

MATHEMATICS SPECIALIST PROGRAM
(Program does not result in Licensure)

Student Name: _____

Date: _____

Social Security Number: _____

Student Signature: _____

E-mail Address: _____

Faculty Advisor Signature: _____

The Mathematics Specialist Program is especially tailored to help develop mathematical leadership in Early Childhood, Elementary, Middle Childhood (Mathematics concentration), Adolescent to Young Adult (Mathematics major), and Intervention Specialist teachers. Graduate courses and practicum provide necessary knowledge of mathematics, learning theory, child development, research principles, and intervention techniques to graduate students who strive to provide leadership in mathematics education. Faculty contact person: Dr. Trish Koontz, 404 White Hall, Kent, Ohio 44242; call (330) 672-2580; or email, tkoontz@kent.edu

Universal Professional Requirements (UPRs):

Semester(s) Taught

EDUC 65511 Research in Educational Services (3) **OR**
 EDUC 65510 Statistics I for Educational Services (3)

Fall, Spring, Summer
 Fall, Spring, Summer

One of the following four:

EDUC 65520 Child and Adolescent Development: (3)
 EDUC 65521 Adult Development: (3)
 EDUC 65523 Life Span Development: (3)
 EDUC 65524 Learning Theories: (3)

Fall, Spring, Summer
 Fall, Spring, Summer
 Fall, Spring, Summer
 Fall, Spring, Summer

Core Requirement:

C&I 67001 Fundamentals of Curriculum (3)

Specialization Requirements:

C&I 6/77225 Research in Mathematics Education (3): Both quantitative and qualitative research in mathematics educations will be examined for implications to more effective teaching and learning of mathematics.

Fall only

Spring only

C&I 6/87091 Seminar in Mathematics Education (3): A detailed exploration of the implications of current research and professional recommendations for teaching mathematics and designing mathematics curricula will be conducted

You must take 2 of the following 4 courses:

ECED 50147 Teaching Mathematics Early Years (3): Instructional psychology and materials for effective teaching of mathematics in prekindergarten through grade three with a theoretical emphasis on cognitive development. **And/Or**

Fall and Spring

C&I 6/77226 Improving Mathematics Instruction Middle Childhood (3): Instructional psychology and materials including technology for the effective teaching of mathematics in grade three through eight with a theoretical emphasis on cognitive development. **And/Or**

Spring only

ADED 52267 Improving Mathematics Instruction Adolescence to Young Adults (3): Instructional psychology and materials including technology for the effective teaching of mathematics in grade eight through twelve with a theoretical emphasis on cognitive development. **And/Or**

Fall only

C&I 67224 Teaching Mathematics Using Computers and Calculators Grades 4-12, (3): Develop knowledge of research and theories regarding teaching and learning mathematics via computing devices and to develop proficiency in the use of computing devices and software that would be used in the teaching and learning of mathematics.

Odd Summers

The following 4 courses (nine hours) are taken as a concurrent block during even year summers (2006, 2008, 2010, etc.). Prerequisites to this block include: C&I 6/77226 and two of the Improving Math Instruction series (Early Childhood, Middle Childhood, Adolescence and Young Adult, or teaching Math Using Computers or Calculators).

C&I 6/77227 Assessment in Mathematics Education (2): Investigation of standards and practices in mathematically assessments as recommended by NCTM and current research.

C&I 6/77292 Clinical Practicum in Mathematical Assessment (2): Experience in designing and administering both formal and informal assessments.

C&I 6/77228 Intervention in Mathematics Instruction (2): Investigation of alternative methods of teaching mathematics to diverse learners who experience difficulties in learning mathematics.

C&I 6/77592 Practicum in Mathematics Intervention (3): Experience in providing leadership in designing intervention programs for schools, and designing curriculum and instruction for individual learners that experience difficulties in learning mathematics.

Electives: At least two elective hours may be taken from the following or alternative courses approved by your advisor.

EDAD
6/76543 Principles and Techniques of Supervision (3)

C&I 67010 Curriculum Evaluation (3)

Or other approved Mathematics, or education courses.

Total number of hours for the program: 32