

MATHEMATICS MAJOR FOR ELEMENTARY TEACHING

Updated April 2011

The major in Mathematics for Elementary teaching consists of a minimum of 34 credits. Candidates for certification in this major must pass the Michigan Test for Teacher Certification (MTTC) in Elementary Mathematics (Test #89). You must demonstrate your knowledge in following categories:

Subarea	Approximate % of Questions on Test
1. Mathematical Processes & Number Concepts	28%
2. Patterns, Algebraic Relations & Functions	28%
3. Measurement and Geometry	22%
4. Data Analysis, Statistics, Probability, Discrete Math	22%

You may access a study guide at the MTTC testing site; the courses below have been selected and designed so that you will be well prepared for the test.

The following chart is intended to provide you a guide for scheduling your semesters and for keeping track of your grade point average.

100 LEVEL COURSES (8 credits)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
MATH 126 OR MATH 131	Calculus with Review II Calculus I	4 4		
Prerequisite for MATH 126: MATH 125 with C- or better. (Math 125 counts as 4 credits toward graduation, but not toward the program.)				
MATH 132	Calculus II	4		
Prerequisite for MATH 132: MATH 126 or MATH 131 with C- or better, or AP or CLEP credit for Math 131.				

200 LEVEL COURSES (13 credits)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
MATH 205	Math for the Elementary Teacher I	4		
MATH 206	Math for the Elementary Teacher II	2		
MATH 231	Multivariable Mathematics I	4		
Prerequisite for MATH 231: MATH 132 with C- or better.				
MATH 280	Bridge to Higher Mathematics	3		
Prerequisite for MATH 280: Math 132				

300 LEVEL COURSES (9 credits)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
MATH 311 & MATH 312	Statistical Methods Applied Statistical Models	2 2		
Prerequisite for MATH 311/312: Math 132 or High School Statistics				
MATH 321	History of Mathematics	2		
Prerequisite for MATH 321: Math 132				
MATH 351	Geometry	3		
Prerequisite for MATH 351: MATH 280				

MATHEMATICS ELECTIVES (4 additional credits)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
Complete a minimum of 4 additional hours selected from other offerings in the Mathematics Department, or GEMS courses centered on mathematical topics.				
GEMS 100	Mathematics in Public Discourse	2		
MATH 207	K-8 Mathematics Software Applications	2		
MATH 208	Problem Solving for Elementary Teachers	2		
GEMS 105	Nature of Mathematics	2		