



<b>Course Number</b>	Math 4441 Probability
<b>Course Name</b>	
<b>Credit Value (Breakdown of theory and lab credits)</b>	3 Theory
<b>Catalog Course Description</b>	The course will cover mathematical models for random experiments, random variables, expectation, discrete and continuous distributions, joint distributions, conditional probabilities, independence, laws of large numbers, the central limit theorem, and moment generation functions. Prerequisite: MATH 2530. (3, 3T+0S)
<b>Course 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. Discrete and continuous distributions</li> <li>2. Conditional probabilities and independence</li> <li>3. Central limit theorem</li> <li>4. Moment generating functions</li> </ol>
<b>College-Wide Student Learning Outcomes</b>	<p>Math 4441 exposes students to the following NNMC 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>
<b>Program Student Learning Outcomes measured</b>	PSLO #4: Use probability and statistics to test hypothesis