

# MATHEMATICS-BA OR BS-ELEMENTARY EDUCATION (STARTING IN MTH 110)

WITH EDUCATION MAJOR & ELEMENTARY CERTIFICATION MINOR

THIS IS A **GENERAL** CURRICULUM GUIDE AND IS NOT APPLICABLE TO EVERY STUDENT. IT IS IMPORTANT TO MEET WITH YOUR ADVISORS.

## A 2.7 cumulative GPA in the Mathematics major is required for admission to the College of Education

Year One			
<sup>1</sup> MTH 110 Algebra Prerequisite: MTH 110 or proficiency through math placement Gen Ed or WRT 098 Gen Ed Gen Ed EDF 100 Introduction to Education (optional)	4 3/4 3 3 2	<sup>1</sup> MTH 122 College Algebra Prerequisite: MTH 110 or proficiency through math placement <sup>1</sup> MTH 123 Trigonometry Prerequisite: MTH 122 (may be taken concurrently) or proficiency through math placement PSY 101 Introductory Psychology WRT 150 Strategies in Writing Gen Ed	3 3 3 4 3
<i>Total</i>	15/16	<i>Total</i>	16
Year Two			
<sup>1</sup> MTH 201 Calculus I Prerequisites: MTH 122 and 123 or proficiency through math placement <sup>2</sup> MTH 221 Mathematics for Elementary Teachers I Prerequisites: MTH 110 or MTH 122 and sophomore standing PSY 301 Child Development Prerequisite: PSY 101 EDF 315 Diverse Perspectives for Education PED 266 Move, Dance, Learn! PE & Dance for Elem. Ed.	4 4 3 3 2	MTH 202 Calculus II Prerequisite: MTH 201 <sup>2</sup> MTH 222 Mathematics for Elementary Teachers II Prerequisites: MTH 110 or MTH 122 and sophomore standing; MTH 221 strongly suggested SCI 225 Integrated Life Sciences for K-8 Prerequisite: MTH 221 or 222 or 223 (may be taken concurrently) EDI 337 Introduction to Learning and Assessment	4 3 4 3
<i>Total</i>	16*	<i>Total</i>	14
Year Three			
<sup>3</sup> MTH 210 SWS Communicating in Mathematics Prerequisites: WRT 150 and MTH 201 MTH 227 Linear Algebra I Prerequisites: MTH 202 MTH 322 Geometry for Elementary Teachers Prerequisites: MTH 223 or MTH 221 and MTH 222 SCI 226 Integrated Physical Sciences for K-8 Prerequisite: MTH 221 or 222 or 223 (may be taken concurrently) MAT 300 Music, Art, and Theater for Elementary Education	4 3 3 3 3	MTH 345 Discrete Mathematics Prerequisite: MTH 210 MTH 323 Probability and Statistics for Elementary Teachers Prerequisite: MTH 322 ENG 302 Intro.to Lang. Arts: Teaching Writing/Children's Lit. Prerequisite: EDI 337 or PED 265 or PED 266 ENG 308 Teaching Reading: The Necessary Skills Prerequisites: WRT 150 and Junior standing PED 265 Teaching Health in Elementary Schools	3 3 3 4 2
<i>Total</i>	16*	<i>Total</i>	15
Year Four			
MTH 310 Modern Algebra Prerequisites: MTH 210, and either MTH 225 or MTH 227 MTH 324 Algebra for Elementary Teachers Prerequisites: MTH 210 and (MTH 223 or (MTH 221 and MTH 222)) SST 309 Social Studies for Elementary Teachers Prerequisites: Junior standing or permission of instructor MTH 341 Euclidean Geometry Prerequisites: MTH 210 and either MTH 227 or MTH 322 Issue/Theme	3 3 3 3 3	<sup>5</sup> MTH 495 The Nature of Modern Mathematics (Capstone) Prerequisites: MTH 210, MTH 227, MTH 310, and at least three other 300-400 level mathematics courses STA 312 Probability and Statistics Prerequisites: MTH 201 <sup>4</sup> EDS 378 Universal Design for Learning: Elementary Issue/Theme Gen Ed	3 3 3 3 3
<i>Total</i>	15	<i>Total</i>	15
Teacher Preparation Professional Program			
<b>Teacher Assisting</b> EDI 330 Teacher Assisting: Elementary EDF 310 Organizing and Managing Classroom Environments EDR 320 Reading: Assessment and Instruction EDT 370 Technology in Education Must be taken with or after EDI 330 but before EDI 430	5 3 3 3	<b>Student Teaching</b> EDI 430 Student Teaching: Elementary EDF 485 The Context of Educational Issues Must be taken with or after EDI 430	10 3
<i>Total</i>	14	<i>Total</i>	13

See reverse for footnotes

\* The block tuition rate is 12-15 credits. You will pay additional tuition for any credits over 15.

EDF 100 is an exploratory elective for students uncertain about pursuing teacher certification. It can be taken in either the fall or winter semester

It is imperative to meet with your faculty advisor and an advisor in the CLAS Academic Advising Center regularly.

The CLAS Academic Advising Center is located in C-1-140 MAK, 616-331-8585.

Online at: <http://www.gvsu.edu/clasadvising>

<sup>1</sup> Students must fulfill MTH 110, MTH 122, and MTH 123 or waive the requirement through math placement. These courses do not count towards the completion of the Mathematics major.

<sup>2</sup> Mathematics-Elementary Education students have the option of taking MTH 223 (5 credits) in place of MTH 221 and MTH 222.

<sup>3</sup> Students must complete a total of two courses with an SWS attribute.

<sup>4</sup> Starting Fall 2013, EDS 378 may be taken prior to the Teacher Assisting Semester. Please consult with your College of Education Advisor to determine an appropriate time to take this course.

<sup>5</sup> Students may also complete MTH 496 – Senior Thesis – as the capstone requirement. Consult with your mathematics faculty advisor to discuss these options.

Mathematics students can pursue a Bachelor of Arts or Bachelor of Science degree. Students who wish to obtain a BA must fulfill 3<sup>rd</sup> semester proficiency in a foreign language (201 level). The BS requirements are incorporated into the major requirements and include MTH 201, MTH 202, and STA 312.

#### **Declaring the Mathematics and Education Major with Elementary Certification Minor:**

1. Log into myBanner from the GVSU homepage
2. Once logged in select “Student”, “Student Records”, and then, “Change Major”
3. Click on the “Change Major 1/Program” box
4. Click on the down arrow in the box next to “New Major 1/Program,” from here scroll down and choose “Mathematics Teaching-BA Elementary Education” **OR** “Mathematics Teaching-BS Elementary Education” depending on your degree
5. Click “Submit” and then “Change to New Program”
6. Return to the Change Major Screen and select “Add or Change Second Major”
7. Click on the down arrow in the box next to “New Major 2,” from here, scroll down and choose “Education” from the list and then click “Submit” and “Add Second Major”
8. Return to Change Major Screen and select “Add a Minor” or “Add or Delete Minor”, scroll to and select “Elementary Certification” and then click “Submit” and “Add Minor”

#### **General Education Overlap**

<b>General Education Categories fulfilled by the Mathematics Major for Elementary Education:</b>	
Life Sciences with Lab: SCI 225	Physical Sciences with Lab: SCI 226
Social and Behavioral Sciences: PSY 101	Mathematical Sciences: MTH 201
U.S. Diversity: EDF 315	

#### **Elementary Certification Minor (26-28 credits)**

**A 2.7 cumulative GPA in the Elementary Certification minor is required for admission to the College of Education**

##### **ENG 308 Teaching Reading: The Necessary Skills (4)**

Prerequisites: WRT 150 and Junior Status

##### **SCI 225 Integrated Life Science for K-8 Teachers (4)**

Prerequisite: MTH 221 or MTH 222 or MTH 223 (may be taken concurrently)

##### **SCI 226 Integrated Physical Science for K-8 Teachers (3)**

Prerequisites: MTH 221 or MTH 222 or MTH 223 (may be taken concurrently)

##### **PED 265 Teaching Health in Elementary Schools (2)**

##### **PED 266 Move-Dance-Learn! PE & Dance for Elementary Ed (2)**

##### **SST 309 Social Studies for Elementary Teachers (3)**

Prerequisite: Junior standing or permission of instructor

##### **MAT 300 Music, Art & Theatre for Elementary Education (3)**

##### **ENG 302 Introduction to Language Arts: Teaching Writing & Children's Literature**

Prerequisite: EDI 337 or PED 265 or PED 266

##### **MTH 221 Mathematics for Elementary Teachers I (4)**

Prerequisites: MTH 110 or MTH 122 and at least sophomore standing

##### **MTH 222 Mathematics for Elementary Teachers II (3)**

Prerequisites: MTH 110 or MTH 122 and at least sophomore standing; MTH 221 strongly recommended

***May be completed in place of MTH 221 and MTH 222***

***— MTH 223 Mathematics for Elementary Teachers III (5)***

*Prerequisite: MTH 201; must be math major*

#### **Second Major in Education**

##### **Education Major Prerequisites (9 credits)**

**A 2.7 cumulative GPA in the Education Major Prerequisites is required with no grade lower than a C**

##### **— PSY 301 Child Development (3)**

Prerequisite: PSY 101

##### **— EDF 315 Diverse Perspectives on Education (3)**

##### **— EDI 337 Introduction to Learning and Assessment (3)**

##### **Teacher Assisting (17 credits)**

##### **— EDI 330 Teacher Assisting-Elementary (5)**

##### **— EDF 310 Organizing and Managing Classroom Environments (3)**

##### **— EDR 320 Reading: Assessment and Instruction (3)**

##### **— EDT 370 Technology in Education (3)**

Must be taken with or after ED 330 but before ED 430

##### **— EDS 378 Universal Design for Learning: Elementary (3)**

**\*\*** Starting Fall 2013, EDS 378 may be taken prior to the Teacher Assisting Semester. Please consult with your College of Education Advisor to determine an appropriate time to take this course.

##### **Student Teaching (13 credits)**

##### **— EDI 430 Student Teaching, Elementary (10)**

EDI 430 seminar is also required

##### **— EDF 485 The Context of Educational Issues (3)**

Must be taken with or after EDI 430