

## Bachelor of Science in Natural Resources: Ecology, Management, and Restoration of Rangelands

		FALL		SPRING		
	Course Title	Units	Prerequisite?	Course Title	Units	Prerequisite?
<b>Freshman</b>	CHEM 151 OR CHEM 141 AND 143	4	MATH 112 or placement	CHEM 152 OR CHEM 142 AND 144	4	First semester CHEM
	ENGL 101 or 109H	3		ENGL 102	3	
	<b>RNR 200 Conservation of Natural Environments</b>	3		ECOL 182R and L General Biology Lecture and Lab	4	
	MATH 112 College Algebra	3	placement test	Tier 1 Individuals and Societies	3	
	Tier 1 Individuals and Societies	3		Tier 1 Traditions and Cultures	3	
	TOTAL	16		TOTAL	17	
<b>Sophomore</b>	Tier 1 Traditions and Cultures	3		ENVS 200, 201: Soil Science lab and lecture	4	First semester CHEM
	Statistics: MATH 163 or 263, PSY 230 or SBS 200	3	MATH 112 or placement	Tier 1 Individuals and Societies	3	
	<b>RNR 230R Field Botany lecture</b>	2		ECON 200 (Economics)	3	
	<b>RNR 230L Field Botany lab</b>	1		<b>RNR 384 Natural Resources Management Practices</b>	3	
	MCB 181R and L General Biology Lecture and Lab	4	MATH 112 or placement; 1st semester CHEM			
	Oral or Media Communication: COMM 113 or 119, ALC 422, JOUR 455, JOUR 472, SCI 401, SBE 202, RNR 495A	3				
	TOTAL	16		TOTAL	13	
<b>Junior</b>	<b>RNR 316 Natural Resources – Ecology</b>	3	ECOL 182R, ECOL 182L, RNR 230	<b>RNR 321 Ecological Surveys and Sampling</b>	3	Statistics
	Tier 2 Arts or Humanities Elect.	3		RAM 382 Rangeland Plant Communities	3	RNR 230R and RNR 230L
	Technical Electives	6		Technical Writing: ENGL 308, 313, 340, or 414, ENVS 408 or 415	3	
	Technical Skills: RNR 403, RNR 417, RNR 429, GEOG 330	3		Technical Electives	6	
		TOTAL	15		TOTAL	15
<b>Senior</b>	SNRE requirement	1		RAM 446 Management and Restoration of Wildland Vegetation	4	
	RAM 456a Rangeland Inventory and Monitoring	4		RAM 487 Rangeland Management Planning (odd years only)	2	
	Technical Electives	7		Technical Electives	6	
	RAM 436a Grazing Ecology & Management	2		<b>RNR 480 Natural Resources Policy and Law</b>	3	RNR 200
		TOTAL	15		TOTAL	15
Diversity Emphasis: One general education course must have the non-Western Civilization, Gender, Race, Class, Ethnicity designation						
2nd semester language proficiency required--not included in this plan						
Catalog Year 2019-20						

## POTENTIAL CAREER TRACKS

**Restoration Ecologist/ Preserve Manager**

ECOL 406R      AREC 350  
ECOL 406L

4 units from the following:  
PLS 360      PLS 312

3 units from the following:  
RNR 438      WSM 408

6-8 units from the following:  
ENVS 461      WFSC 444  
RNR 403

**Range Management Specialist GS-5 Office of Personnel Management & Society for Range Management Certification**

PLS 360      ENVS 431  
ACBS 477

9 units from the following:  
ECOL 406R&L  
RNR 438      WFSC 455R  
WFSC 441      WSM 460  
WFSC 444      WSM 462  
WSM 465      WSM 468

Strongly Recommended:  
RNR 403 or      RNR 417

**Environmental Communication, Education, and Interpretation**

6 units from the following:  
AGTM 422      JOUR 413  
AED 438      SOC 333  
JOUR 455      PSYC 329  
JOUR 472      PSYC 374

6 units from the following:  
ANTH 202      ANTH 409  
ANTH 307      ECOL 406R  
ANTH 331      WFSC 444  
WFSC 447

6 units from the following:  
AREC 476      GEOG 210  
GEOG 373      GEOG 380  
GEOG 459

**Ecologist Series GS-5 Office of Personnel Management**

6 units from the following:  
PHYS 102      HWR 250  
ATMO 171      GEOS 251

6 units from the following:  
ECOL 183      WFSC 441  
ECOL 320      WFSC 444  
ECOL 380      ECOL 472  
ECOL 406R      ECOL 482  
ECOL 438      ECOL 485

Strongly Recommended:  
RNR 403      RNR 417

**Peace Corps/ International Conservation & Development**

At least 2 semesters of a second language, and 4 recommended

1 course from the following:  
ANTH 202      GEOG 210  
GEOG 373

1 course from the following:  
ANTH 331      GEOG 380

1 course from the following:  
AGTM 422      SOC 333  
PSYC 360

**Research in Rangeland Science & Management**

ENG 414      RAM 499  
RNR 492

3 units from the following:  
PHIL 202      PHIL 421  
PHIL 305

9 units from the following:  
MATH 113      ENVS 431  
PHYS 102      CHEM 241a  
GEOS 251      CHEM 243a

**Ranch Management**

PLS 360      ACBS 431  
ACBS 336A or      ACBS 477

9 units from the following:  
ECOL 406L      WFSC 455L  
ECOL 406R      WFSC 455R  
RNR 438      WSM 460A  
WFSC 441      WSM 462  
WFSC 444      WSM 468  
WFSC 447

3 units from the following:  
ACBS 213      ACBS 477  
ACBS 315R      ACBS 480B  
ACBS 480B  
ACBS 336A      AREC 217

3 units from the following:  
GEOG 483      RNR 422  
RNR 403      ENVS 461  
RNR 417      WSM 330

**Natural Resources Planning**

1 unit from the following:  
AREC 217      AREC 373  
AREC 350      AREC 476

3 units from the following:  
ATMO 171  
PLG 301

3 units from the following:  
GEOG 371      GEOG 459  
GEOG 401a      GEOG 461  
GEOG 401b      GEOG 465

Strongly Recommended:  
ENVS 453  
RNR 403 or      RNR 417

**Additional Career Tracks:** Tribal Range Management Specialist  
Soil Science GS-5, Office of Personnel Management  
Cooperative Extension  
OPM Botanist GS-5  
Environmental Law and Policy  
Environmental Assessment  
Wildlife Biologist GS-5 Office of Personnel Management

**Management**

For further details on any of these potential career tracks, see your faculty advisor.

**Soil Conservation GS-5 Office of Personnel Management**

ENVS 431      PLS 312  
ENVS 461      PLS 360

Strongly Recommended:  
CHEM 241      CHEM 243  
RNR 403 or      RNR 417