



MATHEMATICS, GRADES 9-12 - GRADUATE

EDUCATOR PREPARATION PROGRAM NAME
WEBSTER UNIVERSITY

EDUCATOR PREPARATION PROGRAM CODE
300335

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	COMM 5187	Secondary Techniques & Curriculum	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	CMAT 5015	Differentiated Instruction & Assessment	.75
d. Strategies for Content Literacy	COMM 5187 COMM 5920	Secondary Techniques & Curriculum Reading & Writing in the Content Fields	1 0
e. Critical Thinking and Problem Solving	COMM 5187	Secondary Techniques & Curriculum	1
f. English Language Learning	CMAT 5015	Differentiated Instruction & Assessment	.75

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	CMAT 5505 or EPSY 5505	Psychological Foundations of Education or Applied Developmental & Educational Psychology	2
b. Psychology/Education of the Exceptional Child	SPED 5860	Psychology of the Exceptional Student	3
c. Differentiated Learning	CMAT 5015	Differentiated Instruction & Assessment	.75
d. Classroom Management	CMAT 5170 or EPSY 5170	Classroom & Behavior Management or Behavioral Management	3
e. Cultural Diversity	CMAT 5000	Teaching in a Diverse Society	1
f. Educational Psychology	CMAT 5505 or EPSY 5505	Psychological Foundations of Education or Applied Developmental & Educational Psychology	1

3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	CMAT 5015	Differentiated Instruction & Assessment	.75
b. Legal/Ethical Aspects of Teaching	CMAT 5000	Teaching in a Diverse Society	1

4. Secondary Literacy (Minimum of six semester hours)

	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	COMM 5920	Reading & Writing in the Content Fields	3
b. Instructional Interventions for Students with Reading Deficits	COMM 5905	Reading Assessments & Interventions Gr 6-12	3

Professional Requirements - Total Semester Hours 26

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)	CMAT 5000	Teaching in a Diverse Society	1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	CMAT 5105	Practicum: Secondary Math	2
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	CMAT 5205	Apprentice Teaching: Secondary Math	9
Field and Clinical Experiences - Total Semester Hours			12
C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)			
	Course Number	Course Title	Semester Hours
		Content Courses to be determined by review of undergraduate transcripts and should include courses that fulfill areas below. These are Webster's UG course numbers.	
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	12 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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