



## MASTER OF ARTS IN TEACHING (MAT) 9-12 MATH

EDUCATOR PREPARATION PROGRAM NAME <b>MISSOURI STATE UNIVERSITY</b>	EDUCATOR PREPARATION PROGRAM CODE <b>119119</b>
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### INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name & EPP Code above. The EPP Code may be located at <https://dese.mo.gov/sites/default/files/EPP-Code-Name.pdf>

#### 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 Gale Hairston, 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	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 RDG574 or RDG640	Content Area Literacy Analysis and Correction of Difficulties in Literacy	0(3) .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 RDG710 RDG574 or RDG640	Advanced Studies in Teaching and Learning Content Area Literacy Analysis and Correction of Difficulties in Literacy	1(9) .25(3) 0(3)
d. Classroom Management	SFR797 PSY710 SEC783	Advanced Studies in Teaching and Learning Psychology of Education Internship in Teaching I	.25(9) .25(3) 1(3)
e. Cultural Diversity	RDG560 or RDG660 or RDG665  SFR797	Diversity Issues in Literacy and Content Area Instruction  Cultural Diversity in Literacy and Instruction: Classrooms and Community Advanced Studies in Teaching and Learning	2(3)  2(3) .25(9)
f. Educational Psychology	PSY710	Psychology of Education	1.5(3)

##### 3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	SFR797 RDG710 SEC784	Advanced Studies in Teaching and Learning Content Area Literacy Internship in Teaching II	.25(9) 0(3) 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	RDG574 or RDG640 RDG560 or RDG660 or RDG665	Analysis and Correction of Difficulties in 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>Professional Requirements - Total Semester Hours</b>			<b>26</b>
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)
<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)	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	Choose one (1) Statistics for Science and Engineers Statistical Theory I Statistical Methods Foundations of Probability and Statistics for Teachers	3 3 3 3
f. Computer Science (three semester hours)	n/a		
g. Linear Algebra (three semester hours)	MTH333	Linear Algebra I	3
<b>*MTH 532 cannot be counted in both C.5. and C.6.b.</b>			
<b>Content Knowledge Area-Total Semester Hours</b>			<b>MAT=40-41</b>

