

Elementary Education Majors
MIDDLE GRADE MATHEMATICS ENDORSEMENT

A Middle Grade Mathematics Endorsement requires a total of 18 semester hours which include:

- a) 3 semester hours in methods of teaching mathematics in middle grades
- b) 15 semester hours to be selected from four of the following areas:
 - 1) Math content courses for elementary teachers
 - 2) Calculus
 - 3) Modern abstract algebra or number theory
 - 4) Geometry
 - 5) Computer Science (applied mathematics – programming languages)
 - 6) Probability and Statistics
 - 7) History of Mathematics

For part a)

MATH 310 – new for Fall 2005 (Teaching of Middle Level Mathematics) **MATH 310 is typically offered in the evenings during the fall term. See your advisor for enrollment.**

For part b)

Listed below are some of the courses which apply to each of the other seven areas. Select carefully, not all courses are offered every semester.

Prerequisites are noted in brackets:

- 1) **MATH 112a:** Mathematics for Elementary Teaching-Number Sense and Algebra [None]; **MATH 112b:** Mathematics for Elementary Teaching-Probability, Statistics and Geometry [None]
- 2) **MATH 150:** Calculus I [120 & 125]; **MATH 152:** Calculus II [150]; **MATH 250:** Calculus III [152]; **MATH 305:** Differential Equations [MATH 250 AND PHYS 211A]
- 3) **MATH 315:** Number Theory [125]; **MATH 320:** Intro to Algebraic Structures [223] (**MATH 315** will typically be offered every other spring, beginning **SP05**)
- 4) **MATH 435:** Foundations for Euclidean and Non-Euclidean Geometry [250, 321 and 320 or 350]; **MATH 437:** Differential Geometry [250]; **MATH 495b:** Geometry [consent of instructor] (**MATH 495b** will typically be offered every other summer, beginning **SU06**)
- 5) **CS 140:** Intro to Computing I [MATH 120] or **CS 150:** Intro to Computing II [CS 140]
- 6) **STAT 244:** Statistics [MATH 120] or higher; **MATH 495d:** Probability and Statistics [consent of instructor] (**MATH 495d** will typically be offered every other summer, beginning **SU05**)
- 7) **MATH 300:** History of Mathematics [125] or **MATH 400:** Development of Modern Mathematics [152 & 223] (**MATH 300** will typically be offered every other spring, beginning **SP06**)

CHECK THE SIUE CATALOG FOR PREREQUISITES FOR ALL COURSES.

Math Endorsement Worksheet:

A Middle Grade Mathematics Endorsement requires 18 semester hours which include the following:

a) Math 310 Teaching Mathematics in Middle Grades, which typically offered in the Evening's during the fall term
_____ Semester Grade _____

b) 15 semester hours to be selected from **(4)** four of the following areas:

1. Math content courses for elementary teacher **Math 112a and/or Math 112b**
_____ Semester Grade _____
_____ Semester Grade _____

2. Calculus- **Math 150**, 152, Math 250 Math 305 (check Prerequisites)
_____ Semester Grade _____

3. Modern abstract algebra or number theory **Math 315**, Math 320, (Prerequisites)
_____ Semester Grade _____

4. Geometry-**Math 435**, Math 437, Math 495b (check Prerequisites)
_____ Semester Grade _____

5. Computer Science-**CS 140**, CS 150 (check Prerequisites)
_____ Semester Grade _____

6. Probability and Statistics- **Stats 244**, Math 495d (check Prerequisites)
_____ Semester Grade _____

7. History of Mathematics- **Math 300**, Math 400 (check Prerequisites)
_____ Semester Grade _____

Current Math courses already completed:

Math endorsement areas completed:

