



**University of Idaho**  
Department of Forest,  
Rangeland and Fire Sciences

# Rangeland Ecology & Management

Recommended 4-Year Plan | 2022/2023

## Best in the West

Rangelands are important environments in the West and make up nearly half of the total land area in Idaho. Our nationally ranked Rangeland Ecology and Management degree (accredited by the Society for Rangeland Management) prepares students to manage, conserve, and restore these diverse and critical environments, which include grasslands, shrub lands, woodlands, and deserts. Our graduates are leaders in the field, and our program prepares students for a career with government agencies, conservation groups and private landowners. Our program provides a solid understanding of ecological restoration and the many emerging issues facing natural resource professionals. Students can design their own emphasis area or can focus on one of four designed career tracks: Lands and Livestock; Restoration Ecology; Wildland Fire; and Wildlife Habitat.

### FRESHMAN

#### FALL

COURSE		CREDITS
CHEM 101/101L - Intro to Chemistry & Lab <b>OR</b> CHEM 111/111L* - General Chemistry I & Lab <small>(CHEM 101, MATH 143, 160, or 170; or sufficient test score)</small>	Science	4
ENGL 101* - Writing & Rhetoric I <small>(sufficient test score)</small>	Writ Comm	3
MATH 108 - Intermediate Algebra		3
NR 101 - Exploring Natural Resources		2
REM 151* - Rangeland Principles		3

**TOTAL 15**

#### SPRING

COURSE		CREDITS
AVS 109 - Science of Animals that Serve Humanity <b>OR</b> AVS 110 - Science of Animal Husbandry <small>(AVS 109)</small>		3-4
ENGL 102* - Writing & Rhetoric II <small>(ENGL 101)</small>	Writ Comm	3
MATH 143 - College Algebra <small>(MATH 108)</small> <b>OR</b> MATH 160* - Survey of Calculus <small>(MATH 143)</small>	Math	3-4
REM 252 - Wildland Plant Identification		2
General Education Requirement	International	3

**TOTAL 14-16**

### SOPHOMORE

#### FALL

COURSE		CREDITS
BIOL 114 - Organisms & Environments <b>OR</b> BIOL 115/115L - Cells & the Evolution of Life & Lab <small>(CHEM 101/101L or 111/111L)</small>	Science	4
COMM 101* - Fundamentals of Oral Communication	Oral Comm	3
ECON 202* - Principles of Microeconomics	Social Sci	3
NRS 235 - Society & Natural Resources	Social Sci	3
STAT 251* - Statistical Methods <small>(MATH 108, 143, 160, or 170; or sufficient score)</small>		3
REM 253 - Wildland Plant ID Field Studies <small>(REM 252)</small>		1

**TOTAL 17**

#### SPRING

COURSE		CREDITS
BIOL 213 - Structure & Function Across the Tree of Life <b>OR</b> <small>(BIOL 114 or 115/115L)</small> PLSC 205 - General Botany <small>(Rec: CHEM 101 and PLSC 102. BIOL 114 or 115/115L)</small>		4
FOR 221/WLF 220 - Principles of Ecology <small>(BIOL 102/102L, 114, 115, or PLSC 205)</small>		3
Free Elective		3
General Education Requirement	Humanities	3
General Education Requirement	Humanities	3

**TOTAL 16**

**JUNIOR**

**FALL**

COURSE	CREDITS
ENGL 313* - Business Writing (ENGL 102 & Soph standing), ENGL 317* - Technical Writing (ENGL 102 & Soph standing), ENGL 318 - Science Writing (ENGL 102 & Soph standing) <b>OR</b> WLF 370 - Management Communication of Scientific Data	3
FOR 375 - Fundamentals of Geomatics (college algebra)	3
REM 410* - Principles of Vegetation Monitoring & Measurement (STAT 251)	2
WLF 411+ - Wildland Habit Ecology & Assessment (STAT 251 Rec: REM 252 & 253, 341, or 410)	2
SOIL 205 & 206 - The Soil Ecosystem & Lab (CHEM 101 or 111)	4

**TOTAL 14**

**SPRING**

COURSE	CREDITS
REM 341 - Systematic Botany (BIOL 114 or 115 & BIOL 213 or PLSC 205)	3
REM 440+ - Restoration Ecology (FOR 221, WLF 220, NR 321, or BIOL 314) <b>OR</b> REM 280* - Intro to Wildland Restoration & PLSC 419 - Plant Community Restoration Methods (FOR 221 or WLF 220)	3 2&2
NRS 383 - NR & Ecosystem Service Economics (NRS 235; ECON 202 or 272; & MATH 143)	3
Free Elective	3
General Education Requirement American Diversity	3

**TOTAL 15-16**

**SENIOR**

**FALL**

COURSE	CREDITS
REM 459+ - Rangeland Ecology (Rec: FOR 221 or WLF 220, ENGL 317 & REM 410 or FOR 274)	3
REM 460 - Integrated Field Studies in Rangelands (Permission)	1
SOIL 454 - Pedology (Rec: SOIL 205/206)	3
Career Track Elective (300-400)	3
Career Track Elective	3

**TOTAL 13**

**SPRING**

COURSE	CREDITS
FISH 430 - Riparian & River Ecology (FOR 221, WLF 220, or BIOL 314) <b>OR FOR 462 - Watershed Science &amp; Management</b> (MATH 143, PHYS 100/100L, 111/111L, or HS equivalent)	3
REM 456* - Integrated Rangeland Management (ENGL 313 or 317, Rec: REM 151)	3
Career Track Elective (300-400)	3
Career Track Elective	3
Career Track Elective	4

**TOTAL 16**

- This academic plan is intended as a guideline only and does not replace academic advising.
- See course catalog and department website for complete degree requirements and additional information.
- 120 credits minimum are required for a B.S. in Rangeland Ecology & Management.
- Minimum of 36 upper-division credits required to graduate.
- Students must also complete 15 credits of advisor approved elective contributing to a specific career track(see below).
- \* - Both Online & In-Person options are offered
- + - Online only offered

**CAREER TRACKS**

**RESTORATION ECOLOGY** - Millions of acres of rangeland and forests have been disturbed by fire, invasive plants, and overgrazing. Academic advisors in rangeland conservation have developed a set of electives for students interested in a career in Wildland restoration. Completing these career track electives will fulfill requirements for the Restoration Ecology Undergraduate Academic Certificate. Careful selection of courses can also highlight expertise in botany and plant materials to qualify for professions as a botanist.

**WILDLIFE HABITAT** - Many species of wildlife live on rangelands and the management of wildlife habitat is an important and sought-after skill. With help from their academic advisor, rangeland students can complete a career track that will show expertise in wildlife habitat management and fulfill the requirements for a minor in Wildlife Resources.

**LAND AND LIVESTOCK** - This career track is for students interested in "hands-on" management of rangelands. Academic advisors work with students to select courses that provide the knowledge and skills needed to manage rangelands with grazing and fire to enhance livestock production while sustaining communities of native plants and animals. Completion of these courses can also satisfy the requirements for a minor in Animal Science or Soil Science.

**WILDLAND FIRE** -Wildfire is one of the major forces causing change on rangeland ecosystems. Completing a specific set of advisor approved electives will enable students to show knowledge of land management related to Wildland fire and fulfill the requirements for a minor in Fire Ecology and Management.

**INDIVIDUAL INTEREST** - Students can work with their advisor to select specific courses to show expertise in a career track of specific interest that may include Watershed or Riparian Ecologist, Natural Resources GIS Specialist, Environmental Consultant, Tribal Land Manager, Resource Economist, or many other interests related to rangelands.

**CAREER TRACK PLAN**

COURSE #	COURSE NAME	CREDITS	SEMESTER	YEAR
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**Ready to Get Started?**  
Email [cnradvising@uidaho.edu](mailto:cnradvising@uidaho.edu)

