



MATHEMATICS, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME
MARYVILLE UNIVERSITY

EDUCATOR PREPARATION PROGRAM CODE
041639

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) 26

1. Content Planning and Delivery

	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	EDUC 241	Fundamentals of Secondary Schools	1
b. Instructional Strategies and Techniques in Content Area Specialty	EDUC 431/532	Teaching Mathematics Methods: Secondary	2
c. Assessment, Student Data, and Data-Based Decision-Making	EDUC 241	Fundamentals of Secondary Schools	.5
d. Strategies for Content Literacy	EDUC 321	Literacy Across the Academic Disciplines	.5
e. Critical Thinking and Problem Solving	EDUC 241	Fundamentals of Secondary Schools	.5
f. English Language Learning	EDUC 241 EDUC 431/532	Fundamentals of Secondary Schools Teaching Mathematics Methods: Secondary	.5 .5

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	Two of the following: EDUC 309/509, EDUC 313/513 or PSYC 254	Child Dev. & Learning, Adol. Dev. & Learning or Human Development through the Lifespan	1.5 1.5
b. Psychology/Education of the Exceptional Child	EDUC 352/552	Ed. Psych. of the Exceptional Child	2
c. Differentiated Learning	EDUC 201 EDUC 352/552 EDUC 431/532	School & Society Ed. Psych. of the Exceptional Child Teaching Mathematics Methods: Secondary	.5 1 .5
d. Classroom Management	EDUC 315/515	Ed. Developmental Psych: Learn & Mgt.	2
e. Cultural Diversity	EDUC 201	School and Society	1
f. Educational Psychology	EDUC 315/515 EDUC 313/513	Ed. Developmental Psych: Learn & Mgt. Adolescent Development and Learning	1 1

3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDUC 201 EDUC 404	School & Society Professional Seminar	.5 1
b. Legal/Ethical Aspects of Teaching	EDUC 201 EDUC 404	School & Society Professional Seminar	.5 1

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDUC 321/521	Literacy Across the Academic Disciplines	3
b. Instructional Interventions for Students with Reading Deficits	EDUC 361/561	Instructional Interventions in Reading	3
Professional Requirements - Total Semester Hours			26.5
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 200 or EDUC 240	Practicum in School & Society or Practicum in Fundamentals of Secondary Schools	2
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDUC 320, EDUC 360, or EDUC 430	Practicum in Literacy Across the Academic Disciplines or Practicum in Instr. Interventions in Reading or Setting up School Experience plus Practicum in Teaching Mathematics Methods: Secondary	2
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDUC 400	Student Teaching	8
Field and Clinical Experiences - Total Semester Hours			12
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 151 MATH 152 MATH 251	Calculus & Analytical Geometry I Calculus & Analytical Geometry II Calculus & Analytical Geometry III	4 4 1
2. Algebraic Structures (three semester hours)	MATH 300	Algebraic Structure and Proofs	3
3. Geometry (three semester hours)	MATH 330	Euclidean & Non-Euclidean Geometry	3
4. Computer Science (three semester hours)	COSC 151 C++ or ISYS 100	Programming or Computer Applications	3
5. Electives from the above coursework (six semester hours)	Two of the following: MATH 251, MATH 320 or MATH 301	Two of the following: Calculus & Analytical Geometry III, Applied Differential Equations or Math Models with Tech II	3 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)			
b. Structure of the Real Number System (three semester hours)			
c. Number Theory (three semester hours)	MATH 312	Number Theory	3
d. Completion of Calculus Sequence (three semester hours)			
e. Probability and Statistics (three semester hours)	MATH 370 MATH 371	Mathematical Statistics I Mathematical Statistics II	3 3
f. Computer Science (three semester hours)			
g. Linear Algebra (three semester hours)	MATH 316	Applied Linear Algebra	3
Content Knowledge Area - Total Semester Hours			36

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