ANIMAL SCIENCE: ANIMAL BIOTECHNOLOGY, BSAG

Requirements for Students Matriculating in or before Academic Year 2018-2019. 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
General Education Requirements		
English Composition		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
American History & Government		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865	
HIST 1493	American History Since 1865	
POLS 1113	American Government	3
Analytical & Quantitative Thought (A)		
MATH 1513	College Algebra (A) [1]	3
Select one of the following:		3
MATH 1613	Trigonometry (A) [1]	
STAT 2013	Elementary Statistics (A) [1]	
STAT 2023	Elementary Statistics for Business and Economics (A) [1]	
Humanities (H)		
Courses designated (H)		6
Natural Sciences (N)		
Must include one Laboratory Science (L) course		
BIOL 1114	Introductory Biology (LN) [1]	4
Any course designated (N)		3
Social & Behavioral Sciences (S)		
AGEC 1113	Introduction to Agricultural Economics (S) [1]	3
Additional General Education		
Courses designated (A), (H), (N), or (S)		6
Hours Subtotal		40
Diversity (D) & International Dimension (I)		
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		
College/Departmental Requirements		
Agricultural Sciences and Natural Resources		
AG 1011	First Year Seminar	1
ANSI 1124	Introduction to the Animal Sciences	4
ANSI 2111	Animal and Food Science Professional Development	1
ANSI 2233	The Meat We Eat	3
or ANSI 2253	Meat Animal and Carcass Evaluation	
PLNT 1213	Introduction to Plant and Soil Systems	3
CHEM 1314	Chemistry I (LN) [2]	4
or CHEM 1215	Chemical Principles I (LN)	
Written and Oral Communications		
AGCM 3103	Written Communications in Agricultural Sciences and Natural Resources [3]	3
or ENGL 3323	Technical Writing	
Select one of the following: [4]		3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S)	
SPCH 2713	Introduction to Speech Communication (S)	
SPCH 3733	Elements of Persuasion (S)	
Hours Subtotal		22
Major Requirements		
Core Courses		
ANSI 3423	Animal Genetics	3
ANSI 3443	Animal Reproduction	3
ANSI 3543	Principles of Animal Nutrition	3
ANSI 4843	Applications of Biotechnology in Animal Science	3
ANSI 4863	Capstone for Animal Agriculture	3
Option		
Select one option (p. 2)		9
Additional Core Courses		
CHEM 1225	Chemical Principles II (LN)	5
or CHEM 1515	Chemistry II (LN)	
MICR 2123	Introduction to Microbiology	3
MICR 2132	Introduction to Microbiology Laboratory	2
PHYS 1014	Descriptive Physics (N)	4
or PHYS 1114	College Physics I (LN)	
MICR 3033	Cell and Molecular Biology	3
or BIOL 4215	Mammalian Physiology	
Select one of the following:		4
ANSI 3414	Form and Function of Livestock and Poultry	
BIOL 1604	Animal Biology	
BIOL 3204	Physiology	
Select 5 hours upper division organic chemistry		5
BIOC 3653	Survey of Biochemistry	3
Related Courses		
Select 5 hours of the following:		5
Minimum of 3 upper division hours required		
ANSI 3903	Agricultural Animals of the World (I) (or any course designated (I))	
ANSI 3333	Meat Science	
ANSI 4803	Animal Growth and Performance	
ANSI 4910	Animal Industry Internship	
MATH 2144	Calculus I (A)	

MATH 2153	Calculus II (A)
MATH 2163	Calculus III
PHYS 1214	College Physics II (LN)
ANSI [5]	
BIOC	
BIOL	
CHEM	
ENTO	
FDSC	
MICR	
STAT	
No more than 3 hours from ANSI 4900	
Hours Subtotal	58
Electives	
Select 0 hours or hours to complete required total for degree	0
Total Hours	120

1 College & Departmental requirements that may be used to meet GE requirements.

2 If used for [N] requirement, hours in this block reduced by CHEM course hours and related courses increased

3 If ENGL 3323 Technical Writing is substituted for ENGL 1213 Composition II above; hours in this block are reduced by 3

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

5 No more than 3 hours from ANSI 4900 Special Problems

Options

Option 1

Code	Title	Hours
Select 6 hours of the following:		6
ANSI 3433	Animal Breeding	
ANSI 3623	Livestock Behavior Handling	
ANSI 3653	Applied Animal Nutrition	
Select 3 hours of the following:		3
ANSI 4023	Poultry Science	
ANSI 4423	Horse Science	
ANSI 4543	Dairy Cattle Science	
ANSI 4553	Sheep Science	
ANSI 4613	Beef Cow-Calf Management	
ANSI 4633	Stocker and Feedlot Cattle Management	
ANSI 4643	Swine Science	
ANSI 4703	Equine Enterprise Management	
ANSI 4713	Beef Seedstock Management and Sales	

Option 2

Code	Title	Hours
Select 9 hours of the following:		9
ANSI 4803	Animal Growth and Performance	
MICR 3253	Immunology	
MICR 4123	Virology	
MICR 4233	Advanced Cell and Molecular Biology	
BIOL 4134	Embryology	
BIOL 4283	Endocrinology	

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 2024.