



**MATHEMATICS, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME  
**WESTMINSTER COLLEGE**

EDUCATOR PREPARATION PROGRAM CODE  
**049495**

**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**

	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
a. Curriculum and Instructional Planning	EDU 101 EDU 433 MAT 351 EDU 306 EDU 425	Introduction to Teaching Teaching Math MS/Sec. Teaching ELE/MS Math Teaching Reading Secondary School Teaching	1 3 3 3 3
b. Instructional Strategies and Techniques in Content Area Specialty	EDU 433 MAT 351 EDU 306 EDU 425 EDU 290	Teaching Math MS/Sec. Teaching ELE/MS Math Teaching Reading Secondary School Teaching Foundations of Education	3 3 3 3 3
c. Assessment, Student Data, and Data-Based Decision-Making	EDU 433 MAT 351 EDU 306 EDU 425 EDU 290 EDU 393 EDU 490	Teaching Math MS/Sec. Teaching ELE/MS Math Teaching Reading Secondary School Teaching Foundations of Education Education Practicum 2 Education Seminar	3 3 3 3 3 2 3
d. Strategies for Content Literacy	EDU 433 MAT 351 EDU 306 EDU 425 EDU 392	Teaching Math MS/Sec. Teaching ELE/MS Math Teaching Reading Secondary School Teaching Reading and Writing in the Content Area	3 3 3 3 3
e. Critical Thinking and Problem Solving	EDU 433 MAT 351 EDU 306 EDU 425 EDU 393 EDU 490	Teaching Math MS/Sec. Teaching ELE/MS Math Teaching Reading Secondary School Teaching Education Practicum 2 Education Seminar	3 3 3 3 2 3
f. English Language Learning	EDU 385	Diversity in Education	3

**2. Individual Student Needs**

	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
a. Psychological Development of the Child and Adolescent	EDU 230	Child and Adolescent Growth and Development	3
b. Psychology/Education of the Exceptional Child	EDU 231	Education of the Exceptional Individual	3
c. Differentiated Learning	EDU 231 EDU 392 EDU 490	Education of the Exceptional Individual Reading and Writing in the Content Area Education Seminar	3 3 3
d. Classroom Management	EDU 453	Classroom Organization and Management	3
e. Cultural Diversity	EDU 385	Diversity in Education	3
f. Educational Psychology	EDU 221	Education Psychology	3

3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU 290	Foundations of Education	3
b. Legal/Ethical Aspects of Teaching	EDU 290	Foundations of Education	3

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU 392	Reading and Writing in the Content Area	3
b. Instructional Interventions for Students with Reading Deficits	EDU 306	Teaching Reading	3
<b>Professional Requirements - Total Semester Hours</b>			<b>39</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)	EDU 291	Education Practicum 1	2
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU 393	Education Practicum 2	2
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU 497	Student Teaching: Secondary	12
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>16</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)	MAT 124 MAT 214	Calculus 1 Calculus 2	5 4
2. Algebraic Structures (three semester hours)	MAT 422	Modern Algebra	3
3. Geometry (three semester hours)	MAT 314	Higher Geometry	3
4. Computer Science (three semester hours)	CSC 104	Programing and Logic Design	3
5. Electives from the above coursework (six semester hours)	MAT 224 MAT 215	Calculus 3 Linear Algebra	4 3
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)	MAT 310 MAT 305	History of Mathematics Heart of Mathematics	3 3
b. Structure of the Real Number System (three semester hours)			
c. Number Theory (three semester hours)	MAT 331	Mathematics Seminar	3
d. Completion of Calculus Sequence (three semester hours)	MAT 424	Advanced Calculus	3
e. Probability and Statistics (three semester hours)	MAT 313	Mathematical Probability and Statistics	3
f. Computer Science (three semester hours)	CSC 111	Fundamentals of Computer Science 1	3
g. Linear Algebra (three semester hours)			
<b>Content Knowledge Area - Total Semester Hours</b>			<b>43</b>

The Department of Elementary and Secondary Education does not discriminate on the basis of race, color, religion, gender, national origin, age, or disability in its programs and activities. Inquiries related to Department programs and to the location of services, activities, and facilities that are accessible by persons with disabilities may be directed to the Jefferson State Office Building, Office of the General Counsel, Coordinator – Civil Rights Compliance (Title VI/Title IX/504/ADA/Age Act), 6<sup>th</sup> Floor, 205 Jefferson Street, P.O. Box 480, Jefferson City, MO 65102-0480; telephone number 573-526-4757 or TTY 800-735-2966 email [civilrights@dese.mo.gov](mailto:civilrights@dese.mo.gov).