



Course Number	Math 4401 Advanced Calculus I
Course Name	
Credit Value (Breakdown of theory and lab credits)	4 Theory
Catalog Course Description	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)
Course Student Learning Outcomes/Objectives /Competencies of the Course	<p>Student Learning Outcomes: At the end of this course the student will be understand:</p> <ol style="list-style-type: none"> 1. Construction of the real numbers 2. Sequences and series of real numbers 3. Continuity of real valued functions of one real variable 4. Differentiability of real valued functions of one real variable 5. Integration
College-Wide Student Learning Outcomes	<p>Math 4401 exposes students to the following NNMCC College Wide Goals:</p> <p><i>Critical thought: Students are required to analyze and synthesize information and draw reasoned conclusions.</i></p> <p><i>Quantitative reasoning: Calculate, represent, apply, analyze, and communicate both quantitative and qualitative information.</i></p>
Program Student Learning Outcomes measured	PSLO #5: Construct proofs to verify a mathematical assertion.