BACHELOR of SCIENCE in SCIENCE AND MATHEMATICS EDUCATION (#730/#774) Middle Grades Mathematics Major

School of Teacher Education

College of Education and Behavioral Sciences

Western Kentucky University

The program of study shown below should be used in consultation with your advisors. While this is one possible degree plan, it may not be the best plan of study for every student! Each student will complete a unique program of study based on initial mathematics placement, previous college credit, electives chosen, and many other factors.

SAMPLE - 4 year plan

Year 1 Fall Semester		Spring Semester	
MATH 136 – Calculus I (F-QR)	4	MATH 205 – Number Systems & Number Theory for Teachers	3
ENG 100 Intro to College Writing (F-W1)	3	COMM 145 Fundamentals of Public Speaking (F-OC)	3
HIST 101 World History I OR HIST 102 World History II (F-SB)	3	Arts and Humanities (E-AH)	3
Natural & Physical Science with Lab (E-NS, LS)	4	Natural & Physical Science (E-NS)	3
SMED 101 – Intro to Inquiry-Based Approaches to Teaching (E-SB)	1	SMED 102 – Intro to Inquiry- Based Lesson Design (E-SB)	2
TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	14

Year 2 Fall Semester		Spring Semester	
MATH 206 – Fundamentals of Geometry for Teachers	3	MATH 308 – Rational Numbers and Data Analysis for Teachers	3
MATH 183 – Introductory Stats OR STAT 201	3	MATH 302 – Intro to Advanced Math for Middle Grades Teachers	3
SMED 310 – Knowing & Learning in Mathematics & Science	3	SMED 320 – Classroom Interactions	3
ENG 200 Intro to Literature (F-AH)	3	ENG 300 Writing in the Disciplines (F-W2)	3
World Language (if needed) OR General Elective	3	World Language (if needed) OR General Elective	3
		General Elective	1
TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	16

World Language Proficiency: All students entering in Fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to www.wku.edu/modernlanguages/placement/.

Colonnade Program: All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to http://www.wku.edu/colonnade/documents/approved colonnade courses website.pdf

Year 3 Fall Semester		Spring Semester	
MATH 304 – Functions, Applications, and Explorations	3	MATH 413- Algebra and Technology for Middle Grades Teachers	3
MATH 403 – Geometry for Elementary and Middle Teachers OR MATH 323 – Geometry I	3	SMED 360 – Research Methods for Science & Math Teachers	3
SMED 340 – Perspectives on Math and Science	3	Connections: Local to Global Course (K-LG)	3
SPED 330 – Diversity in Learning	3	Connections: Systems (K-SY)	3
Connections: Social and Cultural (K-SC)	3	General Elective	3
TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15

Year 4 Fall Semester		Spring Semester	
MATH 411 – Problem Solving for Elementary and Middle School Teachers	3	MGE 490 – Student Teaching	10
MATH 490 – Seminar in Middle Grades Mathematics	3	SMED 489 – Student Teaching Seminar	3
SMED 470 – Project Based Instruction	3		
LTCY 421 – Reading Middle/Secondary Grade	3		
General Elective	3		
General Elective	3		
TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	13

Department: School of Teacher Education **Phone:** 270-745-3900

Website: www.wku.edu/skyteach

Course Descriptions: http://www.wku.edu/undergraduatecatalog/

Department: Mathematics **Phone:** 270-745-3651 **Website:** www.wlu.edi/math **Email:** math@wku.edu Course Descriptions: http://www.wku.edu/undergraduatecatalog/