



**MATHEMATICS, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME <b>MISSOURI WESTERN STATE UNIVERSITY</b>	EDUCATOR PREPARATION PROGRAM CODE <b>160160</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	EDU 304	Applied Methods & Management	1
b. Instructional Strategies and Techniques in Content Area Specialty	MAT 465	Mathematics Teaching: Methods & Materials	3
c. Assessment, Student Data, and Data-Based Decision-Making	EDU 225 EDU 404	Educational Psychology Seminar in Secondary Elementary Education & Human Relations	.5 .5
d. Strategies for Content Literacy	EDU 311	Secondary Reading Techniques	Hours Listed Below
e. Critical Thinking and Problem Solving	EDU 202 EDU 303 EDU 409	Introduction to Education Experience in Teaching II Secondary Student Teaching III	1 .5 .5
f. English Language Learning	EDU 202 EDU 304 EDU 404	Introduction to Education Applied Methods and Management Seminar in Secondary Elementary Education & Human Relations	1 .5 .5

**2. Individual Student Needs**

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY 140 OR PSY 240 OR PSY 319	Psychological Development of Children & Adolescents for Educators Life-span Developmental Psychology Child/Adolescent Psychology	3
b. Psychology/Education of the Exceptional Child	EDU 315	Psychology & Education of the Exceptional Child	2
c. Differentiated Learning	EDU 315	Psychology & Education of the Exceptional Child	1
d. Classroom Management	EDU 304	Applied Methods & Management	1
e. Cultural Diversity	EDU 225 EDU 304 EDU 404	Educational Psychology Applied Methods and Management Seminar in Secondary Elementary Education & Human Relations	.5 .5 .5
f. Educational Psychology	EDU 225	Educational Psychology	2

**3. Schools and the Teaching Profession**

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU 404	Seminar in Secondary Education & Human Relations	1
b. Legal/Ethical Aspects of Teaching	EDU 202 EDU 404	Introduction to Education Seminar in Secondary Education & Human Relations	1 .5

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU 311	Secondary Reading Techniques	3
b. Instructional Interventions for Students with Reading Deficits	EDU 430	Teaching Students with Reading Deficits	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)	EDU 203	Participation in Teaching I	1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU 303	Experience in Teaching II	1.5
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU 409	Secondary Student Teaching III	8.5
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>11</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 165 & MAT 166  OR MAT 167  MAT 177	Calculus with Analytic Geometry I Differentiation AND Calculus with Analytic Geometry I Integration OR Calculus with Analytic Geometry I  & Calculus with Analytic Geometry II	3 + 3 OR 5  & 4
2. Algebraic Structures (three semester hours)	MAT 416	Abstract Algebra	3
3. Geometry (three semester hours)	MAT 315	Topics in Geometry	3
4. Computer Science (three semester hours)	MAT 217	Mathematics & Technology	3
5. Electives from the above coursework (six semester hours)	MAT177 MAT 287	Calculus with Analytic Geometry II Calculus with Analytic Geometry III	1 5
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 263	History of Mathematics	3
b. Structure of the Real Number System (three semester hours)			
c. Number Theory (three semester hours)	MAT 462	Number Theory	3
d. Completion of Calculus Sequence (three semester hours)			
e. Probability and Statistics (three semester hours)	MAT 331	Applied Statistics	3
f. Computer Science (three semester hours)			
g. Linear Algebra (three semester hours)	MAT 306	Linear Algebra	3
<b>Content Knowledge Area - Total Semester Hours</b>			<b>36-37</b>

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