

MAJOR IN AGRICULTURAL BIOLOGY

Requirements Effective Spring 2023

Freshman

		AUCC	Credits
AB 120 ^{1,2}	Agricultural Biology--Freshman Orientation		1
AB 130 ^{1,2}	Working with Agricultural Biology Data		1
AREC 202	Agricultural and Resource Economics (GT-SS1)	3C	3
CHEM 107	Fundamentals of Chemistry (GT-SC2)	3A	4
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)	3A	1
CO 150	College Composition (GT-CO2)	1A	3
Select one group from the following:			8
Group A			
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	
LIFE 103	Biology of Organisms-Animals and Plants (GT-SC1)	3A	
Group B			
BZ 110	Principles of Animal Biology (GT-SC2)	3A	
BZ 111	Animal Biology Laboratory (GT-SC1)	3A	
BZ 120	Principles of Plant Biology (GT-SC1)	3A	
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			6
Electives			3

Total Credits

30

Sophomore

AB 230 ^{1,2}	Becoming an Agricultural Biology Professional		1
BSPM 302 ¹	Applied and General Entomology		2
CHEM 245	Fundamentals of Organic Chemistry		4
CHEM 246	Fundamentals of Organic Chemistry Laboratory		1
MATH 155	Calculus for Biological Scientists I (GT-MA1)	1B	4
SPCM 200	Public Speaking		3
Select one course from the following:			1-2
BSPM 303A ¹	Entomology Laboratory: General		
BSPM 303B ¹	Entomology Laboratory: Horticultural		
BSPM 303C ¹	Entomology Laboratory: Agricultural		
Select one course from the following:			3
LAND 220/LIFE 220 ¹	Fundamentals of Ecology (GT-SC2)	3A	
LIFE 320 ¹	Ecology		
Select one course from the following:			3
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)	2	
JTC 300	Strategic Writing and Communication (GT-CO3)	2	
LB 300	Specialized Professional Writing	2	
Select one course from the following:			3
AGRI 116/IE 116	Plants and Civilizations (GT-SS3)	1C	
HORT 171/SOCR 171	Environmental Issues in Agriculture (GT-SS3)	1C	
SOC 220	Environment, Food, and Social Justice (GT-SS3)	1C	
Select one course from the following:			3

STAT 301	Introduction to Applied Statistical Methods		
STAT 307	Introduction to Biostatistics		
Total Credits			28-29
Junior			
AB 330 ¹	Applications in Agricultural Biology I	4A,4B,4C	2
BSPM 308 ¹	Ecology and Management of Weeds		3
BSPM 361 ¹	Elements of Plant Pathology		3
BSPM 487	Internship		3
BZ 220 ¹	Introduction to Evolution		3
BZ 350 ¹	Molecular and General Genetics		4
SOCR 240 ¹	Introductory Soil Science		4
Agricultural Biology Elective (see list below) ¹			3
Electives			5
Total Credits			30
Senior			
AB 410	Understanding Pesticides		3
AB 430 ¹	Applications in Agricultural Biology II	4A,4B,4C	3
AB 451	Integrated Pest Management		3
AGED 210	History of Agriculture in the United States	3D	3
Agricultural Biology Electives (see list below) ¹			9
Electives ³			10-11
Total Credits			31-32
Program Total Credits:			120

Agricultural Biology Electives

Code	Title	Credits
Select a minimum of one course from each group for a minimum of 12 credits:		
Group 1: General and Plant		
BC 351	Principles of Biochemistry	4
BZ 223	Plant Identification	3
BZ 331	Developmental Plant Anatomy	4
BZ 338	Comparative Morphology of Vascular Plants	4
BZ 440	Plant Physiology	3
BZ 450	Plant Ecology	4
HORT 221	Landscape Plants	4
HORT 231	Landscape Graphics Studio	4
HORT 232	Principles of Landscape Design	4
HORT 260	Plant Propagation	4
HORT 3XX		
HORT 4XX		
SOCR 460/HORT 460	Plant Breeding and Biotechnology	3
Group 2: Plant Pathology		
AB 521	Forest Health Issues	2
AB 555	Topics in Plant Pathology--Plant Virology	2
BSPM 365	Integrated Tree Health Management	4
BSPM 450	Molecular Plant-Microbe Interaction	3
BZ 333	Introductory Mycology	4
MIP 300	General Microbiology	3

Lecture/laboratory combination:		4
MIP 432/ESS 432	Microbial Ecology	
MIP 433/ESS 433	Microbial Ecology Laboratory	
Lecture/laboratory combination:		4
SOCR 455	Microbiomes of Soil Systems	
SOCR 456	Soil Microbiology Laboratory	
Group 3: Entomology		
AB 340	Insect Biotechnology	3
BSPM 423	Evolution and Classification of Insects	3
BSPM 445	Aquatic Insects	4
BSPM 462/BZ 462/ MIP 462	Parasitology and Vector Biology	5

¹ A minimum grade of 'C' (2.000) must be obtained in this course in order to complete the program.

² Transfer students are required to take AB 270 in lieu of AB 120, AB 130, and AB 230.

³ Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).