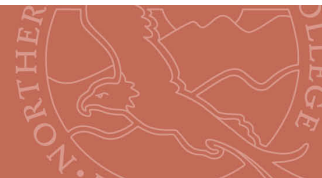


NORTHERN NEW MEXICO COLLEGE



Course Number	ENVS 4416 Irrigation and Drainage
Course Name	
Credit Value (Breakdown of theory and lab credits)	3 Theory
Catalog Course Description	You will participate in the design, management, and evaluation of irrigation and drainage systems, addressing the concepts and processes of system design, soilwater-plant relationships, evapotranspiration and water requirements, effective water use, irrigation scheduling, infiltration, and irrigation systems planning.
Course Student Learning Outcomes/Objectives /Competencies	<ol style="list-style-type: none"> 1. To develop an understanding of the terminology, techniques, and designs of irrigation systems. 2. To develop an understanding of the different methods of irrigation, the advantages and limitations of each and how they relate to economics, ecology specific species. Particular emphasis will be placed on Western and Southwestern States irrigation systems, historical context, traditional practices, and modern innovations, but appropriate examples from across the world will be used. 3. Understand and apply concepts of application rate, infiltration, seepage, leaching, lateral movement, flow rate, working pressure, and different forms of evaporation. 4. To develop an appreciation for the role of irrigation and drainage within the broader context of managing agriculture, watersheds, and ecosystems.
College-Wide Student Learning Outcomes measured (General education courses only)	
Program Student Learning Outcomes measured	<ol style="list-style-type: none"> 1. Apply systems theory, concepts, and methodologies to critically analyze and understand interactions on an ecological level.