

**Revision to the Master of Arts in Mathematics
with Elementary/Middle School Education option**

Current:

Mathematics (Elementary/Middle School Mathematics Education Option)

Degree Requirements

Candidates for the Master of Arts in Mathematics with Elementary/Middle School Education option must complete a minimum of 32 semester hours without a thesis or 30 semester hours with a thesis selected and approved by the Mathematics Department as outlined below.

Curriculum for the 32 Hour Option Without a Thesis

Total. Credits: 32

* Basic Education Courses Total. Credits: 8

Contact the department of education for current list of appropriate courses.

Specific Requirements in Mathematics are as follows:

* MAT 4800 - Diagnosis, Remediation, and Technology in Teaching Mathematics, K-12. Credits: 2

* MAT 5400 - The Teaching of Mathematics in Grades K-6. Credits: 3

* MAT 5410 - Introduction to Research in Mathematics Education. Credits: 3

* MAT 5990 - Independent Study. Credits: 1 to 6

* (4 hours required)

6 Semester Hours Chosen From:

* MAT 5635 - Mathematical Topics for Secondary School Mathematics Teachers.

Credits: 2 or 3

* (repeatable)

* MAT 5810 - Topics in Mathematics for Elementary/Middle School Teachers.

Credits: 1 to 4

* (repeatable)

6 Semester Hours Chosen From:

* MAT 4810 - Topics in Elementary and Middle Level Mathematics. Credits: 1 to 4

* (repeatable)

* MAT 4920 - Algebra and Geometry for Middle Level Teachers. Credits: 3

Curriculum for the 30 Hour Option With a Thesis

Total. Credits: 30

Same as Non-Thesis option with the following changes:

No Independent Study required

MAT 5950 - Thesis. Credits: 3 to 6 required

Proposed (changes are in red):

Mathematics (Elementary/Middle School Mathematics Education Option)

Degree Requirements

Candidates for the Master of Arts in Mathematics with Elementary/Middle School Education option must complete a minimum of 32 semester hours without a thesis or 30 semester hours with a thesis selected and approved by the Mathematics Department as outlined below.

Curriculum for the 32 Hour Option Without a Thesis

Total. Credits: 32

* Basic Education Courses Total. Credits: 8

Contact the department of education for current list of appropriate courses.

Specific Requirements in Mathematics are as follows:

* MAT 4800 - Diagnosis, Remediation, and Technology in Teaching Mathematics, K-12. Credits: 2

* MAT 5400 - The Teaching of Mathematics in Grades K-6. Credits: 3

-or-

* **MAT 5500 – Methods of Teaching Middle Level Mathematics. Credits: 3**

* MAT 5410 - Introduction to Research in Mathematics Education. Credits: 3

* MAT 5990 - Independent Study. Credits: 1 to 6

* (4 hours required)

6 Semester Hours Chosen From:

* MAT 5635 - Mathematical Topics for Secondary School Mathematics Teachers.

Credits: 2 or 3

* (repeatable)

* MAT 5810 - Topics in Mathematics for Elementary/Middle School Teachers.

Credits: 1 to 4

* (repeatable)

6 Semester Hours Chosen From:

* MAT 4810 - Topics in Elementary and Middle Level Mathematics. Credits: 1 to 4

* (repeatable)

* MAT 4920 - Algebra and Geometry for Middle Level Teachers. Credits: 3

Curriculum for the 30 Hour Option With a Thesis

Total. Credits: 30

Same as Non-Thesis option with the following changes:

No Independent Study required

MAT 5950 - Thesis. Credits: 3 to 6 required

5 Semester Hours Chosen From:

- * MAT 4810 - Topics in Elementary and Middle Level Mathematics. Credits: 1 to 4
- * (repeatable)
- * MAT 4920 - Algebra and Geometry for Middle Level Teachers. Credits: 3

Rationale:

There are two reasons for providing this new course an option in the program:

- The state of Illinois requires teachers who wish to be certified at the middle level to have completed a middle level mathematics methods course. Currently, students who graduate with an undergraduate degree that does not contain middle level mathematics methods have no graduate course options to meet the state requirement.
- Students who are elementary or middle level teachers with a mathematics background in a Masters program that emphasizes education or mathematics education currently take MAT 5400, a general elementary mathematics methods course. MAT 5550 would provide a more directed, focused and content rich experience for those students. The course would better be able to meet their specific educational needs.

Effective Date: Summer 2010

Date approved by the department or school: March 2, 2009

Date approved by the college curriculum committee: April 24, 2009

Date approved by COTE: CGS: