



**MATHEMATICS, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME <b>FONTBONNE UNIVERSITY</b>	EDUCATOR PREPARATION PROGRAM CODE <b>038603</b>
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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.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	EDU269 EDU271 EDU447	Critical Skills in the Teaching Profession with Field Experience Introduction to Content Planning, Delivery and Assessment Planning of Instruction and Assessment- Middle and Secondary	1 1 1
b. Instructional Strategies and Techniques in Content Area Specialty	EDU271 EDU313	Introduction to Content Planning, Delivery and Assessment Methods and Practicum for Middle/Secondary/ Community Education	1 1
c. Assessment, Student Data, and Data-Based Decision-Making	EDU271 EDU447	Introduction to Content Planning, Delivery and Assessment Planning of Instruction and Assessment- Middle and Secondary	1 1
d. Strategies for Content Literacy	EDU350	Methods of Teaching Reading in the Content Areas	0
e. Critical Thinking and Problem Solving	EDU268 EDU447	Introduction to Learner Development Planning of Instruction and Assessment- Middle and Secondary	1 1
f. English Language Learning	EDU270	Introduction to Learner Diversity	.5

**2. Individual Student Needs**

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY200	Developmental Psychology	3
b. Psychology/Education of the Exceptional Child	EDU270	Introduction to Learner Diversity	1
c. Differentiated Learning	EDU270 EDU313	Introduction to Learner Diversity Middle Secondary Methods Course with Practicum	.5 1
d. Classroom Management	EDU401	Classroom/Behavior Management	3
e. Cultural Diversity	EDU270	Introduction to Learner Diversity	.5
f. Educational Psychology	EDU268	Introduction to Learner Development	1

**3. Schools and the Teaching Profession**

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU268 EDU270	Introduction to Learner Development Introduction to Learner Diversity	1 .5
b. Legal/Ethical Aspects of Teaching	EDU269	Critical Skills in the Teaching Profession with Field Experience	1

4. Secondary Literacy (Minimum of six semester hours)				
	Course Number	Course Title	Semester Hours	
a. Reading and Writing in the Content Area	EDU350	Methods of Teaching Reading in the Content Areas	3	
b. Instructional Interventions for Students with Reading Deficits	EDU306	Analysis and Correction of Reading Difficulties	3	
<b>Professional Requirements - Total Semester Hours</b>			<b>28</b>	
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)	EDU269	Critical Skills in the Teaching Profession with Field Experience	1	
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU313	Middle Secondary Methods Course with Practicum	1	
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU451	Student Teaching at Secondary Level	10	
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>12</b>	
C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)				
	Course Number	Course Title	Semester Hours	
1. Calculus and Analytical Geometry (nine semester hours)	MTH150	Calculus with Analytic Geometry I	4	
	MTH151	Calculus with Analytic Geometry II	4	
	MTH250	Calculus with Analytic Geometry III	4	
2. Algebraic Structures (three semester hours)	MTH430	Algebraic Structures	3	
3. Geometry (three semester hours)	MTH320	Elements of Geometry	3	
4. Computer Science (three semester hours)	CIS160	Computer Science	4	
5. Electives from the above coursework (six semester hours)	Choose Two:			
	MTH120	Discrete Mathematics	3	
	MTH310	Differential Equations	3	
	CIS120	Overview of Computer and Information Science		
	CIS210	Object-Oriented Programming		
	CIS300 CIS 465	Modeling and Numerical Approximation Robotics		
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)	MTH305	Readings in the History of Mathematics	2
	b. Structure of the Real Number System (three semester hours)			
	c. Number Theory (three semester hours)			
	d. Completion of Calculus Sequence (three semester hours)			
	e. Probability and Statistics (three semester hours)	MTH115	Introduction to Statistics	3
	f. Computer Science (three semester hours)	CIS161	Computer Science II	4
	g. Linear Algebra (three semester hours)	MTH200	Linear Algebra	3
<b>Content Knowledge Area - Total Semester Hours</b>			<b>40</b>	

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