

RANGE SCIENCE (RNGE)

RNGE 240 Forage Crop and Pasture Management

Crosslisted with: PLAS 240, GRAS 240

Prerequisites: PLAS 131 or BIOS 101 or LIFE 120

Description: Principles basic to the establishment, management, and utilization of forage crops and pastures. Plant identification and selection, seeding, fertilization, irrigation, forage quality and utilization, hay and silage preservation, and grazing management. The role of forages and ranges in developing a sustainable agriculture.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: FALL/SPR

Prerequisite for: PLAS 340, RNGE 340, GRAS 340; PLAS 445, AGRO 845, ASCI 451, ASCI 851, RNGE 445, GRAS 445

RNGE 242 North American Wildland Plants

Crosslisted with: PLAS 242, GRAS 242

Prerequisites: Permission.

Notes: PLAS/RNGE 240 recommended.

Description: Identification and description of two-hundred important wildland plants of North America. Characteristics of these plants evaluated in terms of management implications.

Credit Hours: 1

Max credits per semester: 1

Max credits per degree: 4

Grading Option: Graded with Option

Offered: FALL/SPR

RNGE 295 Internship

Crosslisted with: PLAS 295, SOIL 295

Prerequisites: Sophomore standing and completion of an internship contract. The internship contract is subject to approval by the department. Internships completed without a signed contract may not qualify for credit.

Notes: Pass/No Pass only; requires advanced permission before registering for the course.

Description: Professional experience in a plant, landscape or soil interest area. Experience may be with a business, government agency, organization, or a university research, extension, or teaching program.

Credit Hours: 1-3

Min credits per semester: 1

Max credits per semester: 3

Max credits per degree: 6

Grading Option: Pass No Pass

Offered: FALL/SPR

Experiential Learning: Internship/Co-op

RNGE 340 Range Management and Improvement

Crosslisted with: PLAS 340, GRAS 340

Prerequisites: PLAS 240 or NRES 245

Description: The principles of range management within the ecosystem framework. Range improvement practices and grazing systems; plant control using biological, chemical and mechanical factors; prescribed burning; range seeding; range fertilization; and the integration of range with other forage resources.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: SPRING

Prerequisite for: PLAS 445, AGRO 845, ASCI 451, ASCI 851, RNGE 445, GRAS 445

RNGE 440 Great Plains Ecosystem

Crosslisted with: PLAS 440, AGRO 840, NRES 840, NRES 440, GRAS 440

Prerequisites: Junior standing.

Description: Characteristics of Great Plains ecosystems, interrelationships of ecological factors and processes, and their application in the management of grasslands. Interactions of fire, vegetation, grazing animals and wildlife.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: SPRING

RNGE 441 Perennial Plant Function, Growth, and Development

Crosslisted with: PLAS 441, AGRO 841, HORT 841, GRAS 441

Prerequisites: PLAS 325 or equivalent.

Description: Principles of crop physiology and developmental morphology in relation to function, growth, development, and survival of perennial forage, range, and turf plants. The relationship of physiology and morphological development on plant use and management.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: SPRING

RNGE 442 Wildland Plants

Crosslisted with: PLAS 442, AGRO 842, NRES 842, NRES 442, GRAS 442

Prerequisites: Junior standing.

Notes: PLAS 131 or LIFE 121 and 121L or equivalent recommended

Description: Wildland plants that are important to grassland and shrubland ecosystem management and production. Distribution, utilization, classification, identification (including identification by vegetative parts), uses by Native Americans, and recognition of grasses, forbs, shrubs, exotic and wetland plants.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: FALL

RNGE 444 Ecosystem Monitoring and Assessment

Crosslisted with: PLAS 444, AGRO 844, NRES 844, NRES 444, GRAS 444

Prerequisites: Junior standing.

Notes: NRES 220 or equivalent, recommended.

Description: Measurement and monitoring of the important vegetation and environmental factors used to develop management guidelines in grasslands, savannas, woodlands, and wetlands. Emphasis on using ecosystem monitoring protocols for assessment of wildlife habitat, fuels management for wild-land fire, livestock production, and watershed function. Requires field sampling and travel to local field sites.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: FALL

RNGE 445 Livestock Management on Range and Pasture

Crosslisted with: PLAS 445, AGRO 845, ASCI 451, ASCI 851, GRAS 445

Prerequisites: ASCI 250 and PLAS 240 or PLAS 340

Notes: AECN 201 recommended. Capstone course. All students required to participate in a one-week field trip in central or western Nebraska prior to beginning of fall semester. Therefore, students must notify instructor at time of early registration (Dates are given in class schedule.)

Description: Analyzing the plant and animal resources and economic aspects of pasturage. Management of pasture and range for continued high production emphasized.

Credit Hours: 3

Max credits per semester: 3

Max credits per degree: 3

Grading Option: Graded with Option

Offered: FALL

ACE: ACE 10 Integrated Product

Course and Laboratory Fee: \$300

RNGE 495 Grasslands Seminar

Crosslisted with: PLAS 495, ENTO 495, GRAS 495, NRES 495, SOIL 495

Prerequisites: Junior standing.

Description: Topic varies and deals with different aspects of forage and/or range and/or livestock, turf and/or landscape grasses, natural habitats, and wetlands.

Credit Hours: 1-2

Min credits per semester: 1

Max credits per semester: 2

Max credits per degree: 4

Grading Option: Graded with Option

RNGE 496 Independent Study

Crosslisted with: PLAS 496, AGRO 896, SOIL 496

Credit Hours: 1-6

Min credits per semester: 1

Max credits per semester: 6

Max credits per degree: 12

Grading Option: Graded with Option

Course and Laboratory Fee: \$50

RNGE 499H Honors Thesis

Crosslisted with: PLAS 499H, SOIL 499H

Prerequisites: Admission to the University Honors Program and permission.

Notes: AGRI 299H recommended.

Description: Conduct a scholarly research project and write a University Honors Program or undergraduate thesis.

Credit Hours: 3-6

Min credits per semester: 3

Max credits per semester: 6

Max credits per degree: 6

Grading Option: Graded