

College of Education  
Department of  
Mathematics, Science,  
and Instructional  
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March 14, 2012

Dear Educational Planning and Policies Committee (EPPC):

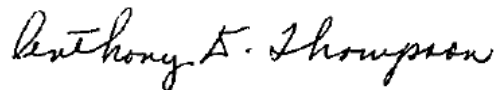
Attached is a submission for consideration by the EPPC regarding revisions to the concentrations in the MAEd in mathematics. These revisions have been approved by the Graduate Curriculum Committee, Graduate Council, and the Faculty Senate. Dr. Rose Allen informed me that any changes to the concentrations would also require approval by the EPPC. Therefore, I request that this proposal be added to an upcoming EPPC agenda.

Documents in the packet include:

- Explanatory Memorandum
- Graduate School Marked Catalog Copy

Please let me know if you need any additional materials or have any questions. My email is [thompsonan@ecu.edu](mailto:thompsonan@ecu.edu); work phone 328-9358.

Sincerely,



Anthony D. Thompson  
Associate Professor of Mathematics Education  
East Carolina University



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## EXPLANATORY MEMO FOR CHANGES IN THE MAED IN MATHEMATICS

**To:** Dr. Scott Gordon, Chair of the Educational Planning and Policies Committee (EPPC):  
**From:** Dr. Anthony D. Thompson  
Graduate Coordinator, MAEd in Mathematics; [thompsonan@ecu.edu](mailto:thompsonan@ecu.edu)  
**Date:** March 14, 2012  
**Subject:** Changes to concentrations in the revised MAEd in Mathematics

On behalf of the graduate faculty of the Mathematics Education Area of the Department of Mathematics, Science, and Instructional Technology Education, I am submitting a request for changes to the concentrations in the MAEd in mathematics. The following provides a brief summary of the changes to the concentrations and the overall changes to the MAEd in mathematics:

- In the existing MAEd, we had 2 concentrations: Secondary and Pre-Secondary. In the revised MAEd in mathematics, we have 3 concentrations: Elementary (Grades K – 6), Middle School (Grades 6 – 9), and High School (Grades 9 – 12).
- Over the past few years, new MATE courses have been developed for specific grade levels: Elementary, Middle School, and High School; these courses have been incorporated into the MAEd in mathematics.
- Following the recommendations from the UNC General Administration, the MAEd in mathematics is reduced from 39 s.h. to 36 s.h. of credit.
- Previously, MATE 6400 was an elective in the MAEd in mathematics; it is now a required course in the common core along with MATE 6200, 6206, and 6211. Previously students could complete a capstone project (either Action Research or Portfolio) without having to take MATE 6400; however, NC DPI requires that the MAEd evidences (e.g., Action Research project) designed to meet the new state teaching standards be assignments within required courses.
- The research course EDUC 6482 or SCIE 6500 has been removed as a required course. With an Action Research assignment now included in the MAEd in mathematics, MATE 6211 (Research in Mathematics Education) and MATE 6400 (Capstone Course) have been adapted within the existing syllabi guidelines to meet these research requirements. Given that the MAEd in mathematics education is designed as a practitioner's degree, we believe 6 hours of research is appropriate.
- For the elementary and middle grades concentration (previously Pre-secondary concentration), the number of mathematics education courses has been reduced from 24 s.h. to 21 s.h.
- For the High School concentration, the number of required graduate mathematics courses has been reduced from 15 s.h. to 12 s.h.

Respectfully submitted,

A handwritten signature in cursive script that reads "Anthony D. Thompson".

Anthony D. Thompson

HTML catalog: <http://www.ecu.edu/cs-acad/grcat/programMATE.cfm>

## MAEd in Mathematics

The MAEd in mathematics is designed for a teacher whose primary teaching assignment ~~is has~~ ~~been~~ in ~~K – 12 the area of pre-secondary or secondary~~ mathematics. ~~The MAEd in mathematics consists of three concentrations: elementary, middle school, and high school. For each graduate student, the selection of a concentration will be made in consultation with a mathematics education advisor and will be based on a student's prior education and future career plans.~~ Prior teaching experience is not necessary for admission to this program, but certification to teach is required for admission. ~~Students holding the equivalent of an undergraduate mathematics major and certified to teach at the secondary level will complete the secondary level concentration. Students who earned the equivalent of an undergraduate concentration in mathematics and are certified to teach at the pre-secondary level will complete the pre-secondary level concentration.~~ Admission materials must include a letter of recommendation from someone aware of the applicant's performance or potential as a classroom teacher.

### Degree Requirements

Minimum degree requirement is ~~39~~ 36 s.h. of credit.

1. Common core - ~~24~~ 15 s.h.

~~EDUC 6001; 6482 or SCIE 6500; MATE 6200, 6206, 6211~~

~~6 s.h. of mathematics analysis and algebra as follows:~~

~~Pre-secondary concentration students take MATH 5521. Readings and Lectures in Mathematics (3) once as analysis and once as algebra.~~

~~Secondary concentration students take MATH 5101 or 5102; 5021 or 5064 or 5581 or 6011~~

EDUC 6001; MATE 6200 or 6062\*, 6206 or 6063\*, 6211, 6400

\* Students who wish to obtain the *elementary mathematics education specialist certificate* must take MATE 6062 and MATE 6063

2. Concentration areas (Choose one.) - ~~18~~ 21 s.h.

~~Pre-secondary concentration:~~

~~Choose 9 s.h. mathematics education electives in consultation with advisor; MATE 6320 or 6321 is normally included unless the student has credit for a similar course~~

~~Choose 9 s.h. electives from the following: MATE 5263, 5264, 6221, 6222, 6223; MATH 5521, 6263~~

~~Secondary concentration:~~

~~Choose 9 s.h. mathematics education electives in consultation with advisor; MATE 6323 is normally included unless the student has credit for a similar course~~

~~Choose 9 s.h. from the following: MATH 5021, 5031, 5064, 5101, 5102, 5110, 5121, 5122, 5131, 5132, 5311, 5322, 5521, 5551, 5581, 5601, 5801, 6001, 6011, 6012, 6022,~~

~~6111, 6112, 6121, 6122, 6251, 6252, 6401, 6402, 6411, 6412, 6561, 6601, 6611, 6612, 6651, 6802, 6803, 6804, 6805~~

**Elementary concentration (Grades K – 6): 21s.h.**

Mathematics for K–6 teachers (12 s.h.)

Students will take the following 4 courses to develop expertise in grades K – 6 mathematics: MATE 6058, 6059, 6060, 6061

Mathematics for K–12 teachers (9 s.h.)

Students will take 3 of the following courses to develop a broader view of K – 12 mathematics. Other courses might be acceptable; please consult with your advisor: MATE 6120, 6130, 6140, 6331, 6341, 6351, 6361, 6371, 6391

**Middle School concentration (Grades 6–9): 21 s.h.**

Mathematics for 6–9 teachers (12 s.h.)

Students will take 4 of the following courses to develop expertise in grades 6 – 9 mathematics; other courses might be acceptable; please consult with your advisor: MATE 6331, 6341, 6351, 6361, 6371, 6391

Mathematics for K–12 teachers (9 s.h.)

Students will take 3 of the following courses to develop a broader view of K – 12 mathematics. Other courses might be acceptable; please consult with your advisor: MATE 6058, 6059, 6060, 6061, 6062, 6063, 6120, 6130, 6140, 6331, 6341, 6351, 6361, 6371, 6391

**High School concentration (Grade 9–12): 21 s.h.**

Mathematics for 9–12 teachers (12 s.h.)

Students will take 4 of the following courses. Other courses might be acceptable; please consult with your advisor: MATH 5021, 5031, 5064, 5101, 5102, 5110, 5121, 5131, 5132, 5551, 5581, 5601, 5774, 5801, 6001, 6150, 6251, 6651

Mathematics for K-12 teachers (9 s.h.)

Students will take 3 of the following courses to develop a broader view of K – 12 mathematics. Other courses might be acceptable; please consult with your advisor: MATE 6110, 6120, 6130, 6140, 6150, 6331, 6341, 6351, 6361, 6371, 6391

3. Other requirements

Capstone experience:

~~The capstone experience will consist of either a research project or a portfolio that is modeled on the National Board Professional Teaching Standards or other equivalent project.~~ The capstone experience (MATE 6400) will consist of an Action Research project and assignments modeled on the National Board Professional Teaching Standards portfolio. This will allow ~~The~~ graduate students ~~will be able~~ to show

knowledge of and skills in the use of appropriate materials, pedagogy, and technology in ~~the construction of a portfolio or research project~~ [mathematics education](#).

School-based experience:

Teaching experience at the K-12 level is not mandatory for admittance to the MAEd program. However, for the graduate student not teaching at the pre-college level, some of the course work will require a practicum with an approved school.