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 395A; 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