

ECOLOGY AND MANAGEMENT OF RANGELANDS OPTION (Major: Natural Resources)

This guide is to aid students in selecting courses. Changes may be made but only in consultation with an advisor. Students must meet all program, Natural Resource Core Curriculum, and University general education requirements for graduation. (See SNR Web Site: www.snr.arizona.edu)

| | Fall | | Spring | |
|----------------|--|-----------|---|-----------|
| Freshman Year | ENGL 101 or 103H (Freshman Composition) | 3 | ENGL 102 or 104H (Freshman Composition) | 3 |
| | Tier 1 Nat Sci – CHEM 151 (Gen. Chem & Lab) | 4 | Tier 1 Nat Sci – CHEM 152 (Gen. Chem & Lab) | 4 |
| | Tier 2 Nat Sci – MCB 181R/L (Life Sci. of Bio & Lab) | 4 | ECOL 182R/L (Life Sci. of Bio & Lab) | 4 |
| | MATH 110 (College Algebra) | 3 | Tier 1 Individuals and Societies. | 3 |
| | | | Tier 1 Individuals and Societies | 3 |
| | TOTAL | 14 | TOTAL | 17 |
| Sophomore Year | Tier 1 Traditions and Cultures Elect. ¹ | 3 | Tier 1 Traditions and Cultures Elect. | 3 |
| | MATH 160 or 263 (Statistics) | 3 | SWES 200, 201 (Soil Science & Lab) | 4 |
| | RNR 200 (Foundations in History & Policy) | 3 | Tier 2 Ind & Soc – Econ 200 or 201a (Intro Econ) | 3 |
| | RNR 230 (Nat. Resources – Field Botany) | 3 | RNR 321 (Natural Resources – Measurements) | 3 |
| | COMM 119 (Public Speaking) | 3 | | |
| | TOTAL | 15 | TOTAL | 13 |
| Junior Year | RNR 316 (Natural Resources – Ecology) | 3 | RNR 384 (Natural Resources – Management Practices) | 3 |
| | Tier 2 Arts or Humanities Elect. | 3 | RAM 382 (Rangeland Plant Communities) | 3 |
| | Technical Electives ² | 10 | ENGL 308 (Tech Writing) or SWES 408 or A ED 422 | 3 |
| | | | RAM 436a (Grazing Ecology & Management) | 2 |
| | | | Technical Electives | 3 |
| | TOTAL | 16 | TOTAL | 14 |
| Senior Year | RAM 456a (Rangeland Inventory & Monitoring) | 4 | RAM 487 (Rangeland Management Plan—odd springs) | 2 |
| | Technical Electives | 9 | RAM 446 (Vegetation Management of Wildlands) | 4 |
| | Free electives | 2 | RNR 480 (Natural Resources – Policy & Law) | 3 |
| | | | Technical Electives | 7 |
| | TOTAL | 15 | TOTAL | 16 |

Bold = SNR Core

¹ One general education course must have the non-Western Civilization, Gender, Race, Class, Ethnicity designation.

² Electives may be selected from the General Catalog; consult your advisor and the career paths on the reverse to select your electives.

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:
GEOG 483 SWES 461
RNR 403 WFSC 444
SWES 431 WFSC 446

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

PLS 360 SWES 431
ANS 336 or ANS 477

9 units from the following:
ECOL 406R&L WFSC 446
RNR 438 WFSC 455
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:
AED 422 JOUR 413
AED 438 SOC 333
AED 439 PSYC 329
JOUR 380 PSYC 374

6 units from the following:
ANTH 202 ANTH 409
ANTH 307 ECOL 406R
ANTH 331 WFSC 444
ANTH 338 WFSC 446
ANTH 339

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 ECOL 441
ECOL 320 ECOL 444
ECOL 380 ECOL 472
ECOL 406R ECOL 478
ECOL 435 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:
AED 422 SOC 333
MAP 305 PSYC 360

Research in Rangeland Science & Management

ENG 414 RAM 499

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

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

Ranch Management

PLS 360 SWES 431
ANS 336 or ANS 477

9 units from the following:
ECOL 406L WFSC 455L
ECOL 406R WFSC 455R
RNR 438 WSM 460
WFSC 441 WSM 462
WFSC 444 WSM 465
WFSC 446 WSM 468

3 units from the following:
ANS 213 ANS 477
ANS 315R ANS 480A
ANS 330 ANS 480B
ANS 336 AREC 215

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

Natural Resources Planning

1 unit from the following:
AREC 217 AREC 375
AREC 350 AREC 476

3 units from the following:
ATMO 171&L PLNG 110
PLNG 301

3 units from the following:
GEOG 371 GEOG 464
GEOG 401a GEOG 461
GEOG 401b GEOG 465
GEOG 459

Strongly Recommended:
SWES 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

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

Soil Conservation GS-5 Office of Personnel Management

SWES 431 PLS 312
SWES 461 PLS 360

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