

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

COURSE DESCRIPTION:

Teaching Mathematics to Children (EDU 227) presents teaching techniques and materials used in contemporary pre-school / elementary 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. The mathematical content of this course is presented within the context of teaching.

PREREQUISITE(S):

None

CO-REQUISITE(S):

None

Upon successful completion of this course, the student will be able to:

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
1. Explain the nature and applications of contemporary curricula in elementary school mathematics.	Lecture Cooperative learning activities	Discussion Board/ Classroom Discussions Weekly Quizzes Midterm exam Final exam
2. Incorporate high quality children's literature in a mathematics lesson plan showing interdisciplinary connections.	Lecture Cooperative learning activities Trade book assignment	Trade book assignment rubric

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
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 learning activities	Observations Math Lesson Plan rubric Midterm exam Final exam
4. Demonstrate the use of problem solving strategies and critical thinking used in math activities.	Math Activities (varied) Lecture Cooperative learning activities (group and partner)	Math Activities rubrics Midterm exam Final exam
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. Mathematics curriculum for the 21st century
2. Mathematics for ALL learners
3. Learning, instructing and assessing mathematics in the classroom
4. The skill development of:
 - Number concepts
 - Number Systems
 - Proportional Reasoning and Probability
 - Decimals and Fractions
 - Geometry and Measurement
 - Algebra
 - Problem Solving

LEARNING MATERIALS:

Textbook: Sperry Smith, Susan, (2013). *Early Childhood Mathematics* (5th ed.). Boston, MA: Pearson Publishing.

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: Meryl Sultanik	Date: 8/30/2106
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 9/1/2016
Revised by: Elizabeth Lattanzi	Date: 9/12/2018
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 10/15/2018
Revised by: Elizabeth Lattanzi	Date: 8/10/2021
VPAA or designee Compliance Verification:	Date: 8/10/2021



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.