# Mathematics (2011-2012)

## Elementary Certification

This is a **general curriculum** guide and is not applicable to every student and is not a replacement for meeting with your advisor.

-Student needs MTH 110 prerequisite-

Fall Semester – Year One	credits	Winter Semester- Year One	credits
MTH 110: Algebra	4	MTH 122: College Algebra (Gen Ed)	3
WRT 150: Strategies in Writing	4	MTH 123: Trigonometry	3
Gen Ed.	3	PSY 101: Introductory Psychology (Gen Ed)	3
Gen Ed.	3	Gen Ed.	3
		Gen Ed.	3
Total	14	Total	15
Fall Semester – Year Two	credits	Winter Semester – Year Two	credits
MTH 201: Calculus I	5	MTH 202: Calculus II	4
MTH 221: Mathematics for Elementary Teachers I*	4	MTH 222: Mathematics for Elementary Teachers II*	3
PSY 301: Child Development*	3	SCI 225: Integrated Life Sciences for K-8 (Gen Ed)*	4
ED 315: Diverse Perspectives on Education (Gen Ed)*	3	PED 265: Teaching Health in Elementary Schools*	2
		PED 266: Move, Dance, Learn!*	2
Total	15	Total	15
Fall Semester – Year Three	credits	Winter Semester – Year Three	credits
MTH 210: Communicating in Mathematics (SWS)	3	MTH 345: Discrete Mathematics	3
MTH 227: Linear Algebra I	3	MTH 323: Probability & Statistics for Elementary Teachers	3
MTH 322: Geometry for Elementary Teachers	3	ENG 302: Introduction to Language Arts*	3
SCI 226: Integrated Physical Sciences for K-8(GenEd)*	3	ENG 308: Teaching Reading: The Necessary Skills*	4
ED 337: Introduction to Learning and Assessment*	3	Gen Ed. or Theme	3
Total	15	Total	13
Fall Semester – Year Four	credits	Winter Semester – Year Four	credits
MTH 310: Modern Algebra I	3	ED 310: Organizing & Managing Classroom Environments	3
MTH 324: Algebra for Elementary Teachers	3	ED 320: Reading: Assessment and Instruction	3
MAT 300: Music, Art, & Theater for Elementary Education*	3	ED 330: Teacher Assisting: Elementary	5
SST 309: Social Studies for Elementary Teachers*	3	ED 370: Technology in Education**	3
MTH 341: Euclidean Geometry	3		
Total	15	Total	14
Fall Semester – Year Five	credits	Winter Semester – Year Five	credits
STA 312: Probability and Statistics	3	ED 430: Student Teaching, Elementary	10
MTH 495: Nature of Modern Mathematics <sup>2</sup>	3	ED 485: The Context of Educational Issues	3
ED 378: Universal Design for Learning: Elementary**	3		
Gen Ed. or Theme	3		
Gen Ed.	3		
Total	15	Total	13

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

#### Notes:

#### Special Notes:

- A. This is a **general** curriculum guide and will not work for everyone, especially those students who have AP or CLEP credit.
- B. Courses that have (*Gen Ed*) written after them are classes that are required in the major or minor and also fulfill a section of the general education program.
- C. Complete a total of two courses with an SWS attribute. The two SWS courses may not be taken from the same department or school. One must be from outside the student's major unit.
- D. You must have 120 credits to graduate from Grand Valley State University. The last 30 credits must be earned in GVSU courses.

<sup>\*</sup> These courses are Education Major prerequisites and include the elementary certification minor. These courses must be completed <u>before</u> applying to the College of Education. Student must have a minimum GPA of 2.7 in these classes, and their major. **Consult with your advisor!** 

<sup>\*\*</sup> ED 370 and/or ED 378 may be taken during or after Assisting but must be taken before Student Teaching.

<sup>&</sup>lt;sup>1</sup> Capstone requirement.