



MATHEMATICS, GRADES 9-12 - MAT

EDUCATOR PREPARATION PROGRAM NAME
LINDENWOOD UNIVERSITY

EDUCATOR PREPARATION PROGRAM CODE
018759

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	EDU 52110	Middle School/High School Classroom Teaching and Technology	3
b. Instructional Strategies and Techniques in Content Area Specialty	EDU 53531	Secondary Methods of Teaching Mathematics	3
c. Assessment, Student Data, and Data-Based Decision-Making	EDU 58404	Advanced Measurement and Evaluation to Enhance Learning	3
d. Strategies for Content Literacy	EDU 58700 OR EDU 50700 OR EDU 50710 OR EDU 50705	Reading/Writing Across the Curriculum OR Reading in the Content Area OR Content Literacy for Diverse Learners OR Methods of Teaching Reading in the Content Areas	3 3 3 3
e. Critical Thinking and Problem Solving	EDU 52110 EDU 54310	Middle School/High School Classroom Teaching and Technology Middle School/High School Differentiation and Classroom Management	3 3
f. English Language Learning	EDU 50710	Content Literacy for Diverse Learners	3

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDU 50200	Psychology of Teaching and Learning	3
b. Psychology/Education of the Exceptional Child	EDU 54100	Education of the Exceptional Child	3
c. Differentiated Learning	EDU 52110 EDU 54310	Middle School/High School Classroom Teaching and Technology Middle School/High School Differentiation and Classroom Management	3 3
d. Classroom Management	EDU 52110 EDU 54310	Middle School/High School Classroom Teaching and Technology Middle School/High School Differentiation and Classroom Management	3 3
e. Cultural Diversity	EDU 50000 EDU 50710	Foundations of K-12 Education Content Literacy for Diverse Learners	3 3
f. Educational Psychology	EDU 50200	Psychology of Teaching and Learning	3

3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU 52110	Middle School/High School Classroom Teaching and Technology	3
	EDU 54310	Middle School/High School Differentiation and Classroom Management	3
	EDU 58404	Advanced Measurement and Evaluation to Enhance Learning	3
b. Legal/Ethical Aspects of Teaching	EDU 50000	Foundations of K-12 Education	3
	EDU 52110	Middle School/High School Classroom Teaching and Technology	3
	EDU 58404	Advanced Measurement and Evaluation to Enhance Learning	3
4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU 58700	Reading/Writing Across the Curriculum	3
b. Instructional Interventions for Students with Reading Deficits	EDU 50710	Content Literacy for Diverse Learners	3
Professional Requirements - Total Semester Hours			27
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)	EDU 50000	Foundations of K-12 Education	(1)
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU 54310	Middle School/High School Differentiation and Classroom Management	(1)
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU 60599	Field Experience: Student Teaching	12
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)	MTH 27100	Calculus I	5
	MTH 27200	Calculus II	5
2. Algebraic Structures (three semester hours)	MTH 32000	Algebraic Structures	3
3. Geometry (three semester hours)	MTH 33000	Geometry	3
4. Computer Science (three semester hours)	CSC 14400	Computer Science I	4
5. Electives from the above coursework (six semester hours)	MTH 30300	Calculus III	5
	MTH 31100	Differential Equations	3
	MTH 34500	Regression Analysis	3
	MTH 35100	Numerical Methods	3
	MTH 36100	Partial Differential Equations	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)	MTH 31300	History of Mathematics	3
b. Structure of the Real Number System (three semester hours)	MTH 28500	Introduction to Advanced Mathematics	3
c. Number Theory (three semester hours)	MTH 31600	Linear Algebra II	3
d. Completion of Calculus Sequence (three semester hours)	MTH 37000	Advanced Calculus	5
e. Probability and Statistics (three semester hours)	MTH 24100	Statistics for Natural Science	3
f. Computer Science (three semester hours)	CSC 10011 or	Intro to Computer Science: Python or	3
	CSC 10022	Intro to Computer Science: Javascript	3
g. Linear Algebra (three semester hours)	MTH 31500	Linear Algebra I	3
Content Knowledge Area - Total Semester Hours			36

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