COLLEGE OF LIBERAL ARTS AND SCIENCES (CLAS) ACADEMIC ADVISING CENTER 2024-2025

MATHEMATICS-EDUCATION 5-9 (STARTING IN MTH 110)

BACHELOR OF ARTS OR BACHELOR OF SCIENCE

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

A 2.7 cumulative GPA in the Mathematics major is required for approval to complete the EDI 331/332 course sequence.

Year One			
[1]**MTH 110** Prereq: MTH 109 or math placement	4	**PSY 101** Introductory Psychology GE Social/Behavioral	4
EDF 115 Intro to Education: An Exploration of Schooling in America. GE Social/Behavioral	3	Gen Ed GE Physical/Life Science with Lab	4
[2]WRT 150 Gen Ed	4	Gen Ed GE Historical Analysis	3
Optional elective	3	Optional elective	3
Total	*14*	*Total*	*15*
Year Two			
[1]**MTH 201** Calculus I GE Math Prereq: MTH 122 & 123, or MTH 124, or math placement	3	**MTH 202** Calculus II Prerequisite: MTH 201	4
MTH 204 Linear Algebra I Prereq: MTH 122 & 123, or MTH 124, or math placement	3	[3]**MTH 210 SWS** Communicating in Mathematics Prerequisites: Gen Ed Foundations – Writing and MTH 201	3
PSY 331 Adolescent Development Prerequisite: PSY 101	3	**EDR 225** Intro to Teaching Multilingual Learners GE Cultures-GP	3
Gen Ed GE Life Science	3	Optional elective	3
	3		(3)
Total	*15*	*Total*	*12-15*
Year Three			
[4]**Math theme elective**	3	**EDF 315** Diverse Perspectives on Education GE US Diversity	3
[3]**EDF 260 SWS** Educational Research & Assessment: Foundations of Practice SWS	3	Gen Ed GE Arts	3
Gen Ed GE Philosophy and Literature	3	**MTH 323** Prob. & Stats for Elementary Teachers Prerequisite: MTH 226 or (MTH 210 and EDF 115)	3
MTH 322 Geometry for Elementary Teachers Prerequisites: MTH 226 or (MTH 210 and EDF 115)	3	**MTH 315** Discrete Mathematics Prerequisite: MTH 210	3
	(3)		
Total	*12*	*Total*	*12*
Year Four			
MTH 324 Algebraic Reasoning in Grades 3-9 Prerequisites: MTH 326 or (MTH 210 and one of MTH 229, 322, or 323)	3	**MTH 329** Teaching Middle Grades Math Prerequisites: C or better in MTH 202, MTH 210, and MTH 324	3
[4]**Math theme elective**	3	**MTH 331** Euclidean Geometry Prerequisites: MTH 210 and either MTH 204 or MTH 322	3
[4]**Math theme elective**	3	[5]**MTH 495** The Nature of Modern Mathematics (Capstone) Prerequisites: MTH 204, 210, and at least four other 300-400 level	3
Gen Ed GE Philosophy and Literature	3	***OR*** MTH 496 Senior Thesis (Capstone) Prerequisites: 27 cr. in major, major GPA 3.0+, & permission of instructor	3
		Optional elective	
Total	*12*	*Total*	*12*
Year Five - Teacher Preparation Professional Program			
Apprenticeship		**Internship**	
EDI 331 Secondary Teacher Apprenticeship (5-9)	4	EDI 431 Secondary Teacher Internship (5-9)	7
EDI 332 Secondary Apprenticeship Content Area Sem. (5-9) Corequisite: EDI 331	2	EDI 432 Secondary Internship Content Area Seminar (5-9) Corequisite: EDI 431	2
[3]EDR 321 **SWS** Content Area Literacy Corequisite: EDI 331	3	EDF 495 Reflective Inquiry and Practice Corequisite: EDI 430 or 431	3
[6] EDS 379 Universal Design for Learning GE Issues Prerequisite: Junior standing	3	Optional elective	(3)
EDT 477 Secondary Teaching with Technology GE Issues	3		
Total	*15*	*Total*	*12-15*

It is imperative to meet with your CLAS and CECI faculty advisors 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

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

[1] **Students must fulfill MTH 110, MTH 122, and MTH 123 or MTH 124 or waive the requirement through math placement. These courses do not count towards the completion of the Mathematics major**

[2] Students who self-place into WRT 120 should take this course in the fall and then WRT 130 in the winter of their first year. Students who self-place into WRT 150 can take in either semester during their first year. A grade of C or better is required in WRT 130 or 150 in order to satisfy the WRT requirement at GVSU.

[3] Students must complete a total of two courses with an SWS attribute. One SWS should be outside of the major.

[4] Mathematics Education-5-9 students must pick a math elective theme containing three courses. See below for options.

[5] Students may also complete MTH 496 – Senior Thesis - as the capstone course. 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 3rd semester proficiency in a foreign language (201 level). The BS requirements are incorporated into the major requirements and include MTH 201, MTH 204, and MTH 210. To earn a degree from GVSU, all students must complete the following: 120 total credits, all major/minor requirements, all general education requirements, at least 58 credits from a 4-year institution, and the last 30 credits of the degree completed through GVSU.

Declaring the Mathematics and Secondary Education Major

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 Education 5-9" **OR** "Mathematics Teaching-BS Education 5-9" depending on your degree
5. Click "Submit." The system will automatically declare your 2nd major in "Secondary Education"

General Education Categories fulfilled by the Mathematics - Education Majors for 5-9:	
Social and Behavioral Sciences: **PSY 101, EDF 115**	Issues: **EDS 379, EDT 477**
Mathematical Sciences: **MTH 201**	Option of **HSC 201** for Historical Analysis
Cultures-Global Perspectives: **EDR 225**	Cultures-U.S. Diversity: **EDF 315**

Second Major in Secondary Education (42 credits)	
A 2.7 cumulative GPA in the Secondary Education Major Courses is required	
— **EDF 115** Introduction to Education (3) — **EDR 225** Intro to Teaching Multilingual Learners (3) — **EDF 315** Diverse Perspectives on Education (3) — **EDF 260** Educational Research and Assessment (3)*	— **PSY 331** Adolescent Development (3) Prerequisite: PSY 101 ***Must earn a B- or better**
Apprenticeship (15 credits)	**Internship (12 credits)**
— **EDI 331** Secondary Teacher Apprenticeship (4)* — **EDI 332** Secondary Teacher Apprenticeship Content Area Sem. (2) — **EDR 321** Content Area Literacy (3)* — **EDT 477** Teaching with Technology (3)* — **EDS 379** Universal Design for Learning: Secondary (3)*	— **EDI 431** Secondary Teacher Internship (7)* — **EDI 432** Secondary Internship Content Area Seminar (2) — **EDF 495** Reflective Inquiry and Practice (3)* ***Must earn a B- or better**

Application requirements for Teacher Apprenticeship and Teaching Internship experiences can be found at https://www.gvsu.edu/education/undergraduate/apply-for-field-placement-4.htm If you have any questions about the clinical experience applications, please contact the Office of Certification and Accreditation at (616) 331-6650 or email oca@gvsu.edu

Math Elective Themes (Choose one of the following)		
Applied Math	**Survey of Advanced Math**	**Math Education**
Take both of these: **MTH 205** Linear Algebra II **MTH 360** Operations Research Then choose *one* course from this list: **MTH 229** Teaching High School Mathematics **MTH 304** Analysis of Differential Equations* **MTH 350** Modern Algebra I **MTH 402** Complex Analysis* **MTH 406** Linear Algebra III **MTH 408** Real Analysis I* **MTH 431** Non-Euclidean Geometry **MTH 450** Modern Algebra I* **MTH 495** Nature of Modern Math^ **MTH 496** Senior Thesis^	Take this: **MTH 203** Calculus III Then take a total of *two* more classes: Choose *at most one* course from this list: **MTH 205** Linear Algebra II **MTH 304** Analysis of Differential Equations Choose *one or two* courses from this list: **MTH 350** Modern Algebra I **MTH 360** Operations Research **MTH 402** Complex Analysis* **MTH 406** Linear Algebra III* **MTH 408** Real Analysis I **MTH 431** Non-Euclidean Geometry **MTH 450** Modern Algebra I* **MTH 495** Nature of Modern Math^ **MTH 496** Senior Thesis^	Take this: **MTH 226** Math for PK-6: Whole Numbers and Operations Then choose *one* course from this list: **MTH 229** Teaching High School Mathematics **MTH 326** Math for PK-6: Fractions, Decimals, and Proportional Reasoning And choose *one course* from this list: **MTH 350** Modern Algebra I **MTH 360** Operations Research **MTH 402** Complex Analysis* **MTH 406** Linear Algebra III* **MTH 408** Real Analysis I* **MTH 431** Non-Euclidean Geometry **MTH 450** Modern Algebra I* **MTH 495** Nature of Modern Math^ **MTH 496** Senior Thesis^
* This course has additional prerequisites		^ May only count if not taken as capstone
May be used with Unit Head Permission: MTH 380, 386, 387, 399, and 480		

Edited 11/20/2024