

MATHEMATICS MINOR FOR ELEMENTARY TEACHING

Updated December 2015

The **Mathematics minor** (State Code: EX) for Elementary certification consists of a minimum of 22 credits.

Teacher candidates for certification in Math Education at the Elementary level must pass the Michigan Test for Teacher Certification (MTTC) in Elementary Mathematics (Test #089). MTTC content exams should not be taken until 90% of course work in the subject area has been completed. Study guides are available at the MTTC website: http://www.mttc.nesinc.com/PDFs/MI_field089_SG.pdf.

The courses below meet State standards and have been selected so that teacher candidates will be well prepared for the test. Knowledge must be demonstrated in the following categories in order to successfully pass the MTTC subject area exam:

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| 1. Mathematical Processes & Number Concepts | 28% |
| 2. Patterns, Algebraic Relationships, & Functions | 28% |
| 3. Measurement and Geometry | 22% |
| 4. Data Analysis, Statistics, Probability, and Discrete Mathematics | 22% |

PLEASE REFER TO YOUR DEGREE EVALUATION IN KNOWHOPE PLUS IN ADDITION TO THIS DOCUMENT TO DETERMINE FULFILLMENT OF COURSE REQUIREMENTS

100 LEVEL COURSES (8 credits) Choose at least 2 courses.

SUBJECT/COURSE	TITLE	CREDIT HOURS	FULFILLS PORTION OF GENERAL EDUCATION
<i>Note: A student may not receive credit for <u>both</u> MATH 123 and MATH 125 or MATH 126 and MATH 131</i>			
MATH 123	A Study of Functions	4	MA2
MATH 125	Calculus with Review I	4	MA2
MATH 126	Calculus with Review II	4	MA2
<i>Prerequisite for MATH 126: MATH 125 with C- or better.</i>			
MATH 131	Calculus I	4	MA2
MATH 132	Calculus II	4	MA2
<i>Prerequisite for MATH 132: MATH 126 or MATH 131 with C- or better, or AP or CLEP credit for Math 131.</i>			

200 LEVEL COURSES (10 credits)

SUBJECT/COURSE	TITLE	CREDIT HOURS	FULFILLS PORTION OF GENERAL EDUCATION
MATH 205	Math for the Elementary Teacher I	4	MA2
<i>Prerequisite for MATH 205: EDUC 220/221</i>			
MATH 206	Math for the Elementary Teacher II	2	MA2
MATH 210	Introductory Statistics	4	MA2

MATHEMATICS ELECTIVES (4 additional credits)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	FULFILLS PORTION OF GENERAL EDUCATION
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	MA1
MATH 207	K-8 Mathematics Software Applications	2	MA2
MATH 208	Problem Solving for Elementary Teachers	2	MA2
GEMS 105	Nature of Mathematics	2	MA1