

ANIMAL SCIENCE (ANIMAL INDUSTRY) - BACHELOR OF SCIENCE IN AGRICULTURE

The animal industry concentration includes courses that prepare you for work in many phases of the livestock industry, such as livestock production on farms and ranches, the meat industry, the feed industry, livestock breed associations, and livestock publications.

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 120 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education		
<i>Area I: Communications</i>		
	English Composition - Level 1 ¹	4
	English Composition - Level 2 ¹	3
	Oral Communication	3
<i>Area II: Mathematics</i>		
MATH 1220G	College Algebra ²	3-4
	or MATH 1511G Calculus and Analytic Geometry I	
	or MATH 1511H Calculus and Analytic Geometry I Honors	
<i>Area III/IV: Laboratory Sciences and Social/Behavioral Sciences</i>		
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
	Choose one from the following:	3
	ECON 1110G Survey of Economics	
	ECON 2110G Macroeconomic Principles	
	ECON 2120G Principles of Microeconomics Honors	
	<i>Area V: Humanities</i> ¹	3
	<i>Area VI: Creative and Fine Arts</i> ¹	3
	General Education Elective ¹	3-4
	Viewing A Wider World ³	6
Departmental/College Requirements ⁴		
ANSC 1110	Animal Science Careers	1
ANSC 1120	Introduction to Animal Science	3
	or ANSC 1120H Introduction to Animal Science Honors	
ANSC 1120L	Introduction to Animal Science Lab	1
ANSC 303	Livestock, Meat and Wool Evaluation	4
	or ANSC 308 Horse Evaluation	
ANSC 304	Feeds and Feeding	3
ANSC 370	System Physiology of Farm Animals	4
ANSC/RGSC 402	Animal Science Seminar (or)	1
	or ANSC 402 H Animal Science Seminar	
ANSC 421	Physiology of Reproduction	4
ANSC 422	Animal Nutrition	3
ANSC 423	Animal Breeding	3

<i>Ag Electives: choose a total of 6 credit with no more than 3 credits in ANSC Experience</i>		6
RGSC 2110	Introduction to Rangeland Management	
ANSC 1160	Introductory Horse Science	
ANSC 1180	Companion Animal in Society	
ANSC 1140	Introduction to Dairy Science	
ANSC 2310	Introduction to Meat Science	
ANSC 301	Animal and Carcass Evaluation	
ANSC Experience		
ANSC 390	Internship	
ANSC 391	Undergraduate Research Experience	
ANSC 392	Animal Sciences Teaching/Extension Experience	
<i>Concentration</i>		
ANSC 2330	Animal Production	3
ACCT 2110	Principles of Accounting I	3
ANSC 2340	Genetics in Animal Science	3
	or ANSC 305 Principles of Genetics	
ANSC 1170	Introduction to Animal Metabolism	3
	or CHEM 1225G General Chemistry II Lecture and Laboratory for STEM Majors	
<i>Electives</i>		
Production Electives		
Select 9 credits from production courses offered in the department		9
	ANSC 424 Swine Production	
	ANSC 425 Horse Science and Management	
	ANSC 426 Beef Production: Cow-Calf Management	
	ANSC 427 Dairy Production	
	ANSC 428 Sheep and Wool Production	
	ANSC 429 Beef Production: Feedlot Management	
	ANSC 468 Advanced Dairy Herd Management	
Ranch Management Electives		
Select three courses from the following:		9
	AEEC 2140 Technology and Communication for Business Management	
	AEEC 3270 Spreadsheet Applications in Food and Agriculture	
	ANSC 383 Equine Reproductive Management	
	ANSC 480 Environmental Physiology of Domestic Animals	
	RGSC 316 Rangeland Plants	
	RGSC 318 Watershed Management	
	RGSC 325 Rangeland Restoration Ecology	
	Or any AEEC or RGSC numbered 300/3000 & above except AEEC 3210 and AEEC 4530	
Business Electives		
Select one from the following:		
	AEEC 3210 Marketing and Food Agricultural Products	
	AEEC 4530 Case Studies in Food and Agribusiness Management	
	MGMT 361 Small Business Management	
	MKTG 312 Personal Selling	
	Or any BUSA, MGMT, MKTG numbered 300/3000 & above that are not VWW courses	
Non-Departmental Requirements (in addition to Gen.Ed/VWW)		
A ST 311	Statistical Applications	3
Second Language: (not required)		

Electives, to bring the total to 120⁵	13-15
Total Credits	120

- ¹ See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses.
- ² MATH 1220G College Algebra or MATH 1511G Calculus and Analytic Geometry I is required for the degree but students may need to take any prerequisites needed to enter MATH 1220G or MATH 1511G first.
- ³ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog for a full list of courses
- ⁴ Required of Industry and Science Options
- ⁵ Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1220G College Algebra and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year		
Semester 1		Credits
ANSC 1120	Introduction to Animal Science	3
ANSC 1120L	Introduction to Animal Science Lab	1
MATH 1220G	College Algebra	3
ENGL 1110G or ENGL 1110H	Composition I or Composition I Honors	4
ACES 1120	Freshman Orientation	1
Ag Elective: choose one based on interest		3
ANSC 1160	Introductory Horse Science	
ANSC 1180	Companion Animal in Society	
RGSC 2110	Introduction to Rangeland Management	
ANSC 2310	Introduction to Meat Science	
Credits		15
Semester 2		
ANSC 1110	Animal Science Careers	1
ANSC 2330	Animal Production	3
BIOL 2610G	Principles of Biology: Biodiversity, Ecology, and Evolution	3
BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	1
ACOM 1130G	Effective Leadership and Communication in Agriculture	3
Choose an elective course. Consider a minor in horse management, human animal interaction, dairy science range science or ranch management.		3
Credits		14

Second Year		
Semester 1		
ANSC 2340	Genetics in Animal Science	3
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ACCT 2110	Principles of Accounting I	3
ENGL 2210G or ENGL 2210H	Professional and Technical Communication or Professional and Technical Communication	3
ANSC 303 or ANSC 308	Livestock, Meat and Wool Evaluation or Horse Evaluation	4
Credits		17
Semester 2		
ANSC 1170	Introduction to Animal Metabolism	3
ANSC 304	Feeds and Feeding	3
ECON 1110G	Survey of Economics	3
Area VI: Creative and Fine Arts -see catalog for complete list ¹		3
Ranch Management Elective: - see degree plan for complete list		3
Credits		15
Third Year		
Semester 1		
ANSC 370	System Physiology of Farm Animals	4
A ST 311	Statistical Applications	3
Viewing a Wider World class - see catalog for complete list ²		3
Ranch Management Elective: - see degree plan for complete list		3
Choose an elective course. Consider a minor in horse management, human animal interaction, dairy science range science or ranch management.		3
Credits		16
Semester 2		
ANSC 421	Physiology of Reproduction	4
Viewing a Wider World - see catalog for complete list ²		3
Ranch Management Elective - see degree plan for complete list		3
Area V: Humanities - see catalog for complete list ¹		3
Credits		13
Fourth Year		
Semester 1		
ANSC 402	Animal Science Seminar	1
ANSC 422	Animal Nutrition	3
ANSC 423	Animal Breeding	3
Choose production course from degree plan		3
Choose Business Elective from degree plan		3
Choose an elective course. Consider a minor in horse management, human animal interaction, dairy science range science or ranch management.		3
Credits		16
Semester 2		
Choose production course from degree plan		3
Choose production course from degree plan		3
Ranch Management Elective - see degree plan for complete list		3
Ag Elective - see degree plan for complete list. Recommend Internship		3
Choose an elective course. Consider a minor in horse management, human animal interaction, dairy science range science or ranch management.		3
Credits		15
Total Credits		121

¹ See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses.

² See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog for a full list of courses