5600 | Integrated Pest Management | 3 |
| PLNTPH 3001 | General Plant Pathology | 3 |
| PLNTPH 3002 | General Plant Pathology Lab | 2 |
| PLNTPH 5110 | Ecol. and Mgmt. of Pathogens and Insects Affecting Trees in Forest and Urban Enviro. | 3 |
| PLNTPH 5140 | Diseases of Field Crops | 3 |
| PLNTPH 5150 | Fruit and Vegetable Diseases | 3 |
| PLNTPH 5603 | Plant Disease Mgmt. | 3 |

Students may take the remaining credit hours from the courses listed below

Population and Community Ecology

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|--------------|--|-----|
| AGSYSMT 3580 | UAS and Remote Sensing in Agriculture | 3 |
| EEOB 4410 | Conservation Biology | 3 |
| EEOB 4430 | Ecol. Methods I | 1-2 |
| EEOB 5450 | Population Ecology | 3 |
| EEOB 5470 | Community & Ecosystems Ecol. | 3 |
| ENR 4320 | Sustainable Forest Products ³ | 3 |
| ENR 5274 | Ecosystem Simulation | 3 |

Human Ecology and Global Perspectives

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|----------------|---|---|
| AEDE 4532 | Food Security and Globalization | 3 |
| ANIMSCI 3600 | Global Food and Agriculture | 3 |
| EEOB 4240 | Ecology and Evol. of Plants and People | 3 |
| or ANTHRO 5614 | Ethnobotany | 3 |
| ENR 3600 | Sustainable Agriculture & Food Systems ⁴ | 3 |
| GEOG 3900 | Global Climate Change | 3 |
| GEOG 5900 | Weather, Climate, & Global Warming | 3 |