CURRICULUM GUIDE
Mathematics, B.S. (Mathematics Teaching Concentration)
2023-2024
Website: www.math.eku.edu
Email Contact: shane.redmond@eku.edu

Department of Mathematics and Statistics
521 Lancaster Ave.
313 Wallace Bldg.
Richmond, KY 40475
859-622-5942

*The schedule below is an **EXAMPLE** of how you can arrange your class schedule. You are strongly advised to meet with the Chair of the Department Mathematics & Statistics or with your academic advisor prior to registration for appropriate placement in MAT courses.*

	Fall Semester		Spring Semester	
Freshman Year	SCO 100M	1	CED 100	0
	✪ MAT 234	4	EDF 203	3
	G STA 270 (*fulfills Gen. Ed. 2*)	4	G SED 104 (*fulfills Gen. Ed. 6*)	3
	✪ Gen. Ed. 1A (*ENG 101*)	3	MAT 239	3
	Gen. Ed. 5B (*Soc. & Behav. Sci.*)	3	MAT 244	4
			✪ Gen. Ed. 1B (*ENG 102*)	3
	TOTAL	**15**	**TOTAL**	**16**
Sophomore Year	MAT 254	4	CED 200	0
	MAT 301	3	EDF 204	2
	✪ Gen. Ed. 1C (*Oral Comm.*)	3	EDF 219	3
	Gen. Ed. 4 (*Nat. Sci.*)	3	MAT 303 (*spring only*)	3
	Gen. Ed. 6 (*Diversity*)	3	CSC 160, 174, 177 *or* 190	3
			MAT 203 (*spring only*)	3
	❖ 30 hrs complete + apply to professional education program		Gen Ed. 4 (*Nat. Sci.*)	3
	TOTAL	**16**	**TOTAL**	**17**
Junior Year	CED 300	0.5	EDF 413	3
	EDC 300	3	EMS 490	3
	EMS 300	3	CED 400	0.5
	MAT 308 (*fall only*)	3	MAT 315 (*spring only*)	3
	Gen. Ed. 5A (*History*)	3	MAT 305 (*spring only*)	3
	‡ Concentration Elective	3	‡ Concentration Elective	3
	TOTAL	**15.5**	**TOTAL**	**15.5**
Senior Year	ESE/MAT 550 (*fall only*)	3	CED 499	9
	CED 450 (*fall only*)	1	EMS 474	3
	Gen Ed. 3A (*Arts*)	3		
	Gen. Ed. 3B (*Humanities*)	3		
	APPLY FOR STUDENT TEACHING			
	TOTAL	**13**	**TOTAL**	**12**
			TOTAL HOURS TO DEGREE COMPLETION	**120**

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100M	**Student Success Seminar in Mathematics and Statistics** (1)
CORE COURSE REQUIREMENTS (24)	
MAT 234	**Calculus I** (4)
MAT 239	**Linear Algebra and Matrices** (3)
MAT 244	**Calculus II** (4)
MAT 254	**Calculus III** (4)
MAT 301	**Logic and Set Theory** (3)
MAT 308	**Modern Algebra I** (3) (*fall only*)
MAT 315	**Introduction to Analysis** (3) (*spring only*)
MATHEMATICS TEACHING CONCENTRATION REQUIREMENTS (15)	
MAE 303	**Mathematical Models and Applications** (3) (*spring only*)
MAE 305	**Problem Solving and Technology** (3) (*spring only*)
MAT 203	**Geometry for Middle and Elementary School Teachers** (3) (*spring only*)
‡ **PLUS SIX (6) HOURS selected from CSC 320; any MAT course numbered 300 0r above** (*except for 301, 308, 315, and 349*)**, or any STA course numbered 300 or above** (*except for STA 349*)**.** (*Concentration Elective*)	
SUPPORTING COURSE REQUIREMENTS (MATHEMATICS TEACHING) (4)	
CSC 170 *or*	**Intro to Game Programming** (3)
CSC 174 *or*	**Introduction to Programming for Science & Engineering** (3)
CSC 177 *or*	**Introduction to Visual Basic** (3)
CSC 190	**Object-Oriented Programming I** (3)
G STA 270	**Applied Statistics** (4)
PROFESSIONAL EDUCATION REQUIREMENTS (37)	
EDC 300	**Differentiation in Inclusive Classrooms** (3)
EDF 203	**Philosophical & Historical Found. of Ed.** (3)
EDF 204	**Emerging Instructional Technologies** (2)
EDF 219	**Human Development and Learning** (3)
EDF 413	**Assessment in Education** (3)
EMS 300	**Curriculum & Instructional Design** (3)
EMS 474	**Teaching Content Reading** (3)
EMS 490	**Classroom & Behavior Management in P-12** (3)
▲ ESE 550/MAT 550	**Teaching Math. in the Secondary Schools** (3)
G SED 104	**Introduction to Special Education** (3)
PLUS ELEVEN (11) HOURS of Clinical Experiences to include:	
CED 100	**Clinical I: Intro to the Education Prof.** (0)
CED 200	**Clinical II: Understanding the Learner** (0)
CED 300	**Clinical III: curriculum and Instruct. Des.** (.5)
CED 400	**Clinical IV: Diagnosis & Perception** (.5)
CED 450	**Clinical V: Practicing Teaching** (1)
CED 499	**Supervised Student Teaching P-12** (9)
FREE ELECTIVES (0-3)	

▲ ESE 550 and MAT 550 are cross listed.

G *Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.*

* **PREREQUISITES:** *Consult with your advisor and/or the University catalog regarding prerequisites for upper division MAT courses.*

❖*Student must have completed 30 hours by the end of the second semester and apply for admission to Professional Education Program.*

✪ *Must be completed before enrolling in CED 300 and applying to the Teacher Ed. program.*

Upper division courses: *All students are required to have a minimum of 42 hrs. upper division (300-level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.*

Refer to the University Catalog at http://www.catalogs.eku.edu/ regarding University and General Education Requirements