

MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION  
OFFICE OF EDUCATOR QUALITY – EDUCATOR PREPARATION

**MATHEMATICS, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME ROCKHURST UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 501839
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**INSTRUCTIONS**

Please complete Educator Preparation Program (EPP) Name & EPP Code above.

Certification Requirements:

- Course Number – List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Course Title – List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Semester Hours – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to [DESE.MoSPETtransition@dese.mo.gov](mailto:DESE.MoSPETtransition@dese.mo.gov) on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or [DESE.MoSPETtransition@dese.mo.gov](mailto:DESE.MoSPETtransition@dese.mo.gov)

**A. Professional Requirements (Minimum of 26 semester hours)**

1. Content Planning and Delivery

	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	ED 4030 ED 4160 ED 4500	Technology in Education Teaching Middle and Secondary School Math Curriculum Methods and Assessment for Secondary School	3
b. Instructional Strategies and Techniques in Content Area Specialty	ED 4030 ED 4160 ED 4500	Technology in Education Teaching Middle and Secondary School Math Curriculum Methods and Assessment for Secondary School	3
c. Assessment, Student Data, and Data-Based Decision-Making	ED 4160 ED 4500	Teaching Middle and Secondary School Math Curriculum, Methods, and Assessment in Secondary Education	3
d. Strategies for Content Literacy	ED 4020	Fundamentals of Literacy Learning	3
e. Critical Thinking and Problem Solving	ED 4020 ED 4030 ED 4160	Fundamentals of Literacy Learning Technology in Education Teaching Middle and Secondary School Math	3
f. English Language Learning	ED 4020 ED 4030 ED 4160 ED 4450	Fundamentals of Literacy Learning Technology in Education Teaching Middle and Secondary School Math Foundations of Special Education	3

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	ED 4300	Child and Adolescent Development in Education	3
b. Psychology/Education of the Exceptional Child	ED 4450	Foundations of Special Education	3
c. Differentiated Learning	ED 4020 ED 4030 ED 4160 ED 4450 ED 4900	Fundamentals of Literacy Learning Technology in Education Teaching Middle and Secondary School Math Foundations of Special Education Student Teaching Seminar	3
d. Classroom Management	ED 3620 Or ED 4620 Or ED 4160	Foundations of Classroom Management  Foundations of Classroom Management  Teaching Middle and Secondary Math	2  2  3
e. Cultural Diversity	ED 1320 ED 4010 ED 4160 ED 4450	Multicultural Clinical Experience Foundations of Education Teaching Middle and Secondary School Math Foundations of Special Education	3 2 3 3
f. Educational Psychology	ED 4300	Child and Adolescent Development in Education	3

3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	ED 4010	Foundations of Education	2
	ED 4450	Foundations of Special Education	3
	ED 4900	Student Teaching Seminar	3
b. Legal/Ethical Aspects of Teaching	ED 4010	Foundations of Education	2
	ED 4450	Foundations of Special Education	3
	ED 4900	Student Teaching Seminar	3

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	ED 4020	Fundamentals of Literacy Learning	3
b. Instructional Interventions for Students with Reading Deficits	ED 4700	Methods of Diagnosing and Instruction for Remedial Reading	3

**Professional Requirements - Total Semester Hours 31**

B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number	Course Title	Semester Hours
1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	ED 1320	Multicultural Clinical Experiences	1
	ED 4160	Teaching Middle and Secondary Math	30 clock hours
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	ED 3620	Foundations of Classroom Management	1
	ED 4030	Technology in Education	50 clock hours
	ED 4450	Foundations of Special Education	
	ED 4500	Curriculum, Methods, Assmnt in Sec Education	
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	ED 4850	Student Teaching in the Secondary School	9

**Field and Clinical Experiences - Total Semester Hours 11**

C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)			
	Course Number	Course Title	Semester Hours
1. Calculus and Analytical Geometry; nine credit hours	MT 1800	Calculus I	3
	MT 1810	Calculus II	3
	MT 2800	Calculus III	3
2. Algebraic Structures;	MT 3810	<b>Choose one 3 credit hour course:</b> Linear Algebra	3
	MT 4900	<b>OR</b> Abstract Algebra	3
3. Geometry; three credit hours	MT 3600	Modern Geometry	3
4. Computer Science (three credit hours)	MT 3410	Statistical Learning	3
5. Electives from the above coursework; six credit hours;	MT 3700	<b>May not use a course to fulfill more than one requirement</b> Differential Equations	3
	MT 3810	Linear Algebra	3
	MT 4900	Abstract Algebra	4
6. Additional Mathematics coursework – Minimum of 12 semester hours to include at least three of the following areas of Mathematics;		<b>May not use a course to fulfill more than one requirement</b>	
a. History of Mathematics;			
b. Structure of the Real Number System	MT 1510	Discrete Structures	3
c. Number Theory;	MT 3550	Number Theory	3
d. Completion of Calculus Sequence; three credit hours			3
e. Probability and Statistics;	MT 3400	Probability and Statistics	3
f. Computer Science;			
g. Linear Algebra;	MT 3810	Linear Algebra	3

**Content Knowledge Area - Total Semester Hours 35**

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