

NORTHERN NEW MEXICO COLLEGE



Course Number	MATH 1991, Undergraduate Research Experience in Mathematics
Course Name	
Credit Value (Breakdown of theory and lab credits)	3 Theory
Catalog Course Description	This is a computer-based experience in mathematical research. You will learn computational modeling, experimental design, library and internet information searches and research methodology, while interacting with peers and faculty. You will prepare a technical report or poster on your activities. Research questions focus on nonlinear dynamics, differential equations, and mathematical physics. Prerequisite: MATH 1510. (May be repeated for credit) (3, 3T+0L)
Course Student Learning Outcomes/Objectives /Competencies of the Course	Student Learning Outcomes: At the end of this course the student will understand a mathematical research topic in depth using analytical and/or computational techniques.
College-Wide Student Learning Outcomes	MATH 1991 exposes students to the following NNMC College Wide Goals: <i>Critical thought: Students are required to analyze and synthesize information and draw reasoned conclusions.</i> <i>Quantitative reasoning: Calculate, represent, apply, analyze, and communicate both quantitative and qualitative information.</i>
Program Student Learning Outcomes measured	PSLO #3: Use linear algebra and matrices, vector analysis, ordinary differential equations, partial differential equations, or complex analysis to solve real world problems.