New Mexico Highlands Fire Management and Ecology Course Descriptions

Course	Title	Credit	Prerequisite	Description
BIOL 235	Math/Science	3	None	A non-majors science and biology course designed to provide students with an understanding of basic physical and chemical processes important to all living organisms.
FOR 335	Natural Resource Ecology	3	BIO 235 or equivalent	The ecology of natural and artificial groups of organisms managed for production of values is the focus of this course. Course topics include ecosystem productivity, biodiversity, habitat types, ecosystem management, plant stand dynamics, and endangered species roles in range, forest and aquatic ecosystems, and pest populations.
FOR 335	Watershed Management	3	BIO 235 or equivalent	This course will emphasize the interdisciplinary characteristics of watershed management. The need to incorporate ecological and socioeconomic factors when planning and implementing programs to achieve sustainable, socially viable natural resource development is emphasized.
FOR 335	Wildland Fire Management	3	BIO 235 or equivalent	A course on the behavior of wildfires in forest and range communities. Methods of prescribed fire use are discussed. The course reviews methods for fuel load estimation, fire weather prediction, and fire suppression.
FOR 335	Prescribed Fire Practices	3	BIO 235 or equivalent	Prescribed fires are used to meet management objectives of fuel reduction and ecosystem restoration. This course explores the design, planning, conduct and monitoring in prescribed fire utilization.
FOR 335	Landscape Ecology & Wildfire	3	BIO 235 or equivalent	Wildfire behavior depends on vegetation and fuel loading over landscapes. Fires that burn through landscape mosaics of habitat types have variable effects on wildlife, vegetation, and surface hydrology. This creates impacts to water quality and yield, wildlife production, and plant distributions that persist for decades. This course will investigate landscape features of wildfires, and, modeling tools to predict landscape-level fire behavior and impacts.