



MATHEMATICS, GRADES 9-12 (MAT)

EDUCATOR PREPARATION PROGRAM NAME MISSOURI STATE UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 119119
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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	SFR797	Advanced Studies in Teaching and Learning	2(9)
b. Instructional Strategies and Techniques in Content Area Specialty	SFR797	Advanced Studies in Teaching and Learning	2(9)
c. Assessment, Student Data, and Data-Based Decision-Making	SFR797	Advanced Studies in Teaching and Learning	2(9)
d. Strategies for Content Literacy	RDG710	Content Area Literacy	.25(3)
e. Critical Thinking and Problem Solving	SFR797	Advanced Studies in Teaching and Learning	1(9)
f. English Language Learning	RDG710	Content Area Literacy	0(3)
	RDG640 or	Analysis and Correction of Difficulties in Literacy	.5(3)
	RDG574/624	Analysis and Correction of Difficulties in Adolescent Literacy	.5(3)
2. Individual Student Needs			
	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY710	Psychology of Education	1.25(3)
b. Psychology/Education of the Exceptional Child	SPE715	Foundations in Special Education	3
c. Differentiated Learning	SFR797	Advanced Studies in Teaching and Learning	1(9)
	RDG710	Content Area Literacy	.25(3)
	RDG640 or	Analysis and Correction of Difficulties in Literacy	0(3)
d. Classroom Management	RDG574/624	Analysis and Correction of Difficulties in Adolescent Literacy	0(3)
	SFR797	Advanced Studies in Teaching and Learning	.25(9)
e. Cultural Diversity	PSY710	Psychology of Education	.25(3)
	SEC783	Internship in Teaching I	1(3)
	RDG560 or	Diversity Issues in Literacy and Content Area Instruction	2(3)
f. Educational Psychology	RDG660	Cultural Diversity in Literacy and Instruction: Classrooms and Community	2(3)
	or		
f. Educational Psychology	RDG665	Advanced Studies in Teaching and Learning	.25(9)
	SFR797	Psychology of Education	1.5(3)
PSY710			
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	SFR797	Advanced Studies in Teaching and Learning	.25(9)
	RDG710	Content Area Literacy	0(3)
	SEC784	Internship in Teaching II	1(10)
b. Legal/Ethical Aspects of Teaching	SFR797	Advanced Studies in Teaching and Learning	.25(9)

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	RDG710 RDG560 or RDG660 or RDG665	Content Area Literacy Diversity Issues in Literacy and Content Area Instruction Cultural Diversity in Literacy and Instruction: Classrooms and Community	2.5(3) .5(3) .5(3)
b. Instructional Interventions for Students with Reading Deficits	RDG640 or RDG574/624 RDG560 or RDG660 or RDG665	Analysis and Correction of Difficulties in Literacy Analysis and Correction of Difficulties in Adolescent Literacy Diversity Issues in Literacy and Content Area Instruction Cultural Diversity in Literacy and Instruction: Classrooms and Community	2.5(3) 2.5(3) .5(3) .5(3)
Professional Requirements - Total Semester Hours			26
B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number	Course Title	Semester Hours
a. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	SEC783	Internship in Teaching I	1(3)
b. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	SEC783	Internship in Teaching I	1(3)
c. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	SEC784	Internship in Teaching II	9(10)
Field and Clinical Experiences - Total Semester Hours			11
C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)			
	Course Number	Course Title	Semester Hours
1. Calculus and Analytical Geometry (nine semester hours)	MTH261 MTH280	Analytic Geometry and Calculus I Analytic Geometry and Calculus II	5 5
2. Algebraic Structures (three semester hours)	MTH315	Algebraic Structures	3
3. Geometry (three semester hours)	MTH460	College Geometry	3
4. Computer Science (three semester hours)	Choose one CSC121 CSC125 CSC130	Choose one (1) Introduction to Basic Programming Introduction to C++ Programming The World of Computer Science	3 4 3
5. Electives from the above coursework (six semester hours)	Choose two MTH503 MTH567 MTH510 *MTH532	Choose two (2) Advanced Calculus I Introduction to Non-Euclidean Geometry High School Mathematics from an Advanced Perspective Introduction to Abstract Algebra	3 3 3 3
6. Additional Mathematics coursework – Minimum of 12 semester hours to include at least three of the following areas of Mathematics: This is the section where the following areas are “suggested.”			
a. History of Mathematics (three semester hours)	MTH575	History of Mathematics	3
b. Structure of the Real Number System (three semester hours)	*MTH532	Introduction to Abstract Algebra	3
c. Number Theory (three semester hours)	MTH536	Theory of Numbers	3
d. Completion of Calculus Sequence (three semester hours)	MTH302	Multivariate Calculus	3
e. Probability and Statistics (three semester hours)	Choose one MTH345 MTH540 MTH340 MTH343 MTH 545	Choose one (1) Statistics for Science and Engineers Statistical Theory I Statistical Methods Foundations of Probability and Statistics for Teachers Applied Statistics	3 3 3 3 3
f. Computer Science (three semester hours)			
g. Linear Algebra (three semester hours)	MTH333	Linear Algebra I	3
*MTH 532 cannot be counted in both C.5. and C.6.b.			
Content Knowledge Area-Total Semester Hours			MAT=40-41

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