Attention Elementary Education Majors!
Mathematics Concentration

Why Concentrate in Mathematics:
♦ Enjoyment of mathematics
♦ Courses designed especially for teachers
♦ Mathematics is tested in the elementary grades
♦ Strengthen a personally weak subject area
♦ Increase hiring potential

What you will learn:
♦ Mathematics knowledge that is deep and connected
♦ Content connected to the school curriculum
♦ Common student approaches and errors when learning mathematics
♦ Innovative, research-based teaching strategies
♦ Mathematics tools to become a leader in your school

Benefits:
♦ Build your own content knowledge of mathematics in order to better help your students
♦ Increased hiring potential by concentrating in high-need discipline
♦ Ability to add middle grades mathematics to the elementary license with two additional mathematics courses and a passing Praxis II score
♦ Better preparation for mathematics teacher licensure tests
♦ Community of students and faculty with whom to grow professionally

Some of our favorite “extras”: 
♦ Family math nights at local elementary schools
♦ Gamma Chapter meetings
♦ Attending and presenting at North Carolina Council of Teachers of Mathematics conference in Greensboro
♦ Annual faculty Mathemagician competition
♦ Tutoring opportunities for elementary students
♦ Exam study reviews

Become A PiRate!
For more information contact Ron Preston,
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Visit our website: www.ecu.edu/cs-educ/msite/Math/CS-Concentration-Math.cfm
Follow us on Twitter! @ECUElemMath
Mathematics Concentrations for BS Elementary Education Majors

The Mathematics Concentration for BS Elementary Mathematics Education majors is designed for preservice teachers interested in improving their understanding of mathematics, mathematics teaching and learning, and instructional resources. The goal of the program is to develop teachers capable of improving the quality of mathematics teaching and learning for all students through standards-based curriculum, research-based strategies, and innovative practices. Preservice teachers focus on content connected to the school curriculum, investigate common student errors, and learn to consider mathematics from a variety of perspectives, using numerous representations.

Note: Students may use 3 hours of MATH Foundations Curriculum credit for the concentrations. College Algebra credit from dual enrollment as a high school student can be used for MATH 2127.

The Mathematics Concentrations are administered by the Department of Mathematics, Science, and Instructional Technology Education (MSITE). Although students who use the concentrations are advised in other departments, MSITE is ready to assist students with questions about the concentrations and when courses are offered (prestonr@ecu.edu or 252-328-9355).

Elementary education majors do an 18-hour concentration. Elementary Education majors wishing to add middle grades mathematics to their license should take the 24-hour concentration.

### 24-Hour Concentration
- **MATH 2127.** Basic Concepts of Mathematics (3)
- **MATE 1267.** Functional Relationships (3)
- **MATE 2067.** Data and Probability Explorations (3)
- **MATH 2127.** Basic Concepts of Mathematics (3)
- **MATE 3067.** Algebra and Number Foundations (3)
- **MATE 3167.** Geometry and Measurement (3)
- **MATE 3267.** Concepts in Discrete Mathematics (3)
- **MATH 2119.** Elements of Calculus (3)

### 18-Hour Concentration
- **MATE 1267.** Functional Relationships (3)
- **MATE 2067.** Data and Probability Explorations (3)
- **MATH 2127.** Basic Concepts of Mathematics (3)
- **MATE 3067.** Algebra and Number Foundations (3)
- **MATE 3167.** Geometry and Measurement (3)
- **MATE 3267.** Concepts in Discrete Mathematics (3)

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**Puzzle Time!**

**Guess My Number**

Pick a secret 3-digit number. Have someone try to guess it. For each guess tell the person how many digits are PICO, FERMI, OR NADA.

Place (PICO) - correct digit and in the correct place
Digit (FERMI) - correct digit but in the wrong place
Nothing (NADA) - no digits are correct


**Math-to-Go: The Four 4’s**

Can you find every number between 1 and 100 using exactly four 4’s and any operation?

Here is an example of a way to find the number 2:

\[
4/4 + 4/4 = 2
\]

Hint: You may combine digits to make larger numbers (ex. 44). You may also use decimals (ex. .4 or .44) and square roots (ex. \( \sqrt{4} \))

https://www.youcubed.org/task/the-four-4s/