



Bachelor of Science

Major: Ecology and Environmental Science

Specialization: Rangeland Ecology and Management

2023-2024 Sample 4-Year Plan

Total Degree Requirements: 120 credits

Student _____ **Student ID#** _____ **Student Phone #** _____

Advisor _____ **Minimum GPA** 2.0 **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 [Undergraduate Catalog](#).

First Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BIOL 151-151L	General Biology I and Lab (SGR #6)		4	F/S(I)	
CHEM 106-106L or CHEM 112-112L	Chemistry Survey and Lab (SGR #6) or General Chemistry I and Lab (SGR #6)	p. MATH placement p. MATH 114 or higher	4	F/S F/S	
MATH 114 or higher	College Algebra (SGR #5)	p. Placement	3		
NRM 119	Orientation to Natural Resource Management		2	F	
SGR #1	Written Communication (SGR #1)	p. Placement, ENGL 101 recommended	3		
Total Credit Hours			16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS 101-101L	Introduction to Animal Science and Lab	Fall semester for Animal Science majors	4	F/S	
BIOL 153-153L or BOT 201-201L	General Biology II and Lab (4 cr) or General Botany and Lab (3 cr)	p. BIOL 101 or BIOL 151	4 3	F(I)/S S	
CHEM 108-108L or CHEM 114-114L	Organic and Biochemistry and Lab (5 cr) General Chemistry II and Lab (4 cr)	p. CHEM 106 or CHEM 112 p. CHEM 112, MATH 114 or higher	5 4	F/S F/S	
RANG 205-205L	Introduction to Range Management and Lab		3	S	
Total Credit Hours			14-16		

Second Year

Summer

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
NRM 230	Natural Resource Management Techniques	1 week-long summer course in person	2	SU	
Total Credit Hours			2		

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
NRM 276	Scientific Communications		1	F/S	
NRM 311	Principles of Ecology	p. BIOL 151/L or BIOL 153/L; Cross-Listed: BIOL 311	3	F	
RANG 210L	Range Plant Identification Lab		2	F	
SGR #1	Written Communication (SGR #1)	p. ENGL 101	3		
SGR #3	Select from: SOC 100, SOC 150, or SOC 240 (SGR #3)		3		
STAT 281	Introduction to Statistics	p. MATH 114 or higher	3	F/S/SU	
Total Credit Hours			15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ECON 201	Principles of Microeconomics (SGR #3)		3	F/S	
PHYS 101-101L or PHYS 111-111L	Survey of Physics and Lab or Introduction to Physics I and Lab	p. MATH 114 or higher	4	F/S F	
PS 213-213L	Soils and Lab	p. CHEM 106/L or CHEM 112/L	3	F/S	
RANG 215	Introduction to Integrated Ranch Management	Cross-listed with AS 215	3	S	
SGR #2	Oral Communication (SGR #2)	CMST 101 recommended	3		
Total Credit Hours			16		

Information Subject to Change. This is not a contract.

p. = Course Prerequisite I = Internet
Semester: F = Fall, S = Spring, SU = Summer



Third Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
RANG 374-374L	Habitat Conservation and Management and Lab		4	F	
RANG 400	Judging Teams	p. Instructor consent	1	F/S	
RANG 425-425L	Rangeland Assessment and Monitoring and Lab	p. STAT 281 or NRM 282; NRM 311	3	F Odd	
SGR #4	Arts and Humanities/Diversity (SGR #4)	Two disciplines or a sequence of foreign language courses	3	F/S	
SGR #4	Arts and Humanities/Diversity (SGR #4)		3	F/S	
Total Credit Hours			14		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AGEC 271 or BOT 303-303L or NRM 350 or NRM 410 or PS 313 or WL 220 or WL 411-411L	Farm and Ranch Management Forest Ecology and Management and Lab Conservation and Management of Endangered and Nongame Wildlife Conservation Biology Forage Crop and Pasture Management Introduction to Wildlife and Fisheries Management Principles of Wildlife Management & Lab	Select 6 total credits from this list. NRM 350 or NRM 410 may be selected but not both courses.	3	F/S/SU F S F F S F	
AS 218	Survey of Animal Nutrition	p. AS 101 or DS 130	3	S	
RANG 321	Wildland Ecosystems		3	S Odd	
RANG 421	Grassland Fire Ecology	Online only, Cross-listed with WL 421	3	S Even	
RANG 491, 494, 496 or 498	Independent study, Internship, Field Experience or Undergraduate Research/Scholarship		1		
Total Credit Hours			13		

Fourth Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AGEC 271 or BOT 303-303L or NRM 350 or NRM 410 PS 313 or WL 220 or WL 411-411L	Farm and Ranch Management Forest Ecology and Management and Lab Conservation and Management of Endangered and Nongame Wildlife Conservation Biology Forage Crop and Pasture Management Introduction to Wildlife and Fisheries Management Principles of Wildlife Management & Lab	Select 6 total credits from this list. NRM 350 or NRM 410 may be selected but not both courses.	3	F/S/SU F S F F S F	
EES 425 or RANG 419-419L	Disturbance & Restoration Ecology or Plant Ecology and Lab	p. NRM 311 p. BIOL 153 or BOT 201, Cross-listed BOT 419/L	3	F Even F Even	
GEOG 372-372L	Introduction to GIS and Lab		3	F/S/SU	
Electives	General electives or from supporting course lists		6		
Total Credit Hours			15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ABS 475	Integrated Natural Resource Management	p. Senior standing; Spring preferred	3	S	
BOT 301-301L	Plant Systematics and Lab	p. BIOL 151/L or BIOL 153/L	3	S	
Electives	General electives or from supporting course lists to reach 120 total credits		3		
NRM 300	Laws and Policies in Natural Resource Management		3	S	
PRAG 410-410L or PS 462-462L	Soil Geography and Land Use Interpretation and Lab Environmental Soil Management and Lab	p. PS 213-213L or GEOG 132-132L p. PS 213-213L	3	F/S S	
Total Credit Hours			15		

Comments/Notes

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the [Honors program requirements](#).

Information Subject to Change. This is not a contract.

p. = Course Prerequisite I = Internet
Semester: F = Fall, S = Spring, SU = Summer