



SYLLABUS TEMPLATE

Course Number Course Name	ED 222 Math for Educators I
Credit Value (Breakdown of theory and lab credits)	3 Theory
Catalog Description	This course is designed to prepare you to teach the National Council of Teachers of Mathematics Standard 1, K-8, Numbers and Operations, and Standard 2, K-8 Algebra, integrated with Standards 6, 7, 8, 9, and 10 Problem Solving, Reasoning and Proof, Communications, Connections, and Representations. You will be assessed based on performance measures designed to demonstrate mastery of mathematical concepts. You will participate in seminars and observe 10 hours of classroom instruction in the field. Prerequisite: MATH 150. (3, 3T+0L)
Student Learning Outcomes of the course	This course provides to prospective teachers a direction and assistance for implementing math instruction for their students that allow them to develop mathematical confidence and competence. Specifically, the class is designed to help prospective teachers to: <ol style="list-style-type: none"> 1. Deepen their knowledge and appreciation of mathematics, and presents an extensive collection of explorations for the content areas of the mathematics curriculum, such as, measurement, probability and statistics, geometry and spatial sense, logical reasoning, patterns, functions and algebra, and number and its operations. 2. Understand how children learn mathematics for organizing an instructional math program and structuring lessons for cooperative and independent learning. 3. Integrate assessment into classroom instruction to measure, accurately, the level of attainment of the students in the math topics they learn. 4. Establish a classroom environment that supports children's learning of mathematics, and develop children's ability to think and reason mathematically, and help them learn the concepts and skills they need to do so.
College-Wide Student Learning Outcomes	ED 222 learning objectives align with the following NNMC College Wide Goal: <p>Communication Use the verbal, written, listening, and visual skills necessary to analyze, synthesize and cite information, construct arguments, identify and solve problems, and engage across academic fields and civic discourse.</p> <p>Critical Thought Infer specific contexts and situations for learning by asking essential questions and applying both quantitative or qualitative methodologies and processes to solve problems.</p> <p>Cultural Competence Ability to perceive situations from various cultural and ethical contexts; to realize the role of the individual in influencing societal consequences; understand the importance of character values such as but not limited to: truthfulness and personal integrity, sense of</p>



responsibility, sense of fairness and justice, to test conventional wisdom for the pursuit of truth empathy, compassion, and general good citizenship.

Information Literacy

Ability to use current technology including (where applicable) but not limited to: computer software such as word processors, statistics/analytical programs, simulation programs, musical/artistic programs, and other software that increases overall ability and understanding; machinery and industrial processes that contributes towards increased productivity and efficiency; Innovation or the application of creativity or original thought.