Plant Science

Botany & Plant Pathology Department / College of Agriculture

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

Name:_____ **PUID:**_____ **Date:** _____

Required Major Courses (21 credits)

_____ (4) BTNY 11000 Introduction to Plant Science
_____ (3) BTNY 20700 The Microbial World
_____ (3) BTNY 30200 Plant Ecology
_____ (3) BTNY 30500 Fundamentals of Plant Classification
_____ (4) BTNY 31600 Plant Anatomy
_____ (1) BTNY 49700 Research seminar
_____ (3) BTNY 49800 Research in Plant Science

Other Departmental/ Program Course Requirements (78.5 credits) (See Advising Resources)

_____ (0.5) AGR 10100 Introduction to the College of Agriculture and Purdue University
_____ (1) AGR 12500 Introduction to Botany and Plant Pathology
_____ (3) AGRY 32000 Genetics
_____ (1) AGRY 32100 Genetics Laboratory
_____ (3) BCHM 30700 Biochemistry
_____ (3) CHM 11100 General Chemistry *(satisfies Science #1 for core)*
_____ (3) CHM 11200 General Chemistry *(satisfies Science #2 for core)*
_____ (4) CHM 25700 Organic Chemistry
_____ (1) CHM 25701 Organic Chemistry Laboratory
_____ (4) HORT 30100 Plant Physiology
_____ (3) MA 16010 Applied Calculus I *(satisfies Quantitative Reasoning for core)*
_____ (3) PHYS 21400 The Nature of Physics
_____ (3) STAT 30100 Elementary Statistical Methods *(satisfies Information Literacy for core)*
_____ (18) Focus Selective[6]
_____ (3) Economics Selective *(satisfies Human Culture Behavioral/Social Science for core)*[3]
_____ (3) UCC Humanities Selective *(satisfies Human Cultures Humanities for core)*[1]
_____ (3) UCC STS Selective *(satisfies Science, Technology & Society Selective for core)*[5]
_____ (3) Humanities or Social Science Selective[2]
_____ (3) Humanities or Social Science Selective[2]
_____ (3) Humanities or Social Science Selective (30000+ level)[2]
_____ (4) ENGL 10600 First-Year Composition *(satisfies Written Communication for core) (satisfies Information Literacy Selective for core)*
_____ (3) COM 11400 Fundamentals of Speech Communication or *COM 21700* Science Writing and Presentation *(satisfies Oral Communication for core)*
_____ (3) Written or Oral Communications Selective[4]

Electives (20.5 credits)

_____ (20.5) Elective

University Core Requirements (http://www.purdue.edu/provost/initiatives/curriculum/course.html)

Human Cultures Humanities	☐ _____	*Science, Technology & Society Selective*	☐ _____
Human Cultures Behavioral/Social Science	☐ _____	*Written Communication*	☐ _____
Information Literacy	☐ _____	*Oral Communication*	☐ _____
Science Selective	☐ _____	*Quantitative Reasoning*	☐ _____
Science Selective	☐ _____		

College of Agriculture & University Level Requirements (https://ag.purdue.edu/oap/Pages/core_requirements.aspx)

3 credits Multicultural Awareness	☐ _____		
9 credits International Understanding	☐ _____	☐ _____	☐ _____
9 credits of Hum. And/or Social Sciences outside the College of Agriculture	☐ _____	☐ _____	☐ _____
3 credits of Hum. And/or Social Science at 30000 or higher	☐ _____		

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		3	BTNY 20700 The Microbial World	BTNY 11000
0.5	AGR 12500 Introduction to Botany and Plant Pathology		3	CHM 11200 General Chemistry	CHM 11100
4	BTNY 11000 Introduction to Plant Science		4	ENGL 10600 First-Year Composition	
3	CHM 11100 General Chemistry		3	Economics Selective	
3	COM 11400 Fundamentals of Speech or COM 21700 Scientific Communication		4	Elective	
3	MA 16010 Applied Calculus I	ALEKS 75+			
14			**17**		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	BTNY 30500[cc] Fundamentals of Plant Classification	BTNY 11000	3	BCHM 30700 Biochemistry	CHM 25700
4	CHM 25700 Organic Chemistry	CHM 11200	3	BTNY 30200 Plant Ecology	BTNY 11000
1	CHM 25701 Organic Chemistry Lab		3	PHYS 21400 The Nature of Physics	
3	Focus Selective		3	UCC Science, Technology, & Society Selective	
3	UCC Humanities selective		3	Focus Selective	
14			**15**		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
4	BTNY 31600 Plant Anatomy	BTNY 11000	3	AGRY 32000 Genetics	BTNY 11000, HORT 30100
4	HORT 30100 Plant Physiology	CHM 25700	1	AGRY 32100 Genetics Lab	AGRY 32000
3	Focus Selective		3	STAT 30100 Elementary Statistical Methods	
3	Written or Oral Communication Selective		3	Focus Selective	
2	Elective		3	Humanities or Social Science Selective	
			3	Elective	
16			**16**		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	BTNY 49800 Research in Plant Science		1	BTNY 49700 Research Seminar	BTNY 49800
3	Focus Selective		3	Focus Selective	
3	Humanities or Social Science Selective (30000+ level)		3	Humanities or Social Science Selective	
6	Electives		6	Electives	
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

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

PLSC Supplemental Information

All prerequisites must be met

[1]University Core Curriculum Humanities Selective (3 credits)

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

[2]Humanities and Social Science Selective (9 credits)

See approved list at: https://ag.purdue.edu/oap/pages/core-social_humanities.aspx

[3]Economics Selective (3 credits)

AGEC 20300 Introductory Microeconomics for Food and Agribusiness	AGEC 21700 Economics	ECON 25100 Microeconomics
AGEC 20400 Introduction to Resource Economics and Environmental Policy	ECON 21000 Principles of Economics	ECON 25200 Macroeconomics

[4]Written or Oral Communication Selective (3 credits)

AGR 20100 Communication Across Culture	COM 20000-59900	YDAE 44000 Methods of Teaching Agriculture Education
ASL 10000-59900	ENGL 20000-59900	

[5]University Core Science, Technology & Society Selective (3 credits)

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

[6]Focus Selective (18 credits)

ABE 32500 Soil and Water Resource Engineering	BIOL 58000 Evolution	FNR 35300 Natural Resources Assessment
AGEC 25000 Economic Geography of World Food and Resources	BIOL 59500 Cell Biology of Plants	FNR 35700 Fundamental Remote Sensing
AGEC 34000 Economics of World Development	BTNY 20100 Plants and Civilization	FNR 36500 Natural Resources Issues, Policy, and Administration
AGEC 41000 Agricultural Policy	BTNY 20400 Crop and Weed Identification	FNR 40600 Natural Resources and Environmental Economics
AGRY 10500 Crop Production	BTNY 30100 Introductory Plant Pathology	FNR 43400 Tree Physiology
AGRY 12000 Water and Food Security	BTNY 30400 Introductory Weed Science	FNR 43500 Physiological Ecology of Woody Plants
AGRY 25500 Soil Science	BTNY 35000 Biotechnology in Agriculture	FNR 48800 Global Environmental Issues
AGRY 28500 World Crop Adaptation and Distribution	BTNY 39000 Selected Topics in Plant Science	FNR 50100 Limnology
AGRY 29000 Introduction to Environmental Science	BTNY 42000 Plant Cellular and Developmental Biology	FNR 50200 Watershed Hydrology, Ecology, and Management
AGRY 33500 Weather and Climate	BTNY 44300 Arthropods and Diseases of Turfgrass	FNR 50500 Molecular Ecology and Evolution
AGRY 34900 Soil Ecology	BTNY 44600 Integrated Plant Health Management for Ornamental Plants	FNR 54000 Wetlands Ecology
AGRY 35000 Global Awareness	BTNY 50400 Advanced Weed Science	FNR 54200 Ecology and Management of Declining, Rare, and Endangered Species
AGRY 38500 Environmental Soil Chemistry	BTNY 50500 Advanced Biology of Weeds	FNR 55800 Digital Remote Sensing and GIS
AGRY 45000 Soil Conservation and Water Management	BTNY 52500 Intermediate Plant Pathology	HORT 20100 Plant Propagation
AGRY 48000 Plant Genetics	BTNY 53500 Plant Disease Management	HORT 40300 Tropical Horticulture
AGRY 51100 Population Genetics	BTNY 55000 Biology of Fungi	HORT 59000 Special Studies in Horticulture
AGRY 52000 Principles and Methods of Plant Breeding	BTNY 55200 Molecular Approaches to Plant Pathology	HORT 51500 Plant Cell, Tissue, and Organ Culture
AGRY 52500 Crop Physiology and Ecology	BTNY 55300 Plant Growth and Development	HORT 55100 Biophysical Plant Physiology
AGRY 53000 Advanced Plant Genetics	EAPS 10000 Planet Earth	NRES 25500 Soil Science
AGRY 53600 Environmental Biophysics	EAPS 11100 Physical Geology	NRES 28000 Hazardous Waste Handling
AGRY 54400 Environmental Organic Chemistry	EAPS 11300 Environmental Geology	NRES 29000 Introduction to Environmental Science
AGRY 54500 Remote Sensing of Land Resources	EAPS 42000 Global Change Modeling	POL 30000 Introduction to Political Analysis
AGRY 57200 Molecular Cytogenetics	ENGL 23400 Ecological Literature	POL 32300 Comparative Environmental Policy
AGRY 58000 Soil Microbiology	ENTM 20600 General Entomology	POL 32700 Global Green Politics
AGRY 58200 Environmental Fate of Pesticides	ENTM 20700 General Entomology Laboratory	POL 42300 International Environmental Policy
AGRY 58500 Soils and Land Use	ENTM 31100 Insect Ecology	POL 52300 Environmental Politics and Public Policy
ASM 33600 Environmental Systems Management	ENTM 46000 Aquatic Entomology	SOC 55300 Environmental Sociology
BCHM 22100 Analytical Biochemistry	ENTM 51000 Insect Pest Management	SFS 30100 Agroecology
BCHM 56100 General Biochemistry I	ENTM 54200 Insect Ecology	STAT 50300 Statistical Methods of Biology
BCHM 56200 General Biochemistry II	FNR 10300 Introduction to Environmental Conservation	STAT 51100 Statistical Methods
BIOL 12100 Biology I: Diversity, Ecology, and Behavior	FNR 20100 Marine Biology	
BIOL 24100 Biology IV: Genetics and Molecular Biology	FNR 21000 Natural Resource Information Management	
BIOL 41500 Introduction to Molecular Biology	FNR 22500 Dendrology	
BIOL 41600 Viruses and Viral Diseases	FNR 23000 The World's Forests and Society	
BIOL 43800 General Microbiology	FNR 30500 Conservation Genetics	
BIOL 48100 Eukaryotic Biology	FNR 33100 Forest Ecosystems	
BIOL 51700 Molecular Biology: Proteins	FNR 33300 Fire Effects in Forest Environments	
BIOL 51900 Molecular Biology: Nucleic Acids	FNR 34100 Wildlife Habitat Management	