

B. S. IN SOILS AND SUSTAINABLE CROP SYSTEMS

Concentration: Sustainable Crop Production

Emphasis Area: Crop Production

Emphasis Area: Integrated Pest Management

FRESHMAN YEAR

First Semester

BIOL 110 Prin. of Biol. I¹	5(4,3)
CH 101 General Chemistry	4(3,3)
MTHSC 102 Intro to Math Analysis	3(3,0)
or MTHSC 106 Calculus of One Var. I	4(4,0)
SSCS 101 Survey of SSCS	1(1,0)
Arts and Humanities (Non-Literature) Req.²	3(3,0)

Semester Hours: 16-17

Second Semester

BIOL 111 Prin. of Biol. II ¹	5(4,3)
CH 102 Gen. Chemistry	4(3,3)
ENGL 103 Accelerated Composition	3(3,1)
EXST 301 Intro. Statistics	3(2,2)
or MTHSC 108 Calculus of One Var. II	4(4,0)
or MTHSC 207 Multivar. Calculus	4(4,0)
SSCS 102 Acad. & Prof. Dev. I	1(1,0)

Semester Hours: 16-17

SOPHOMORE YEAR

APEC 202 Agricultural Economics	3(3,0)
CH 223/227 Organic Chemistry & Lab ³	4(3,3)
or CH 201 Surv. Organic Chemistry.	4(3,3)
CSENV 202 Soils	4(3,2)
PLPA 310 Plant Diseases & People	3(2,3)

Semester Hours: 14

APEC 205 Agric. & Society	3(3,0)
CH 224/228 Organic Chemistry Lab ³	4(3,3)
or BIOCHEM 305/306 Essen. Elem. Biochem/Lab 4(3,3)	
COMM 250	3(3,0)
SSCS 333 Agricultural Genetics	3(3,0)
Plant Science Req. ⁴	3(3,0)

Semester Hours: 16

JUNIOR YEAR

ENT (BIOSC) 301 Insect Biology & Diversity	4(3,3)
IPM 401 Principles of IPM	3(3,0)
Emphasis Area ⁵	3(3,0)
Plant Science Req. ⁴	3(3,0)
Social Science Requirement²	3(3,0)

Semester Hours: 16

BIOSC 401/402 Plant Phys. & Lab	4(3,3)
CSENV 405 Plant Breeding	3(2,2)
CSENV 407 Intro Weed Science	3(2,2)
ENGL 314 Technical Writing	3(3,0)
PLPA 411 Plant Disease Diagnosis	2(1,2)
SSCS 401 Acad. & Prof. Dev II.	1(1,0)

Semester Hours: 16

SENIOR YEAR

CSENV 417 Weed Ecology and Morphology	3(2,2)
CSENV 490 Beneficial Soil Org. in Plt. Growth	3(3,0)
ENT 401 Insect Pests Ornamental Plants	3(2,3)
or ENT 407 Applied Agri. Ent.⁶	4(3,3)
Emphasis Area ⁵	6

Semester Hours: 15 -16

CSENV 350 Practicum	3
CSENV 452/453 Soil Fertility & Lab	4(3,3)
CSENV 455 Seminar	1(1,0)
Arts and Humanities (Literature) Req.²	3(3,0)
Emphasis Area ⁵	6

Semester Hours: 17

Total Semester Hours = 126-129

(Classes in bold are General Education Requirements)

¹ BIOL 110 and 111 are strongly recommended; however, BIOL 103 and 104 may substitute.

² See General Education Requirements.

³ CH 223, 224, 227, and 228 are strongly recommended.

⁴ Selected from BIOSC 304, CSENV 422, 423, HORT 310, 455, 456, or department-approved course

⁵ Selected from department-approved list.

⁶ Alternate course may be taken as an emphasis area requirement.

Department-Approved Courses: Crop Production

AGM 206	Machinery Management	3(2,3)
AGM 301	Soil and Water Conservation	2(2,0)
APEC 302	Economics of Farm Management	3(3,0)
AGRIC 315	Agriculture and Environment	3(3,0)
BIOSC 425	Introductory Mycology	3(3,0)
BIOSC 426	Mycology Practicum	2(1,2)
BIOSC 446	Plant Ecology	3(3,0)
BIOSC 447	Plant Ecology Lab	2(1,2)
CSENV 426	Cropping Systems Analysis	3(2,2)
CSENS 433	Integrated Weed Mgt. for Agron. & Hort. Crops	3(2,2)
ENT 300	Environmental Entomology	3(3,0)
ENT 308	Apiculture	3(2,3)
ENR 302	Natural Resource Management	3(2,3)
ENR 413	Restoration Ecology	3(3,0)
HORT 310	Growing Landscape Plants	3(2,3)
HORT 455	Small Fruit Crops	3(2,3)
HORT 456	Vegetable Crops	3(3,0)
PLPA 459	Plant Nematology	3(2,3)

Department-Approved Courses: Integrated Pest Management

AGM 206	Machinery Management	3(2,3)
AGM 301	Soil and Water Conservation	2(2,0)
AGM 402	Drainage, Irrigation, and Waste Management	3(2,3)
APEC 302	Economics of Farm Management	3(3,0)
AGRIC 315	Agriculture and Environment	3(3,0)
BIOSC 446	Plant Ecology	3(3,0)
BIOSC 447	Plant Ecology Lab	2(1,2)
CSENV 426	Cropping Systems Analysis	3(2,2)
CSENS 433	Integrated Weed Mgt. for Agron. & Hort. Crops	3(2,2)
ENT 300	Environmental Entomology	3(3,0)
ENT 308	Apiculture	3(2,3)
ENR 302	Natural Resource Management	3(2,3)
ENR 413	Restoration Ecology	3(3,0)
HORT 310	Growing Landscape Plants	3(2,3)
HORT 455	Small Fruit Crops	3(2,3)
HORT 456	Vegetable Crops	3(3,0)
PLPA 459	Plant Nematology	3(2,3)