

# **Horticulture: Plant Science**

 $Horticulture\ \&\ Landscape\ Architecture\ Department\ /\ College\ of\ Agriculture$ 

COA-HLA-BS / Major: HOSC/PLSC 201710 120 Credits for graduation

Name:		PUID:	Date:						
Required Major Courses (	16 credits)								
(3) HORT 10100	<sup>cc</sup> Fundamentals of Horticulture								
	<sup>∞</sup> Plant Propagation								
(4) HORT 30100	Plant Physiology								
	Plant Science Research								
	Horticultural Science Capstone Seminar								
	(1) HORT 51300 Nutrition of Horticultural Crops								
	Postharvest Technology of Fruits and Vege	etables							
Other Departmental/ Pr	ogram Course Requirements (98 cred	its) (See Advising Resources)							
(0.5) AGR 10100 I	ntroduction to the College of Agriculture a	nd Purdue University							
` ` '	ntroduction to Horticulture and Landscape	Architecture Academic Programs							
(3) AGRY 25500	Soil Science								
(3) AGRY 32000	Genetics								
	Genetics Laboratory								
	<sup>)cc</sup> Biochemistry								
	Biochemistry Laboratory								
` '	Introduction to Plant Science								
	Plant Ecology								
: /	Fundamentals of Plant Classification								
	Plant Anatomy								
	General Chemistry (satisfies Science #1 for a	core)							
	General Chemistry (satisfies Science #2 for o	core)							
	Organic Chemistry								
	Organic Chemistry Laboratory								
	pplied Calculus I (satisfies Quantitative Reaso	oning for core)							
	pplied Calculus II								
	Statistical Methods for Biology								
` ' '	Production Selective <sup>7</sup>								
(3) Physics Selection									
(2) Concentration (3) Concentration									
(3) Concentration (3) Concentration									
(3) Concentration									
(3) Concentration									
(3) Economics S									
	ties Selective <i>(satisfies Human Cultures Huma</i>	anities for core)¹							
	Technology & Society Selective (satisfies Selective)		,)2						
	or Social Sciences Selective <sup>4</sup>	cicites, realmonegy a society selective for core	,						
	or Social Sciences Selective <sup>4</sup>								
	or Social Sciences Selective (30000+ level) <sup>4</sup>								
	First-Year Composition (satisfies Written Co	mmunication for core) (satisfies Information L	iteracy Selective for core)						
			tation (satisfies Oral Communication for core)						
(3) Written or O	ral Communication Selective <sup>3</sup>								
Electives (6 credits)									
(6) Electives									
University Core Poquires	nents (http://www.purdue.edu/prov	act /initiatives /curriculum /course ht							
Human Cultures Humanities	——————————————————————————————————————		=						
Human Cultures Behavioral/Social			0						
Information Literacy									
Science Selective	$\Box$								
Science Selective									
College of Agriculture &	University Level Requirements ( <u>https</u>	s://ag.purdue.edu/oap/Pages/core_r	requirements.aspx)						
3 credits Multicultural Awareness	<i>□</i>								
9 credits International Understand	ling 🛮 🗸	<i></i>							
9 credits of Humanities and/or Soc									
Sciences outside the College of Ag									
3 credits of Humanities and/or So									
Sciences at 30000 or higher		<u></u>							

# **Horticulture: Plant Science**

# **Suggested Arrangement of Courses:**

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
0.5	AGR 10100 Introduction to the College of Agriculture and Purdue University		4	CHM 11600 <sup>cc</sup> General Chemistry	CHM 11500
0.5	AGR 12000 Introduction to Horticulture and Landscape Architecture Academic Programs		4	ENGL 10600 First-Year Composition	
4	BTNY 11000 Introduction to Plant Science		3	HORT 10100cc Fundamentals of Horticulture	
4	CHM 11500 <sup>cc</sup> General Chemistry		3	MA 16020 Applied Calculus II	MA 16010
3	COM 11400 Fundamentals of Speech or COM 21700 Science Writing and Presentation	1	1	Elective	
3	MA 16010 Applied Calculus	ALEKS 75+			
15			15		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	AGRY 25500 Soil Science	CHM 11100	3	BCHM 30700 <sup>cc</sup> Biochemistry	CHM 25700
4	BTNY 31600 Plant Anatomy	BTNY 11000	1	BCHM 30900 Biochemistry Laboratory	CHM 25700
4	CHM 25700 <sup>cc</sup> Organic Chemistry	CHM 11600	3	BTNY 30200 Plant Ecology	BTNY 11000
1	CHM 25701 Organic Chemistry Laboratory	CHM 25700)	3	HORT 20100 <sup>cc</sup> Plant Propagation	BTNY 11000 or HORT 10100
3	UCC Humanities Selective <sup>1</sup>		3	Physics Selective <sup>6</sup>	
			2	Concentration Selective <sup>5</sup>	
15			15		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	BTNY 30500 Fundamentals of Plant Classification	BTNY 11000	3	AGRY 32000 Genetics	BTNY 11000 and HORT 30100
4	HORT 30100 Plant Physiology	BTNY 11000 and CHM 25700	1	AGRY 32100 Genetics Laboratory	AGRY 32000
3	Concentration Selective <sup>5</sup>		3	STAT 50300 Statistical Methods for Biology	MA 16020
3	Economics Selective <sup>8</sup>		3	Concentration Selective <sup>5</sup>	
3	Humanities or Social Sciences Selective <sup>4</sup>		3	Humanities or Social Sciences Selective <sup>4</sup>	
			3	Written or Oral Communication Selective <sup>3</sup>	
16			16		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	HORT 49100 Plant Science Research		1	HORT 49200 Horticultural Science Capstone Seminar	HORT 49100
3	Horticultural Production Selective <sup>7</sup>		1	HORT 51300 Nutrition of Horticultural Crops	
3	Humanities or Social Sciences Selective (30000+ level) <sup>4</sup>		1	HORT 54100 Postharvest Technology of Fruits and Vegetables	
3	Concentration Selective <sup>5</sup>		7	Concentration Selective <sup>5</sup>	
1	UCC Science, Technology & Society Selective <sup>2</sup>		3	Elective	
2	Elective				
15			13		

- 1) 120 credits listed above are required for Bachelor of Science degree.
- 2) 2.0 Graduation GPA required for Bachelor of Science degree.
- 3) 32 credits of upper division courses (30000 level or higher) must be taken at Purdue University, West Lafayette.
- 4) ANY COURSE TAKEN AT PURDUE CAN BE ATTEMPTED NO MORE THAN THREE TIMES (INCLUSIVE OF W, WF, I AND IF).
- 5) CC = is considered a critical course

See next page for all supplemental Information  $\label{eq:continuous} % \[ \mathcal{L}_{\mathcal{L}} = \mathcal{L}_{\mathcal{L}$ 

The student is ultimately responsible for knowing and completing all degree requirements. myPurdue Plan is knowledge source for specific requirements and completion

# **HOSC/PLSC Supplemental Information**

All prerequisites must be met

#### <sup>1</sup>University Core Curriculum Humanities Selective (3 credits)

See approved Humanities list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html

# <sup>2</sup>University Core Science, Technology & Society Selective (1-3 credits)

See approved Science, Technology & Society list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html

## <sup>3</sup>Written or Oral Communication Selective (minimum 3 credits)

AGR 20100 Communication Across Culture ASL 10000-59900

COM 20000-59900 ENGL 20000-59900 YDAE 44000 Methods of Teaching Agriculture Education

### <sup>4</sup>Humanities and Social Sciences Selective (9 credits)

(9 credits of Humanities and/or Social Sciences outside the College of Agriculture)

See approved list at: <a href="https://ag.purdue.edu/oap/pages/core-social-humanities.aspx">https://ag.purdue.edu/oap/pages/core-social-humanities.aspx</a>

### <sup>5</sup>Concentration Selectives (18 credits)

AGRY 30600 Seed Technology AGRY 34900 Soil Ecology

AGRY 36500 Soil Fertility
AGRY 48000 Plant Genetics

AGRY 51500 Plant Mineral Nutrition

AGRY 52000 Principles and Methods of Plant Breeding

BCHM 46200 Metabolism

BCHM 56100 General Biochemistry I

BCHM 56200 General Biochemistry II BCHM 57200 Advanced Biochemical Techniques

BIOL 22100 Introduction to Microbiology BIOL 23100 Biology III: Cell Structure and Function

BIOL 41500 Introduction to Molecular Biology

BTNY 20700 The Microbial World

BTNY 20900 Plant Diversity

BTNY 21100 Plants and the Environment

BTNY 30100 Introductory Plant Pathology BTNY 30400 Introductory Weed Science

BTNY 35000 Biotechnology in Agriculture BTNY 42000 Plant Cellular and Developmental Biology

BTNY 55000 Biology of Fungi

BTNY 55200 Molecular Approaches in Plant Biology

BTNY 55300 Plant Growth and Development HORT 55300 Plant Growth and Development HORT 21700 Woody Landscape Plants

HORT 21800 Herbaceous Landscape Plants HORT 42000 Ornamental Plant Production

HORT 42100 Fruit Production

HORT 42200 Vegetable and Herb Production PSY 31800 Problem Solving and Decision Making

PSY 33300 Motivation

## <sup>6</sup>Physics Selective (3 credits)

PHYS 17200 Modern Mechanics PHYS 21400 The Nature of Physics

PHYS 22000 General Physics

PHYS 22100 General Physics

#### <sup>7</sup>Horticultural Production Selective (3 credits)

**HORT 40300 Tropical Horticulture** 

**HORT 42000 Ornamental Plant Production** 

HORT 42100 Fruit Production

HORT 42200 Vegetable and Herb Production

## <sup>8</sup>Economics Selective (3 credits)

AGEC 20300 Introductory Microeconomics for Food and Agribusiness

AGEC 20400 Introduction to Resource Economics and Environmental Policy

AGEC 21700 Economics

ECON 21000 Principles of Economics

ECON 25100 Microeconomics

ECON 25200 Macroeconomics