HORTICULTURE

To meet the educational needs of a student population with interests ranging from plant physiology to landscape design/installation to fruit and vegetable production to golf course/athletic field construction and management, considerable flexibility is built into the horticulture curriculum. The diversity of interests and need for flexibility are reflected in the impressive array of horticulture courses offered.

The Department of Horticulture offers six options within the horticulture major:

1. Greenhouse Plant Production
2. Horticultural Food Crop Production and Management
3. Landscape Design, Installation, and Management
4. Public Horticulture
5. Horticulture Research
6. Turfgrass Management

Graduates possess the technical knowledge and skills to become professional horticulturists. They understand principles of life science, plant growth and development, and are familiar with cultural and management practices for a wide assortment of horticultural crops. They are able to work and communicate effectively with fellow horticultural professionals and other citizens who share an interest in horticulture. Graduates also understand the ethical and environmental dimensions of problems and issues facing horticultural professionals.

A degree in horticulture opens the door to employment opportunities with production nurseries, seed companies, interior landscaping firms, greenhouses, garden centers, conservatories, landscape design/installation firms, public gardens and arboreta, orchards and vineyards, food processing companies, vegetable farms, fertilizer cooperatives, agricultural chemical companies, organizations that manage golf courses, sports fields, sod production companies, and lawn care businesses. Several allied plant-science industries also provide employment opportunities in the areas of sales, management, and communication. Opportunities exist for careers in research, teaching, extension, and business after obtaining advanced training in graduate school.

Student Learning Outcomes

Upon graduation, students should be able to:

1. Acquire, integrate, and apply knowledge of plant science to manage systems.
2. Demonstrate interdisciplinary knowledge and competency in managing horticulture systems.
3. Synthesize knowledge and use insight and creativity to better understand and improve plant systems.
4. Appreciate and communicate the diverse impacts of horticulture on people.
5. Demonstrate professionalism and proficiency in skills that relate to horticulture.

Degree Requirements

Students majoring in horticulture will select an option in which to specialize before reaching junior standing and will fulfill the requirements described below under Options.

Total Degree Requirement: 123 credits

Only 65 credits from a two-year institution may apply which may include up to 16 technical credits; 9 P-NP credits of free electives; 2.00 minimum GPA.

Biological Sciences: 15 cr.

BIOL 2110	Principles of Biology I	3
BIOL 2110L	Principles of Biology Laboratory I	1
And complete eleven credit hours from the following:		11
AGRON 2170	Weed Identification	
AGRON 2820	Soil Conservation and Land Use	
AGRON 3160	Crop Structure-Function Relationships	
AGRON 3170	Principles of Weed Science	
AGRON 3540 & 3540L	Soils and Plant Growth and Soils and Plant Growth Laboratory	
BIOL 2120 & 2120L	Principles of Biology II and Principles of Biology Laboratory II	
BIOL 3120	Ecology	
BIOL 3130 & 3130L	Principles of Genetics and Genetics Laboratory	
or GEN 3200	Genetics, Agriculture and Biotechnology	
BIOL 3140	Principles of Molecular Cell Biology	
BIOL 3550	Plants and People	
BIOL 3660	Plant Systematics	
BIOL 4540	Plant Anatomy	
BIOL 4740	Plant Ecology	
ENT 2010	Introduction to Insects	
ENT 2110	Insects and Society	
ENT 3700	Insect Biology	
ENT 3760	Fundamentals of Entomology and Pest Management	
FOR 4160	Forest Insects and Diseases	

PLP 4080	Principles of Plant Pathology	
Total Credits		**15**

Communications Proficiency (with a grade of C or better)

6 credits of English composition (see approved courses below)

3 credits of speech fundamentals (see approved courses below)

Communication/Library: 13 cr .

ENGL 1500	Critical Thinking and Communication	3
ENGL 2500	Written, Oral, Visual, and Electronic Composition	3
LIB 1600	Introduction to College Level Research	1
ENGL 3020	Business Communication	3
or ENGL 3090	Proposal and Report Writing	
or ENGL 3140	Technical Communication	
One of the following:		3
SPCM 2120	Fundamentals of Public Speaking	
AGEDS 3110	Presentation and Sales Strategies for Agricultural Audiences	
COMST 2140	Professional Communication	
Total Credits		**13**

Ethics: 3 cr.

3 cr. from approved list	3

Humanities and Social Sciences: 6 cr.

Approved Humanities course	3
Approved Social Science course	3
Total Credits	**6**

International Perspective: 3 cr.

3 cr. from approved list	3
Total Credits	**3**

U.S. Cultures and Communities: 3 cr.

3 cr. from approved list	3
Total Credits	**3**

Life Sciences: 6 cr.

BIOL 2110	Principles of Biology I	3
Approved Life Sciences course		3
Total Credits		**6**

Mathematical Sciences: 6 cr.

Select one course from the following:		3
MATH 1400	College Algebra	
MATH 1500	Discrete Mathematics for Business and Social Sciences	
MATH 1650	Calculus I	
AND select one of the following:		3
STAT 1010	Principles of Statistics	
STAT 1040	Introduction to Statistics	
STAT 2026	Introduction to Business Statistics	
STAT 3201	Intermediate Statistical Concepts and Methods	
Total Credits		**6**

Physical Sciences: 11 cr.

Complete one of the following:		5
CHEM 1630 & 1630L	College Chemistry and Laboratory in College Chemistry	
or CHEM 177 & 1770L	General Chemistry I and Laboratory in General Chemistry I	
AND complete one course from the following:		3-4
AGRON 2590	Organic Compounds in Plants and Soils	
CHEM 1780 & 1780L	General Chemistry II and Laboratory in College Chemistry II	
CHEM 3310 & 3310L	Organic Chemistry I and Laboratory in Organic Chemistry I	
PHYS 1010	Physics for the Nonscientist	
PHYS 1150	Physics for the Life Sciences	
PHYS 1310 & 1310L	General Physics I and General Physics I Laboratory	
AND complete one course from the following:		3-5
BBMB 2210	Structure and Reactions in Biochemical Processes	
CHEM 2310 & 2310L	Elementary Organic Chemistry and Laboratory in Elementary Organic Chemistry	
CHEM 3310 & 3310L	Organic Chemistry I and Laboratory in Organic Chemistry I	
Total Credits		11-14

Horticultural Sciences: Minimum of 30 cr.

HORT 1100	Professional and Educational Development in Horticulture	1
HORT 2210	Principles of Horticulture Science	3
HORT 3210	Horticulture Physiology	3
Select 23 cr. hours from courses within selected option.		23
Total Credits		Minimum of 30

Soil Sciences: 3 cr.

AGRON 1820	Introduction to Soil Science	3
Total Credits		**3**

Electives

No more than 4 cr. of Hort 4900 may count toward graduation.

Options

Greenhouse Plant Production

The following courses are required to meet the Horticulture requirement:

HORT 2400	Trees, Shrubs, and Woody Vines for Landscaping	3
HORT 3220	Plant Propagation	3
HORT 3300	Herbaceous Ornamental Plants	3
HORT 3310	Hydroponic Crop Production	2
HORT 3320	Greenhouse and Nursery Operations and Management	4
HORT 4340	Floriculture Crop Production	3
HORT 4350	Landscape Plant Production	3
Other recommended courses are:		
HORT 3910	Horticultural Management Experience	
HORT 4240	Sustainable and Environmental Horticulture Systems	
HORT 4760	Horticultural Postharvest Technology	
HORT 2330	House Plants and Interiorscaping	
Required for option:		
ACCT 2840	Financial Accounting	3
And select 9 cr. hours from the following:		9
ACCT 2150	Legal Environment of Business	
ACCT 2850	Managerial Accounting	
ACCT 4160	Business Law	
AGRON 2060	Introduction to Weather and Climate	
ECON 1010	Principles of Microeconomics	
ECON 1020	Principles of Macroeconomics	
ECON 2300	Farm Business Management	
ECON 2340	Small Business Management	
ECON 3340	Entrepreneurship in Agriculture	
ENTSP 3100	Entrepreneurship and Innovation	
ENTSP 3130	Feasibility Analysis for New Ventures	
MGMT 3700	Managing Organizations	
MGMT 3710	Organizational Behavior	
MKT 3400	Principles of Marketing	
MKT 4420	Sales Management	
MKT 4470	Consumer Behavior	
TSM 2700	Principles of Injury Prevention and Safety	

Horticultural Food Crop Production and Management

The following courses are required to meet the Horticulture requirement:

HORT 2760	Grape and Wine Science	3
HORT 3760	Fundamentals of Field Production of Horticultural Food Crops	3
HORT 4610	Fruit Crop Production and Management	3
HORT 4710	Vegetable Production and Management	2
HORT 4710L	Vegetable Production and Management Lab	1
HORT 4760	Horticultural Postharvest Technology	3
Other recommended courses:		
HORT 3220	Plant Propagation	
HORT 3310	Hydroponic Crop Production	
HORT 3320	Greenhouse and Nursery Operations and Management	
HORT 3380	Seed Science and Technology	
HORT 3910	Horticultural Management Experience	
HORT 4840	Organic Agricultural Theory and Practice	
Required for option:		
ACCT 2840	Financial Accounting	3
And select 9 cr. hours from the following:		9
ACCT 2150	Legal Environment of Business	
ACCT 2850	Managerial Accounting	
ACCT 4160	Business Law	
ECON 1010	Principles of Microeconomics	
ECON 1020	Principles of Macroeconomics	
ECON 2300	Farm Business Management	
ECON 2340	Small Business Management	
ECON 3340	Entrepreneurship in Agriculture	
ENVS 2930	Environmental Planning	
ENVS 3240	Energy and the Environment	
ENVS 3820	Environmental Sociology	
ENVS 4910	Environmental Law and Planning	
FSHN 4030	Food Laws and Regulations	
FSHN 4710	Food Processing	
FSHN 4720	Food Processing Laboratory	
ENTSP 3100	Entrepreneurship and Innovation	
ENTSP 3130	Feasibility Analysis for New Ventures	
MGMT 3700	Managing Organizations	
MGMT 3710	Organizational Behavior	
MKT 3400	Principles of Marketing	
MKT 4420	Sales Management	
MKT 4470	Consumer Behavior	

TSM 2700	Principles of Injury Prevention and Safety	
TSM 3240	Soil and Water Conservation Management	

Horticulture Research

The following courses are required for this option:

AGEDS 3120	Science With Practice	3
HORT 3220	Plant Propagation	3
Other recommended courses:		
HORT 2400	Trees, Shrubs, and Woody Vines for Landscaping	
HORT 3300	Herbaceous Ornamental Plants	
HORT 3310	Hydroponic Crop Production	
HORT 3320	Greenhouse and Nursery Operations and Management	
HORT 3420	Landscape Plant Installation, Establishment, and Management	
HORT 3760	Fundamentals of Field Production of Horticultural Food Crops	
HORT 3910	Horticultural Management Experience	
Mathematical Sciences Requirement:		8
MATH 1650	Calculus I	
MATH 1660	Calculus II	
Physical Sciences Requirement:		
BBMB 3010	Survey of Biochemistry	
or BBMB 404	Biochemistry I	
or BBMB 316	Principles of Biochemistry	
CHEM 1770	General Chemistry I	
CHEM 1770L	Laboratory in General Chemistry I	
CHEM 1780	General Chemistry II	
CHEM 1780L	Laboratory in College Chemistry II	
CHEM 3310	Organic Chemistry I	
CHEM 3310L	Laboratory in Organic Chemistry I	
CHEM 3320	Organic Chemistry II	
CHEM 3320L	Laboratory in Organic Chemistry II	
PHYS 1310 & 1310L	General Physics I and General Physics I Laboratory	
PHYS 1320 & 1320L	General Physics II and General Physics II Laboratory	
And select 5 cr. hours from the following:		
BBMB 4050	Biochemistry II	
BBMB 4040	Biochemistry I	
or BBMB 316	Principles of Biochemistry	
BBMB 4110	Techniques in Biochemical Research	
BIOL 3130	Principles of Genetics	
BIOL 3130L	Genetics Laboratory	
BIOL 3140	Principles of Molecular Cell Biology	
BIOL 3150	Biological Evolution	
CHEM 2110	Quantitative and Environmental Analysis	
CHEM 2110L	Quantitative and Environmental Analysis Laboratory	
CHEM 3160	Instrumental Methods of Chemical Analysis	
CHEM 3160L	Instrumental Analysis Laboratory	
CHEM 3210L	Laboratory in Physical Chemistry	
CHEM 3220L	Laboratory in Physical Chemistry	
CHEM 3240	Introductory Quantum Mechanics	
COMS 2070	Fundamentals of Computer Programming	
GEN 4090	Molecular Genetics	
GEN 4100	Analytical Genetics	

Landscape Design, Installation and Management

The following courses are required to meet the Horticulture requirement:

HORT 2400	Trees, Shrubs, and Woody Vines for Landscaping	3
HORT 2810	Landscape Graphics	2
HORT 3300	Herbaceous Ornamental Plants	3
HORT 3410	Woody Plant Cultivars: Shade Trees, Ornamental Trees and Woody Shrubs	2
HORT 3420	Landscape Plant Installation, Establishment, and Management	3
HORT 3510	Turfgrass Establishment and Management	3
HORT 3800	Principles of Garden Composition	2
HORT 3810	Beginning Garden Composition Studio	2
HORT 4440	Landscape Construction Management	3
HORT 4810	Advanced Garden Composition	2
Other recommended courses are:		
HORT 3220	Plant Propagation	
HORT 3320	Greenhouse and Nursery Operations and Management	
HORT 3910	Horticultural Management Experience	
Required for option:		
ACCT 2840	Financial Accounting	3
And select 9 cr. hours from the following:		9
ACCT 2150	Legal Environment of Business	
ACCT 2850	Managerial Accounting	
ACCT 4160	Business Law	
ECON 2340	Small Business Management	
ECON 3340	Entrepreneurship in Agriculture	

ENTSP 3100	Entrepreneurship and Innovation	
ENTSP 3130	Feasibility Analysis for New Ventures	
MGMT 3700	Managing Organizations	
MGMT 3710	Organizational Behavior	
MKT 3400	Principles of Marketing	
MKT 4420	Sales Management	
MKT 4470	Consumer Behavior	
TSM 3240	Soil and Water Conservation Management	

Public Horticulture

The following courses are required to meet the Horticulture requirement:

HORT 2400	Trees, Shrubs, and Woody Vines for Landscaping	3
HORT 3220	Plant Propagation	3
HORT 3300	Herbaceous Ornamental Plants	3

Other recommended courses:

HORT 2330	House Plants and Interiorscaping	
HORT 2810	Landscape Graphics	
HORT 3320	Greenhouse and Nursery Operations and Management	
HORT 3410	Woody Plant Cultivars: Shade Trees, Ornamental Trees and Woody Shrubs	
HORT 3420	Landscape Plant Installation, Establishment, and Management	
HORT 3510	Turfgrass Establishment and Management	
HORT 3510L	Turfgrass Establishment and Management Laboratory	
HORT 3760	Fundamentals of Field Production of Horticultural Food Crops	
HORT 3800	Principles of Garden Composition	
HORT 3810	Beginning Garden Composition Studio	
HORT 3910	Horticultural Management Experience	

Required for option

ACCT 2840	Financial Accounting	3

And select 9 credit hours from the following:		9
ACCT 2150	Legal Environment of Business	
ACCT 2850	Managerial Accounting	
ACCT 4160	Business Law	
AGEDS 3100	Foundations of Agricultural Education Programs	
AGEDS 4010	Planning Agriculture and Life Sciences Education Programs	
COMST 2110	Interpersonal Communication	
COMST 2140	Professional Communication	
COMST 3170	Small Group Communication	
ECON 1010	Principles of Microeconomics	
ECON 2340	Small Business Management	
ECON 3340	Entrepreneurship in Agriculture	
ENGL 2200	Descriptive English Grammar	
ENGL 3030	Free-Lance Writing for Popular Magazines	
ENGL 3050	Creative Writing: Nonfiction	
ENGL 3090	Proposal and Report Writing	
ENGL 3130	Rhetorical Website Design	
ENGL 4150	Business and Technical Editing	
ENGL 4160	Visual Aspects of Business and Technical Communication	
ENSCI 4460	Integrating GPS and GIS for Natural Resource Management	
FIN 3010	Principles of Finance	
JLMC 2010	Reporting and Writing for the Mass Media	
JLMC 3100	Fundamentals of Photojournalism	
MGMT 3700	Managing Organizations	
MGMT 3710	Organizational Behavior	
MGMT 4710	Introduction to Human Resource Management	
PR 2200	Principles of Public Relations	
SPCM 3120	Business and Professional Speaking	

Turfgrass Management

The following courses are required to meet the Horticulture requirement:

HORT 2400	Trees, Shrubs, and Woody Vines for Landscaping	3
HORT 3510	Turfgrass Establishment and Management	3
HORT 3510L	Turfgrass Establishment and Management Laboratory	1
HORT 4510	Professional Turfgrass Management	2
HORT 4530	Sports Turf Management	3
HORT 4540	Turf & Landscape Irrigation	3
HORT 5510	Growth and Development of Perennial Grasses	2

Other recommended courses:

HORT 3300	Herbaceous Ornamental Plants	
HORT 3220	Plant Propagation	
HORT 3910	Horticultural Management Experience	
HORT 4240	Sustainable and Environmental Horticulture Systems	

Required for option:		
ACCT 2840	Financial Accounting	3
And select 9 cr. hours from the following:		9
ACCT 2850	Managerial Accounting	

ACCT 4160	Business Law
AGRON 2060	Introduction to Weather and Climate
AGRON 3600	Environmental Soil Science
AGRON 4590	Soil and Water Chemistry
ECON 2340	Small Business Management
ECON 3340	Entrepreneurship in Agriculture
ENVS 2010	Introduction to Environmental Issues
ENVS 3240	Energy and the Environment
HSPM 1010	Introduction to the Hospitality Industry
HSPM 2890	Contemporary Club Management
MGMT 3700	Managing Organizations
MGMT 3710	Organizational Behavior
TSM 2700	Principles of Injury Prevention and Safety
TSM 3240	Soil and Water Conservation Management

Horticulture, B.S. Greenhouse Plant Production Option

Freshman

Fall	Credits	Spring	Credits
ENGL 1500	3	ENGL 2500	3
BIOL 2110	3	CHEM 1630	4
BIOL 2110L	1	CHEM 1630L	1
HORT 1210	3	STAT 1040	3
LIB 1600	1	AGRON 1820	3
HORT 1100	1	HORT 2210	3
Social Science	3		
	15		**17**

Sophomore

Fall	Credits	Spring	Credits
ENT 2010	1	HORT 3320	4
ENT 2110	2	AGRON 2820	3
HORT 2400	3	PHYS 1010, 1150, BBMB 2210, or AGRON 2590	3-4
MATH 1400	3	ENT 3760	3
ACCT 2840	3	Elective	3
HORT 3310	2		
	14		**16-17**

Junior

Fall	Credits	Spring	Credits
HORT 4340	3	ENTSP 3100	3
HORT 3300	3	HORT 3220	3
HORT 3910	1	CHEM 2310, ***and*** CHEM 2310L, or BBMB 2210	3
PLP 4080	3	International Perspective	3
Elective	3	Elective	3
U.S. Cultures and Communities	3		
	16		**15**

Senior

Fall	Credits	Spring	Credits
HORT 3210	3	HORT 4350	3
HORT 3910	1	ECON 3340	3
ECON 2340	3	Humanities	3
Ethics	3	HORT 3410	2
SPCM 2120 or AGEDS 3110	3	ENGL 3020 or 3140	3
Elective	3		
	16		**14**

Horticulture, B.S. - Horticulture Food Crop Production and Management Option

Freshman

Fall	Credits	Spring	Credits
ENGL 1500	3	ENGL 2500	3
BIOL 2110	3	CHEM 1630	4
BIOL 2110L	1	CHEM 1630L	1
Social Science	3	STAT 1040	3
HORT 1210	3	AGRON 1820	3
LIB 1600	1	HORT 2210	3
HORT 1100	1		
	15		**17**

Sophomore

Fall	Credits	Spring	Credits
ENT 2010	1	AGRON 2820	3
ENT 2110	2	HORT 2760	3
HORT 3760	3	PHYS 1010, 1310, 1150, BBMB 2210, or AGRON 2590	3-4
MATH 1400	3	ENT 3760	3
ACCT 2840	3	HORT 4710	2
International Perspective	3	HORT 4710L	1
	15		**15-16**

Junior

Fall	Credits	Spring	Credits
HORT 3310	2	HORT 4240	3
Biological Science	3	HORT 3320	4
HORT 3910	1	HORT 3220	3
Humanities	3	HORT 4610	3

CHEM 2310, ***and*** CHEM 2310L, or BBMB 2210	3	Elective	2
Elective	3		
	15		**15**

Senior

Fall	Credits	Spring	Credits
ENTSP 3100	3	ENGL 3020 or 3140	3
HORT 3910	1	ECON 3340	3
ECON 2340	3	PLP 4080	3
HORT 4760	3	Ethics	3
HORT 3210	3	U.S. Cultures and Communities	3
SPCM 2120 or AGEDS 3110	3		
	16		**15**

Horticulture, B.S. - Landscape Design, Installation, and Management

Freshman

Fall	Credits	Spring	Credits
ENGL 1500	3	ENGL 2500	3
BIOL 2110	3	CHEM 1630	4
BIOL 2110L	1	CHEM 1630L	1
Social Science	3	STAT 1040	3
HORT 1210	3	HORT 2810	2
LIB 1600	1	HORT 2210	3
HORT 1100	1		
	15		**16**

Sophomore

Fall	Credits	Spring	Credits
ENT 2010	1	AGRON 2820	3
ENT 2110	2	HORT 3810	2
HORT 3300	3	PHYS 1010, 1310, 1150, BBMB 2210, or AGRON 2590	3-4
HORTICULTURE ELECTIVE	2	ENT 3760	3
MATH 1400	3	Elective	2
HORT 3800	2		
	13		**13-14**

Junior

Fall	Credits	Spring	Credits
HORT 2400	3	BIOL 3550	3
HORT 3510	3	CHEM 2310 & 2310L or BBMB 2210	3-4
HORT 3910	1	International Perspective	3
HORT 4440	3	U.S. Cultures and Communities	3
SPCM 2120 or AGEDS 3110	3	HORT 3410	2
ECON 2340	3	ACCT 2840	3
	16		**17-18**

Senior

Fall	Credits	Spring	Credits
ENTSP 3100	3	ENGL 3020 or 3140	3
HORT 3910	1	Humanities	3
ECON 3340	3	Ethics	3
MGMT 3710	3	PLP 4080	3
HORT 3420	3	HORT 3220	3
HORT 3210	3		
HORT 4810	2		
	18		**15**

Horticulture, B.S. - Public Horticulture Option

Freshman

Fall	Credits	Spring	Credits
ENGL 1500	3	ENGL 2500	3
BIOL 2110	3	CHEM 1630	4
BIOL 2110L	1	CHEM 1630L	1
Social Science	3	STAT 1040	3
HORT 1210	3	AGRON 1820	3
LIB 1600	1	HORT 2210	3
HORT 1100	1		
	15		**17**

Sophomore

Fall	Credits	Spring	Credits
ENT 2010	1	AGRON 2820	3
ENT 2110	2	HORT 3220	3
HORT 2400	3	PHYS 1010, 1310, 1150, BBMB 2210, or AGRON 2590	3-4
MATH 1400	3	ENT 3760	3
ACCT 2840	3		
International Perspective	3		
	15		**12-13**

Junior

Fall	Credits	Spring	Credits
HORT 3300	3	BIOL 3550	3
JLMC 2010	3	CHEM 2310 & 2310L or BBMB 2210	3-4
HORT 3910	1	HORT 4240	3

SPCM 2120 or AGEDS 3110	3 Elective	3
PR 2200	3 U.S. Cultures and Communities	3
Elective	3 Elective	1
	16	**16-17**

Senior

Fall	Credits	Spring	Credits
ENGL 3090	3	ENGL 3020 or 3140	3
PLP 4080	3	Elective	3
HORT 3910	1	Humanities	3
HORT 3210	3	HORT 3320	4
Ethics	3	MGMT 3710	3
HORT 3420	3		
	16		**16**

Horticulture, B.S. - Horticulture Research Option

Freshman

Fall	Credits	Spring	Credits
ENGL 1500	3	ENGL 2500	3
CHEM 1770	4	CHEM 1780	3
CHEM 1770L	1	CHEM 1780L	1
Social Science	3	STAT 1040	3
HORT 1210	3	AGRON 1820	3
LIB 1600	1	HORT 2210	3
HORT 1100	1		
	16		**16**

Sophomore

Fall	Credits	Spring	Credits
BIOL 2110	3	BIOL 2120	3
BIOL 2110L	1	BIOL 2120L	1
HORT 2400	3	International Perspectives	3
MATH 1650	4	MATH 1660	4
PHYS 1310	4	PHYS 1320	4
PHYS 1310L	1	PHYS 1320L	1
	16		**16**

Junior

Fall	Credits	Spring	Credits
HORT 3210	3	ENT 3760	3
HORT 3910	1	BIOL 3130	3
PLP 4080	3	BIOL 3130L	1
AGEDS 3120	3	HORT 3220	3
HORT 3420	3	CHEM 3310	3
U.S. Cultures and Communities	3	CHEM 3310L	1
	16		**14**

Senior

Fall	Credits	Spring	Credits
CHEM 3320	3	BIOL 3140	3
CHEM 3320L	1	HORT 3320	4
HORT 3910	1	Ethics	3
BBMB 3010, 4040, or 3160	3	SPCM 2120 or AGEDS 3110	3
HORT 3300	3	ENGL 3020 or 3140	3
BIOL 3660	4		
	15		**16**

Horticulture, B.S. - Turfgrass Management Option

Freshman

Fall	Credits	Spring	Credits
ENGL 1500	3	ENGL 2500	3
BIOL 2110	3	CHEM 1630	4
BIOL 2110L	1	CHEM 1630L	1
Social Science	3	STAT 1040	3
HORT 1210	3	AGRON 1820	3
LIB 1600	1	HORT 2210	3
HORT 1100	1		
	15		**17**

Sophomore

Fall	Credits	Spring	Credits
ENT 2010	1	AGRON 2820	3
ENT 2110	2	HORT 4520	3
HORT 2400	3	PHYS 1010, 1310, 1150, BBMB 2210, or AGRON 2590	3-4
MATH 1400	3	HORT 5510	2
ACCT 2840	3	SPCM 2120 or AGEDS 3110	3
HORT 3510	3		
HORT 3510L	1		
	16		**14-15**

Junior

Fall	Credits	Spring	Credits
HORT 4530	3	AGRON 3540	3
AGRON 2060	3	ENT 3760	3
HORT 3910	1	HORT 4510	2
PLP 4080	3	HORT 3220	3
International Perspective	3	CHEM 2310 & 2310L or BBMB 2210	3-4

U.S. Cultures and Communities	3		
	16		**14-15**
Senior			
Fall	**Credits**	**Spring**	**Credits**
HORT 3210	3	ENGL 3020 or 3140	3
HORT 3910	1	MGMT 3710	3
HORT 4540	3	HORT 4240	3
HORT 3420	3	Ethics	3
Option Class	3	Option Class	3
Option Class	3		
	16		**15**

Minors

The Department of Horticulture offers two minors: 1) Horticulture and 2) Landscape Management. Both minors are earned by taking HORT 2210 Principles of Horticulture Science plus 12 additional credits with at least 6 credits at the 3000-level or above. The minor must include at least 3 credits that are not used to meet any other department, college, or university requirement.

Horticulture minor

The Horticulture minor is a broad-based minor that does not focus within a specific area of horticulture. The 12 additional credits for this minor can be selected from the full list of Horticulture courses.

Landscape Management minor

The Landscape Management minor focuses on landscape management including plant selection, landscape installation and management, and turfgrass management. The 12 additional credits for this minor can be selected from the following courses: HORT 2400 Trees, Shrubs, and Woody Vines for Landscaping, HORT 2810 Landscape Graphics, HORT 3300 Herbaceous Ornamental Plants, HORT 3410 Woody Plant Cultivars: Shade Trees, Ornamental Trees and Woody Shrubs, HORT 3420 Landscape Plant Installation, Establishment, and Management, HORT 3510 Turfgrass Establishment and Management or HORT 4440 Landscape Construction Management.

Graduate Study

The graduate major in horticulture leads to the M.S. (thesis and non-thesis option) and Ph.D. Some faculty members of the department serve as major professors for students in interdepartmental graduate majors in plant biology; genetics and genomics; molecular, cellular, and developmental biology; ecology and evolutionary biology; sustainable agriculture; and environmental science.

Graduates possess a broad understanding of horticulture and the allied plant sciences. They are able to communicate effectively with members of the scientific community, industry groups, and other interested citizens. They are experienced in conducting research and communicating the results from that research. They are capable of addressing and solving complex problems that confront the many horticultural, agricultural, and plant science professions. They also understand the ethical, legal, social, and environmental issues associated with modern agricultural/horticultural practices.