



**MATHEMATICS, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME SAINT LOUIS UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 300310
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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](mailto: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](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	EDI 3320	Curriculum & Methods in Teaching Secondary Mathematics	3
	EDI 4210	Methods of Technology Integration	3
b. Instructional Strategies and Techniques in Content Area Specialty	EDI 3320	Curriculum & Methods in Teaching Secondary Mathematics	-
c. Assessment, Student Data, and Data-Based Decision-Making	EDI 4420	Assess Classroom Performance	3
	EDR 3891	Qualitative and Quantitative Methods	3
d. Strategies for Content Literacy	EDI 3200	Reading/Writing Content Fld.	-
e. Critical Thinking and Problem Solving	EDI 4210	Methods of Technology Integration	-
f. English Language Learning	EDI 3001	English Language Learners	3

**2. Individual Student Needs**

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDF 2240	Growth, Development & learn	3
b. Psychology/Education of the Exceptional Child	EDSP 4310	Ed & Psych of the Exp. Ind.	3
c. Differentiated Learning	EDSP 4480	Teach Meth Incl. Class Mid & Sec	3
	EDSP 4310	Ed & Psych of the Exceptional	-
d. Classroom Management	EDSP 4250	Classroom Organization and Management (Mid, Sec.)	3
e. Cultural Diversity	EDF 3620	Multicultural Issues in the Classroom	3
f. Educational Psychology	EDF 2240	Growth Dev & Learning	-

**3. Schools and the Teaching Profession**

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDSP 4480	Teach Meth Incl. Class Mid & Sec	-
	EDF 3890	School and Community	3
b. Legal/Ethical Aspects of Teaching	EDF 2040	Foundations of Secondary Education	-
	EDF 3840	Prof Ethics	3
	EDI 4870	Prof. Development Seminar	3

**4. Secondary Literacy (Minimum of six semester hours)**

	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDI 3200	Reading/Writing Content Fld.	3
b. Instructional Interventions for Students with Reading Deficits	EDI 4200	Disciplinary Literacy Assessment & Intervention for Secondary Students	3

**Professional Requirements - Total Semester Hours 48**

**B. Field and Clinical Experiences (Minimum of ten semester hours)**

	Course Number	Course Title	Semester Hours
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1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	EDF 2040 EDF 3890 EDSP 4310 EDL 3892	Foundations of Secondary Education School and Community Education & Psych of the Exceptional Individual Leadership and Service Seminar	1 (35 hrs.**) .29 (10hrs.**) .14 (5 hrs.**) .43 (15hrs.**)
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDI 3325 EDI 3200 EDI 4200 EDI 4420	Practicum in Secondary Mathematics Reading and writing in the Content Fields Disciplinary Literacy Assessment-Secondary Assess Classroom Performance	3 (105 hrs**) .43 (15hrs.**) .29 (10hrs.**) .17 (6 hrs.**)
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDI 4840	Obs. & Student Teaching Secondary	10 (15 weeks)
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>16</b>
<b>C. Mathematics Content Knowledge Area (Minimum of 36 semester hours)</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
1. Calculus and Analytical Geometry (nine semester hours)	Math 1510 Math 1520 Math 2530	Calculus I Calculus II Calculus III	4 4 4
2. Algebraic Structures (three semester hours)	MATH 3120	Introduction to Linear Algebra	3
3. Geometry (three semester hours)	Math 4410 Math 4430	Foundations of Geometry or Non-Euclidean Geometry	3
4. Computer Science (three semester hours)	CSCI 1010 or CSCI 1020 or  CSCI 1030 or  CSCI 1040 or CSCI 1050 or CSCI 1060 or CSCI 1070 or  CSCI 1080 or CSCI 1300	Introduction to Computer Science, Principles Introduction to Computer Science, Bioinformatics Introduction to Computer Science, Game Design Intro to Computer Science, Mobile Computing Intro to Computer Science, Multimedia Intro to Computer Science, Scientific Program Intro to Computer Science, Taming the Big Data Intro to Computer Science, Web Development Intro to Object Oriented Programming	3
5. Electives from the above coursework (six semester hours)	Math 2530 Math 2660	Calculus III Principles of Mathematics	- 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)	MATH 4050*	History of Mathematics	3
b. Structure of the Real Number System (three semester hours)	MATH 4210	Introduction to Analysis	3
c. Number Theory (three semester hours)	MATH 4150	Number Theory	3
d. Completion of Calculus Sequence (three semester hours)	MATH 3550	Differential Equations I	3
e. Probability and Statistics (three semester hours)	MATH 4810*	Elementary Theory of Probability	3
f. Computer Science (three semester hours)	CSCI 1010 or CSCI 1020 or  CSCI 1030 or  CSCI 1040 or CSCI 1050 or CSCI 1060 or CSCI 1070 or  CSCI 1080 or CSCI 1300	Introduction to Computer Science, Principles Introduction to Computer Science, Bioinformatics Introduction to Computer Science, Game Design Intro to Computer Science, Mobile Computing Intro to Computer Science, Multimedia Intro to Computer Science, Scientific Program Intro to Computer Science, Taming the Big Data Intro to Computer Science, Web Development Intro to Object Oriented Programming	3
g. Linear Algebra (three semester hours)	MATH 4110	Introduction to Abstract Algebra	3
<b>Content Knowledge Area - Total Semester Hours</b>			<b>36</b>

The Department of Elementary and Secondary Education does not discriminate on the basis of race, color, religion, gender, national origin, age, or disability in its programs and activities. Inquiries related to Department programs and to the location of services, activities, and facilities that are accessible by persons with disabilities may be directed to the Jefferson State Office Building, Office of the General Counsel, Coordinator – Civil Rights Compliance (Title VI/Title IX/504/ADA/Age Act), 6<sup>th</sup> Floor, 205 Jefferson Street, P.O. Box 480, Jefferson City, MO 65102-0480; telephone number 573-526-4757 or TTY 800-735-2966 email [civilrights@dese.mo.gov](mailto:civilrights@dese.mo.gov).

\*Required courses

\*\*1 credit hour is equivalent to 35 contact hours