Bachelor of Science Major: Animal Science Specialization: Science

2023-2024 Sample 4-Year Plan Total Degree Requirements: 120 credits

Student	Student ID#	Student Phone #	
Advisor	Minimum GPA	Minor/Career Interest(s)	

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the <u>Undergraduate Catalog</u>.

## First Year

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Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS 119	Opportunities in Animal and Veterinary Science	c. AS 120 or VET 120	1	F	
AS 101-101L*	Introduction to Animal Science & Lab	Fall semester for First-Year Animal Science majors	3,1	F/S	
AS 120 or VET 120	Survey of Animal Science or Intro to Veterinary Medicine	c. AS 119	1	F	
BIOL 151-151L	General Biology I & Lab (SGR #6)		4	F/S(I)	
CHEM 112-112L	General Chemistry I & Lab (SGR #6)	p. MATH 114 or higher placement	3,1	F/S	
SGR #2	Oral Communication (SGR #2)		3		
		Total Credit Hours	17		

**Spring** 

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BIOL 153-153L	General Biology II & Lab (SGR #6)		4	F(I)/S	
CHEM 114-114L	General Chemistry II & Lab (SGR #6)	p. CHEM 112/L and MATH 114 or higher	3,1	F/S	
SGR #1	Written Communication (SGR #1)	p. Placement	3		
MATH 114 or MATH 115 or MATH 121-121L or MATH 123	College Algebra (3 cr) or Precalculus (5 cr) Survey of Calculus & Lab (5 cr) (SGR #5) or Calculus I (4 cr) (SGR #5)	p. MATH 101, 103 or placement p. MATH 114 or placement p. MATH 114, 115, 120 or placement p. MATH 115, 120 or placement	3-5		
General Electives			0-2		
		Total Credit Hours	16		

## **Second Year**

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS 219*	Principles of Animal Nutrition	p. AS 101 or DS 130	3	F	
CHEM 326-326L	Organic Chemistry I & Lab	p. CHEM 114	3,1	F/S	
ECON 201	Principles of Microeconomics (SGR #3)		3	F/S	
SGR #1	Written Communication (SGR #1)	p. ENGL 101	3		
SGR #4	Arts and Humanities (SGR #4)		3		
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 328-328L	Organic Chemistry II & Lab	p. CHEM 326	3,1	F/S	
SGR #3	Social Sciences (SGR #3)		3		
SGR #4	Arts and Humanities (SGR #4)		3		
VET 223-223L	Anatomy and Physiology of Domestic Animals & Lab	p. CHEM 108 or CHEM 326	3,1	S	
		Total Credit Hours	14		

<sup>\*</sup>Animal Science majors must achieve a minimum of a cumulative 2.0 GPA in Animal Science core courses for successful graduation. Core courses include AS 101-101L, AS 219, AS 241-241L, AS 319-319L, AS 332, AS 333-333L, AS 389, and 2 capstone courses in which the students receive the highest grades (if they take more than 2). Capstone courses include AS 445-445L, AS 450, AS 474-474L, AS 475-475L, AS 476-476L, AS 477-477L, and AS 478-478L.

p. = Course Prerequisite c. = Course Corequisite Semester: F = Fall, S = Spring, SU = Summer



# SOUTH DAKOTA STATE UNIVERSITY

#### Third Year

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS 333-333L*	Livestock Reproduction & Lab	p. VET 223	2,1	F	
AS 241-241L*	Introduction to Meat Science & Lab		2,1	F/S	
CHEM 464	Biochemistry I	p. CHEM 328	3	F	
MICR 231-231L or	General Microbiology & Lab or	p. CHEM 106 or CHEM 112	4	F/S	
MICR 233-233L	Introductory Microbiology & Lab	p. BIOL 151 and CHEM 106, 108, 112,		S	
		or 114			
General Electives			3		
		Total Credit Hours	16		

**Spring** 

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS 319-319L*	Livestock Feeds and Feeding & Lab	p. AS 219	2,1	F/S	
AS 332*	Livestock Breeding and Genetics	p. AS 101 or DS 130; and BIOL 101/L or 151/L	4	F/S	
AS 389*	Current Issues in Animal Science		3	F/S/SU	
VET 403	Animal Diseases and Their Control	p. Sophomore standing or higher	3	F/S	
Experiential Learning	Select one: ABS 482, AS 322, AS 400, AS 494, or AS 498	Check prerequisites for selected course	1		
		Total Credit Hours	14		

# Fourth Year

# Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS Capstone Course*	Select from:				
	AS 445-445L Value-Added Meat Products & Lab	p. AS 241/L	2,1	F	
One course must be	AS 450 Meat Product Safety and HACCP	p. AS 241/L	3	F even	
AS 474/L, 475/L,	AS 474-474L Cow/Calf Management & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	F/S	
476/L, 477/L, or	AS 475-475L Feedlot Operations and Management & Lab	p. AS 285/L, AS 319/L	2,1	F	
478/L	AS 476-476L Horse Production & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	S	
	AS 477-477L Sheep and Wool Production & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	F	
	AS 478-478L Swine Production & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	S	
PHYS 111-111L	Introduction to Physics I & Lab	p. MATH 114 or higher	3,1	F	
STAT 281 or	Introduction to Statistics or	p. MATH 103 or higher	3	F/S/SU	
NRM 282-282L	Natural Resources Statistics & Lab	p. MATH 114 or higher		F	
ACCT 210	Principles of Accounting I		3	F/S/SU	
General Electives			2		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS Capstone Course*	Select from:				
	AS 445-445L Value-Added Meat Products & Lab	p. AS 241/L	2,1	F	
	AS 450 Meat Product Safety and HACCP	p. AS 241/L	3	F even	
	AS 474-474L Cow/Calf Management & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	F/S	
	AS 475-475L Feedlot Operations and Management & Lab	p. AS 285/L, AS 319/L	2,1	F	
	AS 476-476L Horse Production & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	S	
	AS 477-477L Sheep and Wool Production & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	F	
	AS 478-478L Swine Production & Lab	p. AS 319/L, AS 332 and AS 333/L	2,1	S	
PHYS 113-113L	Introduction to Physics II & Lab	p. PHYS 111	3,1	S	
General Electives			5		·
		Total Credit Hours	12		

# Comments/Notes

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.

 $\begin{array}{l} p. = Course \; Prerequisite \; c. = Course \; Corequisite \\ Semester: \; F = Fall, \; S = Spring, \; SU = Summer \end{array}$