

## 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 Principles of Biology I**<sup>1</sup> .....5(4,3)  
**CH 101 General Chemistry** .....4(3,3)  
**MTHSC 102 Intro. to Math. Analysis**<sup>2</sup> .....3(3,0)  
or **MTHSC 106 Calculus of One Var. I**<sup>2</sup> .....4(4,0)  
SSCS 101 Survey of SSCS .....1(1,0)  
**Arts and Humanities (Non-Literature) Req.**<sup>3</sup> .....3(3,0)

Semester Hours: 16-17

##### Second Semester

BIOL 111 Principles of Biology II<sup>1</sup> .....5(4,3)  
CH 102 General Chemistry .....4(3,3)  
**ENGL 103 Accelerated Composition** .....3(3,1)  
EXST 301 Introductory Statistics .....3(2,2)  
or MTHSC 108 Calculus of One Var. II .....4(4,0)  
or MTHSC 207 Multivariable Calculus .....4(4,0)  
**SSCS 102 Academic & Prof. Development I** .....1(1,0)

Semester Hours: 16-17

#### SOPHOMORE YEAR

**APEC 202 Agricultural Economics** .....3(3,0)  
CH 223/227 Organic Chemistry & Lab<sup>3</sup> .....4(3,3)  
CSENV 202 Soils .....4(3,2)  
PLPA 310 Plant Diseases & People .....3(2,2)

Semester Hours: 14

**APEC 205 Agriculture & Society** .....3(3,0)  
CH 224/228 Organic Chemistry & Lab<sup>3</sup> .....4(3,3)  
**COMM 250 Public Speaking** .....3(3,0)  
SSCS 333 Agricultural Genetics .....3(3,0)  
Plant Science Requirement<sup>4</sup> .....3(3,0)

Semester Hours: 16

#### JUNIOR YEAR

ENT (BIO SC) 301 Insect Biology & Diversity .....4(3,3)  
IPM 401 Principles of IPM .....3(3,0)  
Emphasis Area<sup>5</sup> .....3(3,0)  
Plant Science Requirement<sup>4</sup> .....3(3,0)  
**Social Science Requirement**<sup>2</sup> .....3(3,0)

Semester Hours: 16

BIO SC 401/402 Plant Physiology & Lab .....4(3,3)  
CSENV 405 Plant Breeding .....3(2,2)  
CSENV 407 Introductory Weed Science .....3(2,2)  
**ENGL 315 Scientific Writing & Communication** .....3  
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 Ins. Pests of Orn. Plts. & Shade Trees .....3(2,3)  
or ENT 407 Applied Agric. Entomology .....4(3,3)  
Emphasis Area Requirement<sup>5</sup> .....6

Semester Hours: 15 -16

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

Semester Hours: 17

**Total Semester Hours = 126-129**

**(Classes in bold are General Education Requirements)**

<sup>1</sup> BIOL 110 and 111 are strongly recommended; however, BIOL 103/105 may substitute for BIOL 110 and 104/106 may substitute for BIOL 111.

<sup>2</sup> See General Education Requirements.

<sup>3</sup> CH 223/227 and 224/228 are strongly recommended; however CH 201 and BIOCH 305/306 may be substituted.

<sup>4</sup> Selected from BIOSC 205/206, 304, CSENV 422, 423, HORT 310, 455, 456, or other course approved by advisor.

<sup>5</sup> Selected from department-approved list. Emphasis Areas include Crop Production and Integrated Pest Management.

**Department-Approved Courses: Crop Production**

AGM 205	Principles of Fabrication	3(2,3)
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 205	Principles of Fabrication	3(2,3)
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)