



MATHEMATICS, GRADES 9-12 - POST BACCALAUREATE

EDUCATOR PREPARATION PROGRAM NAME

UNIVERSITY OF CENTRAL MISSOURI

EDUCATOR PREPARATION PROGRAM CODE

121121

INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name & EPP Code above. The EPP Code may be located at <https://dese.mo.gov/sites/default/files/EPP-Code-Name.pdf>

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 on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573/751-1668 or 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 EDFL 5340	Introduction to the Teaching Profession Contemporary Instruction: Theory & Practice	0.5 OR 1.0
	MATH 4880 MATH 3850	Issues and Methods of Teaching Secondary Math Strategies in Teaching Secondary Math	0.5 0.5
b. Instructional Strategies and Techniques in Content Area Specialty	MATH 4880 MATH 3850	Issues and Methods of Teaching Secondary Math Strategies in Teaching Secondary Math	1.5 1.5
c. Assessment, Student Data, and Data-Based Decision-Making	EDFL 2100 EDFL 4974 MATH 4974	Introduction to the Teaching Profession Content Specific Assessment Assessment in the Mathematics Classroom	2.0 AND 1.0 OR 1.0
	EDFL 4300 EDFL 5300	Educational Measurement and Evaluation Advanced Assessment & Evaluation	2.0 OR 3.0
	MATH 4880 MATH 3850	Issues and Methods of Teaching Secondary Math Strategies in Teaching Secondary Math	0.5 0.5
d. Strategies for Content Literacy	EDFL 4210 EDFL 5208	Introduction to Content Area Literacy Content Area Literacy	0.0 OR 0.0
e. Critical Thinking and Problem Solving	EDFL 2250 MATH 4880 MATH 3850	Intro to ELL and Culturally Responsive Pedagogy Issues and Methods of Teaching Secondary Math Strategies in Teaching Secondary Mathematics	0.5 0.5 0.5
	EDFL 4970 EDFL 5340	Secondary Teaching and Behavior Management Contemporary Instruction Theory & Practice	0.5 OR 1.0
f. English Language Learning	EDFL 2250	Intro to ELL & Culturally Responsive Pedagogy	1.0

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY 2220 PSY 3220 CFD 1220 COUN 5310	Child & Adolescent Psychology OR Life-Span Development OR Child & Adolescent Development OR Development Across the Lifespan	3.0
b. Psychology/Education of the Exceptional Child	EDSP 2100 EDSP 5200	Education of the Exceptional Child Advanced Education of the Exceptional Child	1.5 OR 1.0
c. Differentiated Learning	EDSP 2100 EDSP 5200	Education of the Exceptional Child Advanced Education of the Exceptional Child	1.0 OR 0.5
	EDFL 2250	Intro to ELL & Culturally Responsive Pedagogy	0.5

d. Classroom Management	EDFL 4970 EDFL 4973 MATH 4973	Secondary Teaching & Behavioral Management Classroom Management in Content Area Engaging Secondary Mathematics Learners	1.5 AND 1.0 OR 1.0 OR 2.0 OR 3.0
e. Cultural Diversity	EDFL 2250	Intro to ELL & Culturally Responsive Pedagogy	0.5
f. Educational Psychology	EDFL 2240 EDFL 5200	Educational Psychology Advanced Educational Psychology	3.0 OR 3.0
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDFL 2100 EDFL 5340	Introduction to the Teaching Profession Contemporary Instruction Theory and Practice	1.0 OR 1.0
b. Legal/Ethical Aspects of Teaching	EDFL 2100 EDSP 2100 EDSP 5200	Introduction to the Teaching Profession Education of the Exceptional Child Advanced Education of the Exceptional Child	0.5 OR 0.5 OR 1.5
4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDFL 4210 EDFL 4212 EDFL 4972 EDFL 5208	Introduction to Content Area Literacy Literacy in the Disciplines I Literacy in the Discipline II Content Area Literacy	1.0 AND 1.0 AND 1.0 OR 3.0
b. Instructional Interventions for Students with Reading Deficits	EDFL 4210 EDFL 4212 EDFL 4972 EDFL 5210	Introduction to Content Area Literacy Literacy in the Disciplines I Literacy in the Discipline II Assessment of Literacy Development	1.0 AND 1.0 AND 1.0 OR 3.0
Professional Requirements - Total Semester Hours			29
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)	FLDX 2150 FLDX 3000	Introductory Field Experience OR Field Experience I in the Content Area	1.0 OR 1.0
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	FLDX 3550 FLDX 4970	Practicum in Secondary Instruction OR Field Experience II in the Content Area	1.0 OR 1.0
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDFL 5100 FLDX 4468 FLDX 4595 FLDX 4468 FLDX 4595	Internship AND Student Teaching Secondary II OR Student Teaching Secondary I Student Teaching Secondary II Student Teaching Secondary I	3.0 AND 5.0 OR 5.0 OR 4.0 4.0
Field and Clinical Experiences - Total Semester Hours			10
C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)			
	Course Number	Course Title	Semester Hours
1. Calculus and Analytical Geometry (nine semester hours)	MATH 1151 MATH 1152	Calculus I Calculus 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	3.0
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 & High School Math	3.0
f. Computer Science (three semester hours)			
g. Linear Algebra (three semester hours)			
Content Knowledge Area - Total Semester Hours			37

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