

# NORTHERN NEW MEXICO COLLEGE



<b>Course Number</b> <b>Course Name</b>	Math 4401 Advanced Calculus I
<b>Credit Value</b> <b>(Breakdown of theory and lab credits)</b>	4 Theory
<b>Catalog Course Description</b>	Students will undergo a rigorous study of the calculus of one variable, the definition of real numbers, sequences, limits, functions, continuity, differentiation, and integration. You will be responsible for understanding and constructing proofs. Prerequisites: MATH 2530. (4, 4T+0S)
<b>Student Learning Outcomes/Objectives /Competencies of the Course</b>	<p><b>Student Learning Outcomes:</b> At the end of this course the student will be understand:</p> <ol style="list-style-type: none"> <li>1. Construction of the real numbers</li> <li>2. Sequences and series of real numbers</li> <li>3. Continuity of real valued functions of one real variable</li> <li>4. Differentiability of real valued functions of one real variable</li> <li>5. Integration</li> </ol>
<b>College-Wide Student Learning Outcomes</b>	<p>Math 4401 learning objectives align with the following NNMC College Wide Goal:</p> <p><i>Critical thought: Students are required to analyze and synthesize information and draw reasoned conclusions.</i></p>