



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

**MATHEMATICS, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME <b>UNIVERSITY OF CENTRAL MISSOURI</b>	EDUCATOR PREPARATION PROGRAM CODE <b>121121</b>
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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.MoSPETransition@dese.mo.gov](mailto:DESE.MoSPETransition@dese.mo.gov) on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or [DESE.MoSPETransition@dese.mo.gov](mailto:DESE.MoSPETransition@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	EDFL 2100	Introduction to the Teaching Profession	0.5
	MATH 4880	Issues and Methods of Teaching Secondary Math	0.5
	MATH 3850	Strategies in Teaching Secondary Math	0.5
b. Instructional Strategies and Techniques in Content Area Specialty	MATH 4880	Issues and Methods of Teaching Secondary Math	1.0
	MATH 3850	Strategies in Teaching Secondary Math	1.0
c. Assessment, Student Data, and Data-Based Decision-Making	EDFL 2100	Introduction to the Teaching Profession	1.0
	MATH 4880	Issues and Methods of Teaching Secondary Math	0.5
	MATH 3850	Strategies in Teaching Secondary Math	0.5
	MATH 4974	Assessment in the Mathematics Classroom	1.0
d. Strategies for Content Literacy	EDFL 4210	Introduction to Content Area Literacy	0.5
e. Critical Thinking and Problem Solving	EDFL 2250	Intro to ELL and Culturally Responsive Pedagogy	0.5
	EDFL 4970	Secondary Teaching and Behavior Management	0.5
	MATH 4880	Issues and Methods of Teaching Secondary Math	0.5
	MATH 3850	Strategies in Teaching Secondary Mathematics	0.5
f. English Language Learning	EDFL 2250	Intro to ELL and Culturally Responsive Pedagogy	0.5

**2. Individual Student Needs**

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY 3220	Life-Span Development	3.0
	-OR- PSY 2220	-OR- Child and Adolescent Psychological Development	
	-OR- CFD 1220	-OR- Child & Adolescent Development	
b. Psychology/Education of the Exceptional Child	EDSP 2100	Education of the Exceptional Child	1.5
c. Differentiated Learning	EDSP 2100	Education of the Exceptional Child	1.0
	EDFL 2250	Intro to ELL and Culturally Responsive Pedagogy	0.5
d. Classroom Management	EDFL 4970	Secondary Teaching and Behavioral Management	1.5
	MATH 4973	Engaging Secondary Mathematics Learners	1.0
	MATH 4880	Issues and Methods of Teaching Secondary Math	0.5
	MATH 3850	Strategies in Teaching Secondary Math	0.5
e. Cultural Diversity	EDFL 2250	Intro to ELL and Culturally Responsive Pedagogy	0.5
f. Educational Psychology	EDFL 2240	Educational Psychology	3.0

**3. Schools and the Teaching Profession**

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDFL 2100	Introduction to the Teaching Profession	1.0
b. Legal/Ethical Aspects of Teaching	EDFL 2100 EDSP 2100	Introduction to the Teaching Profession Education of the Exceptional	0.5 0.5
<b>4. Secondary Literacy (Minimum of six semester hours)</b>			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDFL 4210 EDFL 4212 EDFL 4972	Introduction to Content Area Literacy Literacy in the Disciplines I Literacy in the Disciplines II	1.0 1.0 1.0
b. Instructional Interventions for Students with Reading Deficits	EDFL 4210 EDFL 4212 EDFL 4972	Introduction to Content Area Literacy Literacy in the Disciplines I Literacy in the Disciplines II	0.5 1.0 1.0
<b>Professional Requirements - Total Semester Hours</b>			<b>30.0</b>
<b>B. Field and Clinical Experiences (Minimum of ten semester hours)</b>			
	Course Number	Course Title	Semester Hours
1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	FLDX 2150	Introductory Field Experience	1.0
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	FLDX 3000 FLDX 4970	Field Experience in the Content Area Field Experience II in the Content Area	1.0 1.0
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	FLDX 4468 FLDX 4595	Student Teaching Secondary II Student Teaching Secondary I	6.0 6.0
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>15.0</b>
<b>C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)</b>			
	Course Number	Course Title	Semester Hours
1. Calculus and Analytical Geometry (nine semester hours)	MATH 1151 MATH 1152	Calculus & Analytical Geometry I Calculus & Analytical Geometry II	5.0 5.0
2. Algebraic Structures (three semester hours)	MATH 4710	Algebraic Structures	3.0
3. Geometry (three semester hours)	MATH 2221	Foundations of Geometry	3.0
4. Computer Science (three semester hours)	CS 1100	Computer Programming I	3.0
5. Electives from the above coursework (six semester hours)	MATH 3710 MATH 2862	Linear Algebra Advanced Perspective on Secondary Geometry & Trigonometry	3.0 3.0
6. Additional Mathematics coursework – Minimum of 12 semester hours to include at least three of the following areas of Mathematics:			
a. History of Mathematics (three semester hours)	MATH 4233	The Scientific, Historical, & Sociological Impact of Mathematics	3.0
b. Structure of the Real Number System (three semester hours)	MATH 2861	Advanced Perspectives on High School Mathematics (3 semester hour class)	3.0
c. Number Theory (three semester hours)	MATH 2410	Discrete Mathematics	3.0
d. Completion of Calculus Sequence (three semester hours)			
e. Probability and Statistics (three semester hours)	MATH 4851	Probability and Statistics for Middle and High School Math	3.0
f. Computer Science (three semester hours)			
g. Linear Algebra (three semester hours)			
<b>Content Knowledge Area - Total Semester Hours</b>			<b>37</b>

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