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| <b>Course Number</b>   | Math 1130 Survey of Mathematics  |
| <b>Course Name</b>   |  |
| <b>Credit Value<br/>(Breakdown of theory<br/>and lab credits)</b>                              | 3 Theory   |
| <b>Catalog Course<br/>Description</b>  | This course will develop students' ability to work with and interpret numerical data, to apply logical and symbolic analysis to a variety of problems, and/or to model phenomena with mathematical or logical reasoning. Topics include financial mathematics used in everyday life situations, statistics, and optional topics from a wide array of authentic contexts. MATH 100N or 100NL or appropriate score on placement exam. (3, 3T+0S)   |
| <b>Course Student<br/>Learning<br/>Outcomes/Objectives<br/>/Competencies of the<br/>Course</b> | <p><b>Student Learning Outcomes:</b></p> <ol style="list-style-type: none"> <li>1. Construct and analyze graphs and/or data sets.             <ol style="list-style-type: none"> <li>a. Gather and organize information.</li> <li>b. Understand the purpose and use of various graphical representations such as tables, line graphs, tilings, networks, bar graphs, etc.</li> <li>c. Interpret results through graphs, lists, tables, sequences, etc.</li> <li>d. Draw conclusions from data or various graphical representations.</li> </ol> </li> <li>2. Use and solve various kinds of equations.             <ol style="list-style-type: none"> <li>a. Understand the purpose of and use appropriate formulas within a mathematical application.</li> <li>b. Solve equations within a mathematical application.</li> <li>c. Check answers to problems and determine the reasonableness of results.</li> </ol> </li> <li>3. Understand and write mathematical explanations using appropriate definitions and symbols.             <ol style="list-style-type: none"> <li>a. Translate mathematical information into symbolic form.</li> <li>b. Define mathematical concepts in the student's own words.</li> <li>c. Use basic mathematical skills to solve problems.</li> </ol> </li> <li>4. Demonstrate problem solving skills within the context of mathematical applications.             <ol style="list-style-type: none"> <li>a. Show an understanding of a mathematical application both orally and in writing.</li> <li>b. Choose an effective strategy to solve a problem.</li> <li>c. Gather and organize relevant information for a given application.</li> </ol> </li> </ol> |
| <b>College-Wide Student<br/>Learning Outcomes</b>  | <p>Math 1130 will expose 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<br/>Learning Outcomes<br/>measured</b>                                      | None   |