

Range Science (RNG)

	Credits
RNG 225 - Natural Resource & Agro-Ecosystems	3
Introduction to scientific theories and their relation to natural resources and agriculture. Influence of these theories on current perspectives toward the environment. 3 lectures. Cross-listed with NRM.	
RNG 326 - Modeling of Range and Agro-Ecosystems	3
Introduction and applications of systems analysis and simulation modeling to agriculture, biology, range ecology, and natural resources management. 2 lectures, 1 two-hour laboratory. (even years)	
RNG 336 - Introduction to Range Management	3
Principles of range management which include plant identification, range evaluation, and range improvement. 3 lectures. F	
RNG 450 - Range Plants	3
Identification, distribution, and forage value of important U.S. range plants. 1 lecture, 2 two-hour laboratories. Prereq: BOT 314. Cross-listed with BOT. F	
RNG 452 - Geographic Information Systems in Range Survey	3
Analysis of methods for determining range composition, condition, and productivity. Emphasis will be given to the use of Geographic Information Systems. 3 lectures. Prereq: RNG 336. F (odd years)	
RNG 453 - Rangeland Resources Watershed Management	3
Study of the management of physical/biological settings and processes along with human activities on water and watersheds considering preventative and restorative strategies in a rangeland setting. Prereq: RNG 336 or NRM 225. Cross-listed with NRM.	
RNG 454 - Wetland Resources Management	3
Principles of wetland systems, wetland management, wetland functions, wetland assessment, and wetland improvement. Prereq: RNG 336.	
RNG 456 - Range Habitat Management	3
Study of specific techniques and systems approaches to maintenance and improvement of rangeland ecosystems. 3 lectures. Prereq: RNG 336. S (odd years)	
RNG 458 - Grazing Ecology	3
Grazing processes and systems and their effects on plants and herbivores. 3 lectures. Prereq: RNG 336. S (even years)	
RNG 460 - Plant Ecology	3
Ecological structure, processes, and patterns observed with plant communities and populations as influenced by environmental conditions. Illustrations provided with local fieldwork. Prereq: BIOL 151, 151L. Cross-listed with BOT.	
RNG 462 - Rangeland Planning and Analysis	3
Developing the basics of planning and the use of advanced planning tools for managing public and private rangelands. Prereq: RNG 336, 456/656 or 458/658.	
RNG 650 - Range Plants	3
Identification, distribution, and forage value of important U.S. range plants. 1 lecture, 2 two-hour laboratories. Prereq: BOT 314. Cross-listed with BOT. F	
RNG 652 - Geographic Information Systems in Range Survey	3
Analysis of methods for determining range composition, condition, and productivity. Emphasis will be given to the use of Geographic Information Systems. 3 lectures. Prereq: RNG 336. F (odd years)	
RNG 653 - Rangeland Resources Watershed Management	3
Study of the management of physical/biological settings and processes along with human activities on water and watersheds considering preventative and restorative strategies in a rangeland setting. Prereq: RNG 336 or NRM 225. Cross-listed with NRM.	
RNG 654 - Wetland Resources Management	3
Principles of wetland systems, wetland management, wetland functions, wetland assessment, and wetland improvement. Prereq: RNG 336.	
RNG 656 - Range Habitat Management	3
Study of specific techniques and systems approaches to maintenance and improvement of rangeland ecosystems. 3 lectures. Prereq: RNG 336. S (odd years)	
RNG 658 - Grazing Ecology	3
Grazing processes and systems and their effects on plants and herbivores. 3 lectures. Prereq: RNG 336. S (even years)	
RNG 660 - Plant Ecology	3
Ecological structure, processes, and patterns observed with plant communities and populations as influenced by environmental conditions. Illustrations provided with local fieldwork. Prereq: BIOL 151, 151L. Cross-listed with BOT.	

RNG 662 - Rangeland Planning and Analysis**3**

Developing the basics of planning and the use of advanced planning tools for managing public and private rangelands. Prereq: RNG 336, 456/656 and 458/658.

RNG 716 - Agrostology**3**

Identification and description of U.S. grasses and grass-like plants. 2 lectures, 2 two-hour laboratories. Prereq: BOT 314. Cross-listed with BOT. F (even years)

RNG 717 - Aquatic Vascular Plants**2**

Identification and description of aquatic vascular plants. 1 lecture, 2 two-hour laboratories. Prereq: BOT 314. Cross-listed with BOT. F (odd years)

RNG 765 - Analysis Of Ecosystems**3**

Introduction to advanced statistical techniques to evaluate plant communities, plant-animal interactions, and plant-soil relationships. Emphasis on multivariate analysis. 2 lectures, 1 two-hour laboratory. Prereq: STAT 330. S (even years)