

Kent State University
Department of Teaching, Leadership & Curriculum Studies
College and Graduate School of Education, Health and Human Services
Kent, Ohio 44242

Mathematics Specialist Master's Degree Program

Name: _____ Degree to be awarded: _____ MA* _____ M.Ed.*

Home Address: _____ E-mail address: _____

City: _____ State: _____ Zip code: _____ Telephone number: _____

***NOTE: The M.Ed. requires a minimum of 32 semester hours of course work, while the M.A. requires a minimum of 26 semester hours of course work, plus a thesis for which 6 semester hours credits are granted.**

Instructions for Filing the Prospectus

1. Students must schedule a meeting with advisor to discuss the prospectus during the first semester of course work.
2. The prospectus must be completed and filed by the end of the first year of course work in 418 White Hall. Prior to filing the prospectus in 418 White Hall, make two (2) copies. Give one (1) copy to your major advisor. Retain one (1) copy for your personal use.
3. Research in Educational Services must be taken as specified on the prospectus.
4. A minimum of 4 C&I courses must be taken as specified on the prospectus.
5. Any deviation from the prospectus **MUST BE APPROVED IN ADVANCE** by the student's advisor. Changes are to be filed by the student with the Coordinator of Graduate Education Programs, Debbie Roeder, in Room 418 White Hall one semester prior to anticipated graduation. She can be contacted at 330-672-0558 or droeder@kent.edu.
6. Degree work must be completed within six (6) years. The starting date is the first semester of graduate course work at Kent State University.
7. A minimum of 16 semester hours must be taken at the 60000 level or higher.
8. A minimum of 18 semester hours must be taken at the Kent campus.
9. Consult the graduate catalog for elective prior to meeting with advisor.

Approval of Prospectus

Graduate Student (signature)

(print name)

Date

Graduate Advisor

Date

I. Universal Professional Requirement

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

_____ C&I 67001 Fundamentals of Curriculum (3)

Total Hours 6

II. Specialization Requirements

_____ C&I 6/77225 Research in mathematics education (3)

_____ C&I 6/87791 Seminar in mathematics education (3)

_____ C&I 6/77227 Assessment in mathematics education (2)

_____ C&I 6/77292 Clinical practicum in mathematics assessment (2)

_____ C&I 6/77228 Intervention in mathematics instruction (3)

_____ C&I 6/77592 Practicum in mathematics intervention (3)

You must take 3 of the following 4 courses:

_____ ECED 50147 Teaching mathematics early years (3)

_____ ADED 52267 Improving math instr. Adolescence to young adult (3)

_____ C&I 67224 Teaching mathematics using computers and calculators grades 4 – 12 (3)

_____ C&I 67226 Improving math instruction middle childhood (3)

Total Hours _____

III. C&I Electives

Course Hours

Total Hours _____

IV. Other Electives

Course Hours

Total Hours _____

V. Workshops: Graduate Credit Only: Maximum 4 Hours

Workshop Hours

Total Hours _____

VI. Thesis: 6 credit hours

Total Hours _____

VII. Transfer Credits (course work within 6 years): Maximum of 12 semester hours or 18 quarter hours.

1. Official transcript must be filed with the Graduate School of Education. Only A or B grades will transfer.
2. Formal letter of request listing course title, course number, number of credit hours, semester taken and institution must also be completed and approved by the Graduate School of Education.

Course Hours

Total Hours _____

Credit Hour Summary

I. _____
II. _____
III. _____
IV. _____
V. _____
VI. _____
VII. _____

Total Credits _____

MATHEMATICS SPECIALIST PROGRAM

Universal Professional Requirements (UPRs) & Core Course: offered Fall, Spring, & Summer

EDPF 65511, Research in Educational Services (3)

OR

EDPF 65510 Statistics I for Educational Services (3)

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)

C&I 6/87791, 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. (Spring only)

You must take 3 of the following 4 courses.

ECED 50147, Teaching Mathematics Early Years (3): Instructional psychology and materials for effective teaching of mathematics in kindergarten through grade three with a theoretical emphasis on cognitive development. (Fall or Summer)

And/Or

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. (Spring only)

And/Or

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. (Fall only)

And/Or

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. (Fall and Odd Summers)

MATHEMATICS SPECIALIST PROGRAM PROSPECTUS page 2

Universal Professional Requirements (UPRs) & Core Course: (A)

EDPF 65511, Research in Educational Services (3) OR _____

EDPF 65510 Statistics I for Educational Services (3) _____

C&I 67001, Fundamentals of Curriculum (3) _____

TOTAL A: 6 hours _____

Specialization Requirements: (B)

C&I 6/77225, Research in Mathematics Education (3) _____

C&I 6/87091, Seminar in Mathematics Education (3) _____

C&I 6/77227, Assessment in Mathematics Education (2) _____

C&I 6/77292, Clinical Practicum in Mathematical Assessment (2) _____

C&I 6/77228, Intervention in Mathematics Instruction (2) _____

C&I 6/77592, Practicum in Mathematics Intervention (3) _____

You must take 3 of the following 4 courses.

ECED 50147, Teaching Mathematics Early Years (3) _____

C&I 6/77226, Improving Mathematics Instruction Middle Childhood (3) _____

ADED 52267, Improving Mathematics Instruction Adolescence to Young Adults (3) _____

C&I 67224, Teaching Mathematics Using Computers and Calculators Grades 4-12 (3) _____

TOTAL B: 24 hours min. _____

Minimum mathematics requirement Check your licensure program.

_____ Secondary Math Major

_____ Middle Childhood Math Concentration

_____ Elementary

_____ Early Childhood

_____ Other

You must have a minimum 15 hours of undergraduate or graduate mathematics courses to complete this program. Middle Childhood Math Concentration and Secondary Math Majors will have this requirement completed in their licensure program. Others should meet with their advisor to determine which additional mathematics courses would best serve them as a Mathematics Specialist. Mathematics Education and Computer Science classes do not count toward the 15 hour minimum. These math courses may be taken concurrently with program requirements. File transcripts showing mathematics courses taken and attach a list signed by your advisor, of the approved 15+ semester hours of mathematics courses taken. Transcripts and the list should be filed in room 308 no later than the deadline for graduation (usually the first week of the semester you expect to graduate).

Electives: (C)

TOTAL C: _____

Workshop: (D)

TOTAL D: _____

Transfer: (E)

TOTAL E: _____

GRAND TOTAL (A+B+C+D+E): _____ must be a minimum of 32 semester hours

Graduate Student: _____

Advisor: _____

The following 4 courses (nine hours) are taken as a concurrent block. Prerequisites to this block include: C&I 6/77225 and two of the Improving Math Instruction series (Early Childhood, Middle Childhood, Adolescence and Young Adult, or Teaching Math Using Computers or Calculators). All 4 of the following courses are taught even numbered summers only: 2010, 2012, 2014, etc. Summer II for 8 weeks, Monday through Thursday.

C&I 6/77227, Assessment in Mathematics Education (2): Investigation of standards and practices in mathematical 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.

Minimum mathematics requirement

You must have a minimum 15 hours of undergraduate or graduate mathematics courses to complete this program. Middle Childhood Math Concentration and Secondary Math Majors will have this requirement completed in their licensure program. Others should meet with their advisor to determine which additional mathematics courses would best serve them as a Mathematics Specialist. Mathematics Education and Computer Science classes do not count toward the 15 hour minimum. These math courses may be taken concurrently with program requirements. File transcripts showing mathematics courses taken and attach a list signed by your advisor, of the approved 15+ semester hours of mathematics courses taken. Transcripts and the list should be filed in room 308 no later than the deadline for graduation (usually the first week of the semester you expect to graduate).

Electives:

Electives may be taken from the following or alternative courses approved by your advisor. It is advised that at least 32 graduate hours are needed to complete this masters degree.

Some suggested electives:

ECED 50147, Teaching Mathematics Early Years (3)

C&I 6/77226, Improv Math Instruction Middle Childhood (3)

ADED 52267, Improv Math Instruction Adolescence to Young Adults (3)

C&I 6/77224, Teach Math w/ Computers and Calc. Grades 4-12 (3)

EDAD 6/76542, Principles and Techniques of Supervision (3)

C&I 6/77010, Curriculum Evaluation (3)

Or **other advisor approved** C&I, Mathematics, Middle Childhood, Secondary, Early Years, Multicultural, or courses in Special/Gifted Education among others.

For further information contact: Dr. Trish Koontz
404 White Hall
Kent, Ohio 44242

tkoontz@kent.edu

330-672-0640

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) 672-0640; or email, tkoontz@kent.edu

Universal Professional Requirements (UPRs):

Semester(s) Taught

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

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

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

Spring only

You must take 3 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 or Summer

C&I 6/77226 Improving Mathematics Instruction Middle Childhood (3): Instructional psychology and materials including technology for the effective teaching of mathematics in grade four 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.

Fall and Odd Summers

The following 4 courses (nine hours) are taken as a concurrent block during even year summers (2010, 2012, 2014, etc.). This is considered the capstone experience of the program. 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 mathematical 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 who experience difficulties in learning mathematics.

Electives:

Electives may be taken from the following or alternative courses approved by your advisor. It is advised that at least 32 graduate hours are needed to complete this masters degree.

Some suggested electives:

- ECED 50147, Teaching Mathematics Early Years (3)
C&I 6/77226, Improv Math Instruction Middle Childhood (3)
ADED 52267, Improv Math Instruction Adolescence to Young Adults (3)
C&I 6/77224, Teach Math w/ Computers and Calc. Grades 4-12 (3)
EDAD 6/76542, Principles and Techniques of Supervision (3)
C&I 6/77010, Curriculum Evaluation (3)

Or **other advisor approved** C&I, Mathematics, Middle Childhood, Secondary, Early Years, Multicultural, or courses in Special/Gifted Education among others.

Minimum mathematics requirement Check your licensure program.

_____ Secondary Math Major _____ Middle Childhood Math Concentration
_____ Elementary _____ Early Childhood _____ Other

You must have a minimum 15 semester hours of undergraduate or graduate mathematics courses to complete this program. Middle Childhood Math Concentration and Secondary Math Majors will have this requirement completed in their licensure program. Others should meet with their advisor to determine which additional mathematics courses would best serve them as a Mathematics Specialist. Mathematics Education and Computer Science classes do not count toward the 15 hour minimum. These math courses may be taken concurrently with program requirements. File transcripts showing mathematics courses taken and attach a list signed by your advisor, of the approved 15+ semester hours of mathematics courses taken. Transcripts and the list should be filed in room 308 no later than the deadline for graduation (usually the first week of the semester you expect to graduate).

Total number of hours for the program: 32