



**Bachelor of Science**

**Major: Ecology and Environmental Science**

**Specialization: Rangeland Ecology and Management**

**2022-2023 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	
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	
ENGL 101	Composition I (SGR #1)	p. Placement	3	F/S	
MATH 114 or higher	College Algebra (SGR #5)	p. Placement	3	F/S	
NRM 119	Orientation to Natural Resource Management		2	F	
<b>Total Credit Hours</b>			16		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AS 101-101L	Introduction to Animal Science and Lab		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	S	
CHEM 108-108L or CHEM 114-114L	Organic and Biochemistry and Lab (5 cr) or General Chemistry II and Lab (4 cr)	p. CHEM 106 p. CHEM 112, MATH 114 or higher	5	F/S	
RANG 205-205L	Introduction to Range Management and Lab		3	S	
<b>Total Credit Hours</b>			16		

**Summer**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
NRM 230	Natural Resource Management Techniques	Week long summer course	2	SU	
<b>Total Credit Hours</b>			2		

**Second Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ENGL 201	Composition II (SGR #1)	p. ENGL 101	3	F/S	
NRM 276	Scientific Communications		1	F/S	
STAT 281 or NRM 282-282L	Introduction to Statistics or Natural Resource Statistics and Lab	p. MATH 114 or higher	3	F/S/SU(1)	
PS 213-213L	Soils and Lab	p. CHEM 106/L or CHEM 112/L	3	F/S	
RANG 210-210L	Range Plant Identification and Lab		2	F	
SGR #3	Select from SOC 100, SOC 150, or SOC 240 (SGR #3)		3	F/S	
<b>Total Credit Hours</b>			15		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CMST 101	Fundamentals of Speech (SGR #2)		3	F/S	
ECON 201	Principles of Microeconomics (SGR #3)		3	F/S	
NRM 300	Laws and Policies in Natural Resource Management		3	S	
RANG 215	Introduction to Integrated Ranch Management	Cross-listed with AS 215	3	S	
SGR #4	Arts and Humanities/Diversity (SGR #4)	Two disciplines or a sequence of foreign language courses	3	F/S	
<b>Total Credit Hours</b>			15		

**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
AGEC 271 or BOT 303-303L or NRM 350 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 Forage Crop and Pasture Management Introduction to Wildlife and Fisheries Management Principles of Wildlife Management & Lab		3	F/S/SU(I) F S  F S F	
NRM 311	Principles of Ecology	p. BIOL 151/L or BIOL 153/L; Cross- Listed: BIOL 311	3	F	
RANG 374-374L	Habitat Conservation and Management and Lab		4	F	
RANG 421	Grassland Fire Ecology	Cross-listed with WL 421	3	S Odd	
SGR #4	Arts and Humanities/Diversity (SGR #4)	Two disciplines or a sequence of foreign language courses	3	F/S	
<b>Total Credit Hours</b>			16		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AGEC 271 or BOT 303-303L or NRM 350 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 Forage Crop and Pasture Management Introduction to Wildlife and Fisheries Management Principles of Wildlife Management & Lab		3	F/S/SU(I) F S  F S F	
AS 218	Survey of Animal Nutrition	p. AS 101	3	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/S/SU(I)	
RANG 321	Wildland Ecosystems		3	S Odd	
RANG 400	Judging Teams	p. Instructor consent	1	S	
RANG 491, 494, 496 or 498	Independent study, Internship, Field Experience or Undergraduate Research/Scholarship		1		
<b>Total Credit Hours</b>			15		

**Fourth Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
EES 425-425L or RANG 419-419L	Disturbance & Restoration Ecology and Lab Plant Ecology and Lab	p. NRM 311 p. NRM 311, Cross-listed with BOT 419-419L	3	F Even	
GEOG 372-372L	Introduction to GIS and Lab		3	F/S/SU(I)	
RANG 425-425L	Rangeland Assessment and Monitoring and Lab	p. NRM 282 or STAT 281; NRM 311	3	F Odd	
Electives	General electives or from supporting course lists		3		
<b>Total Credit Hours</b>			12		

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ABS 475-475L	Integrated Natural Resource Management and Lab	p. Senior standing	3	S	
BOT 301-301L	Plant Systematics	p. BIOL 151/L or BIOL 153/L	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 p. PS 213-213L	3	F/S S	
Electives	General electives or from supporting course lists to reach 120 total credits		4		
<b>Total Credit Hours</b>			13		

**Comments/Notes**

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

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