



MATHEMATICS, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME WEBSTER UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 300335
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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 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	EDUC 3500	Methods of Teaching Secondary School	1
b. Instructional Strategies and Techniques in Content Area Specialty	MTHT 4460	Methods of Teaching Secondary Mathematics	3
c. Assessment, Student Data, and Data-Based Decision-Making	EDUC 3100 Or PSYC 2400 & EDUC 3120	Learning, Teaching and Assessment Or Educational Psychology and Classroom Assessment	1.5
d. Strategies for Content Literacy	EDUC 3500 EDUC 3900	Methods of Teaching Secondary School Methods of Teaching Reading & Writing in the Content Area	1 0
e. Critical Thinking and Problem Solving	EDUC 3500	Methods of Teaching Secondary School	1
f. English Language Learning	EDUC 4335	Inclusive Practices for Gen Educ Teacher	.75

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDUC 2300 or PSYC 2300 or PSYC 2200 & PSYC 2250	Child and Adolescent Development or Lifespan Development or Child Psychology & Adolescent Psychology	3
b. Psychology/Education of the Exceptional Child	EDUC 2900	Education of Students with Exceptionalities	3
c. Differentiated Learning	EDUC 4435	Inclusive Practices for the General Education Teacher	.75
d. Classroom Management	EDUC 3375	Behavior Management	3
e. Cultural Diversity	EDUC 2800 or EDUC 3150 EDUC 4435	Foundations of Education or Education in a Diverse Society Inclusive Practices for Gen Educ Teacher	1.5 .75
f. Educational Psychology	EDUC 3100 Or PSYC 2400 & EDUC 3120	Learning, Teaching and Assessment Or Educational Psychology and Classroom Assessment	1.5

3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDUC 4435	Inclusive Practices for Gen Educ Teacher	.75
b. Legal/Ethical Aspects of Teaching	EDUC 2800 or EDUC 3150	Foundations of Education or Education in a Diverse Society	1.5

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDUC 3900	Methods of Teaching Reading & Writing in the Content Area	3
b. Instructional Interventions for Students with Reading Deficits	EDUC 4695	Differentiated Reading Assessment and Intervention	3
Professional Requirements - Total Semester Hours			30
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)	EDUC 2000 or EDUC 3155	Beginning Practicum or Early Diversity Practicum	1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDUC 3006	Practicum: Secondary Math	2
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDUC 4971	Apprentice Teaching: Secondary Math	13
Field and Clinical Experiences - Total Semester Hours			16
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 1610 & MATH 1620 & MATH 3000 &	Calculus I & Calculus II & Calculus III	5 5 5
2. Algebraic Structures (three semester hours)	MATH 3010 OR MATH 3500 OR MATH 4010	Discrete Algebraic Structures OR Introduction to Algebraic Structures OR Abstract Algebra	3
3. Geometry (three semester hours)	MATH 3510 OR MATH 3530	Vector Geometry or Modern Geometry	3
4. Computer Science (three semester hours)	COSC 1550	Computer Programing I	3
5. Electives from the above coursework (six semester hours)		These elective hours covered by the calculus sequence	
6. Additional Mathematics coursework – Minimum of 12 semester hours to include at least three of the following areas of Mathematics:		Select courses from at least 3 areas below	12 hours from at least 3 areas below
a. History of Mathematics (three semester hours)	MATH 3050	History of Mathematics	3
b. Structure of the Real Number System (three semester hours)	MATH 3130 OR MATH 2450 OR MATH 3030	Real Number System Introduction to Abstract Math Theory of Equations	3
c. Number Theory (three semester hours)	MATH 3300	Introduction to Number Theory	3
d. Completion of Calculus Sequence (three semester hours)	MATH 3040 OR MATH 3070 OR MATH 4110	Differential Equations OR Calculus IV OR Introduction to Analysis	3
e. Probability and Statistics (three semester hours)	MATH 3200 OR MATH 3210 OR MATH 3220 OR MATH 3610 OR STAT 3100	Statistics OR Data Mining Foundations OR Data Mining Methods Probability OR Inferential Statistics	3
f. Computer Science (three semester hours)	COSC 1560	Computer Programing II	3
g. Linear Algebra (three semester hours)	MATH 3160	Linear Algebra	3
Content Knowledge Area - Total Semester Hours			36

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