

GRASSLAND STUDIES (GRAS)

GRAS 240 Forage Crop and Pasture Management

Crosslisted with: AGRO 240, RNGE 240

Prerequisites: AGRO/HORT 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

Format: LEC

Offered: FALL/SPR

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

GRAS 242 North American Wildland Plants

Crosslisted with: AGRO 242, HORT 242, RNGE 242

Prerequisites: Permission.

Notes: AGRO/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

Format: LEC

Offered: FALL/SPR

GRAS 340 Range Management and Improvement

Crosslisted with: AGRO 340, RNGE 340

Prerequisites: AGRO 240.

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

Format: LEC

Offered: SPRING

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

GRAS 440 Great Plains Ecosystem

Crosslisted with: AGRO 440, AGRO 840, NRES 840, RNGE 440, NRES 440

Prerequisites: Junior standing.

Notes: BIOS 101 and 101L, or equivalent, recommended.

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

Format: LEC

Offered: SPRING

GRAS 441 Perennial Plant Function, Growth, and Development

Crosslisted with: AGRO 441, AGRO 841, HORT 441, HORT 841, RNGE 441

Prerequisites: AGRO 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

Format: LEC

Offered: SPRING

GRAS 442 Wildland Plants

Crosslisted with: AGRO 442, AGRO 842, NRES 842, RNGE 442, NRES 442

Prerequisites: Junior standing.

Notes: BIOS 101 and 101L, 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

Format: LEC

Offered: FALL

GRAS 444 Ecosystem Monitoring and Assessment

Crosslisted with: AGRO 444, AGRO 844, NRES 844, RNGE 444, NRES 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

Format: LEC

Offered: FALL

GRAS 490 Internship Experience in Grazing Livestock Systems

Prerequisites: Junior standing, Grazing Livestock Systems major and permission

Description: A structured practical experience under the supervision of a professional in grazing livestock systems.

Credit Hours: 1-3

Min credits per semester: 1

Max credits per semester: 3

Max credits per degree: 4

Format: FLD

Prerequisite for: ASCI 482, AECN 482

GRAS 495 Grasslands Seminar

Crosslisted with: AGRO 495, ENTO 495, HORT 495, NRES 495, RNGE 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

Format: LEC

GRAS 496 Independent Study

Prerequisites: Permission and advance approval of contract.

Credit Hours: 1-5

Min credits per semester: 1

Max credits per semester: 5

Max credits per degree: 5

Format: IND