Montgomery County Community College
EDU 227
Teaching Mathematics to Young Children
3-3-0

COURSE DESCRIPTION:
Teaching Mathematics to Young Children (EDU 227) presents teaching techniques and materials used with students, from birth through fourth grade, in contemporary mathematics programs. Students will learn ways to focus instruction on helping children understand and utilize mathematics effectively, think critically, and enforce mathematical standards throughout lessons/ activities. The mathematical content of this course is presented within the context of teaching young children.

PREREQUISITE(S):
None

CO-REQUISITE(S):
None

Upon successful completion of this course, the student will:

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
1.Understand the nature and applications of contemporary curricula in early & elementary school mathematics.	Lecture Cooperative/ Independent learning activities	Discussion Board/ Classroom Discussions Weekly Quizzes
2. Incorporate high quality children's literature in a mathematics lesson plan showing interdisciplinary connections.	Lecture Cooperative/Independent learning activities Trade book assignment	Trade Book assignment rubric
3. Create a mathematics-based lesson plan that reaches ALL learners and learning styles, while including the use of PA standards.	Math Lesson Plan Lecture Cooperative/Independent learning activities	Math Lesson Plan rubric
4. Demonstrate the use of problem-solving strategies and critical	Math Activities (varied) Lecture	Math Activities rubrics Weekly Quizzes

thinking used in math activities.	Cooperative/independent learning activities	
5. Create a grade appropriate mathematics learning center that is engaging and interactive.	Math Learning Center Math Learning Center Presentation	Math Learning Center rubric Math Learning Center Presentation rubric

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria*.

SEQUENCE OF TOPICS:
1. Foundations, principles, and standards in math
2. Learning, instructing and assessing mathematics in the classroom
3. The language of math
4. The skill development of:
    - Early mathematical concepts
    - Number Sense
    - Place value
    - Data analysis
    - Proportional Reasoning and Probability
    - Decimals and Fractions
    - Geometry and Measurement
    - Early Algebra
    - Problem Solving

LEARNING MATERIALS:
Textbook: Early Childhood Mathematics, Susan Sperry Smith, 5th Edition, Pearson Publishing Boston MA, 20013. ISBN:13-978-0-13-261368-2.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:
Prepared by: Helen Gingrich; Carol-Rae Sodano; D. Creciun Date: 1995

Revised by: Elizabeth Lattanzi Date: 3/1/2013
VPAA/Provost or designee Compliance Verification:
Victoria L. Bastecki-Perez, Ed.D. Date: 4/8/2013

Revised by: Elizabeth Lattanzi Date: 9/12/2018
VPAA/Provost or designee Compliance Verification:
Victoria L. Bastecki-Perez, Ed.D. Date: 9/2018

Revised by: Meryl Sultanik Date: 9/9/2024
VPAA/Provost or designee Compliance Verification:
Chae Sweet, Ed.D. Date: 11/19/2024

Revised by: Elizabeth Lattanzi Date: 8/20/2025
VPAA or designee Compliance Verification: Date: 8/20/2025

This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.