COLLEGE OF LIBERAL ARTS AND SCIENCES (CLAS) ACADEMIC ADVISING CENTER 2013-2014

MATHEMATICS-BA OR BS-SECONDARY EDUCATION (STARTING MTH 201)

EDUCATION MAJOR & TEACHABLE MINOR REQUIRED

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 admission to the College of Education

Year One			
[1]MTH 201 Calculus I Prerequisites: MTH 122 and MTH 123 or proficiency through math placement	4	MTH 202 Calculus II Prerequisite: MTH 201	4
WRT 150 Strategies in Writing	4	[2]MTH 210 SWS Communicating in Mathematics Prerequisites: WRT 150 and MTH 201	4
Gen Ed	3	PSY 101 Introductory Psychology	3
Minor	3	Minor	3
		EDF 100 Introduction to Education **(optional – see below)**	2
Total	*14*	*Total*	*16*
Year Two			
MTH 203 Calculus III Prerequisite: MTH 202	4	MTH 345 Discrete Mathematics Prerequisite: MTH 210	3
MTH 227 Linear Algebra I Prerequisite: MTH 202	3	STA 312 Probability and Statistics Prerequisites: MTH 201	3
PSY 301 Child Development Prerequisite: PSY 101	3	EDI 337 Introduction to Learning and Assessment	3
		Gen Ed	3
EDF 315 Diverse Perspectives for Education	3	Minor	3
Minor	3		
Total	*16*	*Total*	*15*
Year Three			
MTH 310 Modern Algebra Prerequisites: MTH 210, and either MTH 225 or MTH 227	3	MTH 341 Euclidean Geometry Prerequisites: MTH 210 and either MTH 227 or MTH 322	3
MTH 229 Mathematical Activities for Secondary Teachers Prerequisites: MTH 201 or equivalent and sophomore standing	3	[3]MTH Cognate Course	3
		Gen Ed	3
Gen Ed	3	Gen Ed	3
Gen Ed	3	Minor	3
Minor	3		
Total	*15*	*Total*	*15*
Year Four			
MTH 329 Teaching Middle Grades Math Prerequisites: C or better in MTH 202, MTH 210, and one of the following MTH 229, 322, 323, or 324. Junior standing	3	[6]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	3
[4]MTH Elective	3	[5]EDS 379 Universal Design for Learning: Secondary	3
Gen Ed	3	Gen Ed	3
Issue/Theme	3	Minor	3
Minor	3	Minor	3
Total	*15*	*Total*	*15*
Teacher Preparation Professional Program			
Teacher Assisting		**Student Teaching**	
EDI 331 Methods and Strategies of Secondary Teaching	5	EDI 431 Student Teaching: Secondary	8
EDF 310 Organizing and Managing Classroom Environments	3	EDI 432 Student Teaching: Secondary Content	2
EDR 321 Content Area Literacy	3	EDF 485 The Context of Educational Issues	3
EDT 370 Technology in Education Must be taken with or after EDI 331 but before EDI 431	3	Must be taken with or after EDI 431	
Total	*14*	*Total*	*13*

* 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.

[1] **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.**

[2] Students must complete a total of two courses with an SWS attribute

[3] Mathematics-Secondary students must complete one Math Cognate Course. Options are listed on the back of this page.

[4] Mathematics-Secondary students must complete one elective course in Math. These electives are listed on the back of this page.

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

[5] Starting Fall 2013, EDS 379 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.
[6]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 3rd 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 Teachable 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 Secondary Education" **OR** "Mathematics Teaching-BS Secondary 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 chosen minor and then click "Submit" and "Add Minor"

Teachable Majors and Teachable Minors for Secondary Education

Teachable Majors		Teachable Minors	
Biology	Mathematics	Biology-Teaching	History-Teaching
Chemistry	Music (K-12)	Chemistry-Teaching	Mathematics-Secondary Education
Earth/Space Science	Physical Education (K-12)	Computer Science-Teaching	Physical Education-Teaching
English	Physics	Earth/Space Science-Teaching	Physics-Teaching
French	Social Studies	Economics-Teaching	Political Science-Teaching
German	Spanish	English-Teaching	Psychology-Teaching
History	Visual Arts (K-12)	French-Teaching	School Health Education
Latin		Geography-Teaching	Spanish-Teaching
		German-Teaching	

General Education Overlap

General Education Categories fulfilled by the Mathematics Major for Secondary Education:	
Social and Behavioral Sciences: PSY 101	U.S. Diversity: EDF 315
Mathematical Sciences: MTH 201	

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

— **EDF 315 Diverse Perspectives on Education** (3)	— **PSY 301 Child Development** (3)
— **EDI 337 Introduction to Learning and Assessment** (3)	Prerequisite: PSY 101
Teacher Assisting (14 - 17 credits)	**Student Teaching (13 credits)**
— **EDI 331 Teacher Assisting-Secondary** (5)	— **EDI 431 Student Teaching, Secondary** (8)
— **EDF 310 Organizing and Managing Classroom Environments** (3)	— **EDI 432 Student Teaching, Secondary Content** (2)
— **EDR 321Content Area Literacy** (3)	— **EDF 485 The Context of Educational Issues** (3)
— **EDT 370 Technology in Education** (3)	Must be taken with or after EDI 431
Must be taken with or after EDI 331 but before EDI 431	
— **EDS 379 Universal Design for Learning: Secondary** (3)**	
** Starting Fall 2013, EDS 379 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.	

Mathematics Cognate Courses (Choose one of the following)		
BIO 355 Human Genetics	ECO 342 Strategic Games	PHI 203 Intermediate Logic
BIO 375 Genetics	ECO 480 Econometrics and Forecasting	PHY 230 Principles of Physics I
CHM 351 Introduction to Physical Chemistry	EGR 304 Innovation	PSY 300 Research Methods in Psychology
CIS 160 Programming with Visual Basic	GEO 440 Geohydrology	STA 314 Statistical Quality Methods
CIS 162 Computer Science I	GEO 470 Geophysics	STA 345 Statistics in Sports
EGR/CIS 261 Structured Programming in C	HSC 201 The Scientific Revolution	STA 412 Mathematical Statistics I

Math Elective Courses (Choose one of the following)		
MTH 300 Applied Analysis I	MTH 401 Mathematics for the Physical Sciences	MTH 410 Modern Algebra II
MTH 304 Analysis of Differential Equations	MTH 402 Complex Variables	MTH 431 Non-Euclidean Geometry
MTH 327 Linear Algebra II	MTH 405 Numerical Analysis	MTH 441 Topology
MTH 360 Operations Research	MTH 408 Advanced Calculus I	MTH 465 Automata and Theory of Computation
	MTH 409 Advanced Calculus II	MTH 496 Senior Thesis