

# PLANT AND SOIL SCIENCES: CROP PRODUCTION AND MANAGEMENT, BSAG

**Requirements for Students Matriculating in or before Academic Year 2024-2025.** Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

**Minimum Overall Grade Point Average: 2.00**

**Total Hours: 120**

Code	Title	Hours
<b>General Education Requirements</b>		
<i>English Composition</i>		
See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition/">http://catalog.okstate.edu/university-academic-regulations/#english-composition/</a> )		
ENGL 1113 or ENGL 1313	Composition I Critical Analysis and Writing I	3
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
<i>American History &amp; Government</i>		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical &amp; Quantitative Thought (A)</i>		
STAT 2013	Elementary Statistics (A) <sup>1</sup>	3
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
CHEM 1314 or CHEM 1215	Chemistry I (LN) <sup>1</sup> Chemical Principles I (LN)	4
Course designated (N)		3
<i>Social &amp; Behavioral Sciences (S)</i>		
AGEC 1113	Introduction to Agricultural Economics (S) <sup>1</sup>	3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		9
<b>Hours Subtotal</b>		<b>40</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		
Select at least one International Dimension (I) course		
<b>College Requirements</b>		
UNIV 1111	First Year Seminar (or other approved first year seminar course)	1
ENTO 2993	Introduction to Entomology (LN)	3
<b>Departmental Requirements</b>		

Select one of the following:		3
AGCM 3103	Written Communications in Agricultural Sciences and Natural Resources	
BCOM 3113	Written Communication	
BCOM 3443	Business Communication for International Students	
ENGL 3323	Technical Writing <sup>2</sup>	
Select one of the following:		3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S)	
SPCH 2713	Introduction to Speech Communication (S)	
SPCH 3733	Elements of Persuasion (S) <sup>3</sup>	
PLNT 1213	Introduction to Plant and Soil Systems (N)	3
PLNT 2041	Career Development in Plant and Soil Sciences	1
PLNT 4033	Applied Agricultural Meteorology	3
PLNT 4080 or PLNT 4990	Professional Internship Senior Thesis in Plant and Soil Sciences	3
PLNT 4571	Professional Preparation in Plant and Soil Sciences	1
SOIL 2124	Fundamentals of Soil Science (N)	4
SOIL 4234	Soil Nutrient Management	4
Select one of the following:		3
MATH 1483	Mathematical Functions and Their Uses (A)	
MATH 1513	College Algebra (A) <sup>4</sup>	
MATH 2103	Business Calculus (A)	
MATH 2144	Calculus I (A)	
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN)	4
or BIOL 1114	Introductory Biology (LN)	
CHEM 1515 or CHEM 1225	Chemistry II (LN) <sup>5</sup> Chemical Principles II (LN)	5
Select one of the following:		3
PHYS 1014	Descriptive Physics (N)	
BIOC 2344	Chemistry and Applications of Biomolecules	
CHEM 3013	Survey of Organic Chemistry	
<b>Hours Subtotal</b>		<b>44</b>
<b>Major Requirements</b>		
<i>Core Courses</i>		
PBIO 1404	Plant Biology (LN)	4
Select one of the following:		3
PBIO 4463	Plant Physiology	
PLNT 4123	Plant-Environment Interactions	
HORT 4963	Horticulture Physiology	
PLNT 2013	Applied Plant Science	3
PLNT 3012	Crops of Oklahoma	2
PLNT 4013	Principles of Weed Science	3
PLNT 4353	Plant Breeding	3
ANSI 4203 or NREM 4603	Rangeland and Pasture Utilization Rangeland and Pasture Utilization	3
PLNT 4443	Cropping Systems	3
SOIL 4213	Precision Agriculture	3

**Related Courses**

Select 9 hours of the following: 9

Upper-division PLNT including PLNT 4470, PLNT 4933, PLNT 4573	
PLNT 2011	Agronomic Problem Solving
PBIO 3263	Plants and People (N)
PBIO 4423	Plant Mineral Nutrition
PLP 3343	Principles of Plant Pathology
PLP 3553	Fungi: Myths and More
ENPP 3663	Turfgrass Integrated Pest Management
ENTO 3003	Livestock Entomology
ENTO 3421	Horticultural Insects
ENTO 3461	Insects in Forest Ecosystems
ENTO 4854 or ENPP 5923	Medical and Veterinary Entomology Applications of Biotechnology in Pest Management
SOIL 3433	Soil Genesis, Morphology, and Classification
SOIL 4363	Environmental Soil Science
SOIL 4463	Soil and Water Conservation
SOIL 4483	Soil Microbiology
SOIL 4683	Soil, Water, and Weather
SOIL 4893	Environmental Soil Chemistry
SOIL 3033	Soils and Societies (S)
ANSI 1021 & ANSI 1023 or ANSI 1124	Introduction to the Animal Sciences Lab and Introduction to the Animal Sciences Introduction to the Animal Sciences
ANSI 2123	Livestock Feeding
ANSI 3423	Animal Genetics
ANSI 3543	Principles of Animal Nutrition
ANSI 3653	Applied Animal Nutrition
ANSI 4203	Rangeland and Pasture Utilization
HORT 3113	Greenhouse Management
HORT 4133	Temperature Stress Physiology
HORT 4953	Plant Growth and Development
AST 1413	Introduction to Engineering in Agriculture
AST 2313	Surveying
AST 3011 or AST 3211	Ag Structures Engines and Power
AST 3222	Metals and Welding
AST 4112	Land Measurement and Site Analysis
AST 4203	Agricultural Water Management
ENVR 4033	Ecology of Invasive Species
AST 4213	Safety and Health in Agriculture
GEOG 2344	Digital Tools for Environmental Problem-Solving (LN)
GEOG 3023	Climatology (N)
GEOG 3033	Meteorology (N)
NREM 3013	Applied Ecology and Conservation
NREM 3012	Applied Ecology Laboratory
NREM 3613	Principles of Rangeland Management
NREM 4033	Ecology Of Invasive Species
BIOL 3023	General Genetics

**Hours Subtotal 36****Electives**

Select 0 hours or hours to complete required total for degree 0

**Total Hours 120**

1

College &amp; Departmental requirements that may be used to meet General Education requirements.

2

If ENGL 3323 Technical Writing is used to satisfy ENGL 1213 Composition II above; hours in this block are reduced by 3.

3

If used as (S) course above, hours in this block reduced by 3.

4

If used as (A) course above, hours in this block reduced by 3.

5

If used as (N) course above, hours in this block reduced by 5.

**Other Requirements**

- A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
- A 2.00 GPA or higher in upper-division hours.

**Additional State/OSU Requirements**

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2030.