

Department of Forest,

Rangeland and Fire Sciences

Rangeland Ecology & Management

Best in the West

ENGL 101*-Writing & Rhetoric I (sufficient test score)

MATH 108-Intermediate Algebra

STAT 251*-Statistical Methods

Recommended 4-Year Plan | 2023/2024

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 CREDITS NR 101-Exploring Natural Resources 2 REM 151*-Rangeland Principles 3 CHEM 101/101L - Intro to Chemistry & Lab OR Science 4 CHEM 111/111L*-General Chemistry I & Lab

TOTAL 15

3

Writ Comm

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

TOTAL 14-16

CDDING

SOPHOMORE COURSE **CREDITS** NRS 235-Society & Natural Resources Social Sci 3 REM 253-Wildland Plant ID Field Studies (REM 252) 1 BIOL 114-Organisms & Environments OR Science 4 BIOL 115/115L-Cells & the Evolution of Life & Lab COMM 101*-Fundamentals of Oral Comm OR 3 Oral Comm AGED 101 - Verbal Comm in Ag, Food & NR ECON 202*-Principles of Microeconomics Social Sci 3

TOTAL 17

3

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

TOTAL 16

RANGELAND ECOLOGY & MANAGEMENT

Recommended 4-Year Plan | 2023/2024

JUNIOR	FALL
COURSE	CREDITS
FOR 375-Fundamentals of Geomatics (college algebra)	3
REM 410*-Principles of Vegetation Monitoring & Measurement $_{\mbox{\scriptsize (STAT 251)}}$	2
WLF 411+-Wildland Habit Ecology & Assessment (STAT 251 Rec: REM 252 & 253, 341, or 410)	2
ENGL 313*-Business Writing (ENGL 102 & Soph standing), ENGL 317*-Technical Writing (ENGL 102 & Soph standing), ENGL 318-Science Writing (ENGL 102 & Soph standing) OR WLF 370-Management Communication of Scientific Data	3
SOIL 205 & 206 - The Soil Ecosystem & Lab	4

COURSE		SPRING CREDITS
NRS 383-NR & Ecosystem Service Eco	nomics	3
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) OR REM 280*-Intro to Wildland Restoration & PLSC 419-Plant Community Restoration Methods (FOR 221 or WLF 220)		3 2&2
Free Elective		3
General Education Requirement	American Diversity	3

TOTAL 15-16

TOTAL 14

.....

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

COURSE
FISH 430 - Riparian & River Ecology OR
FOR 221, WLE 220, or BIOL 314)
FOR 462 - Watershed Science & Management
MATH 143, Phys 100/1001, 11/1111, or Hs equivalent)

REM 456* - Integrated Rangeland Management
(ENGL 313 or 317, Rec: REM 151)

Career Track Elective (300-400)

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

Ready to Get Started?

Email cnradvising@uidaho.edu

