



MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION
OFFICE OF EDUCATOR QUALITY – EDUCATOR PREPARATION

BIOLOGY, 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 53530	Secondary Methods of Teaching Science	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 Area	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. Biology Content Knowledge Area (Minimum of 35 semester hours)			
	Course Number	Course Title	Semester Hours
1. History/Philosophy of Science and Technology (Minimum of three semester hours)	One of the following: PHL 26500 SCI 21200	Philosophy of Science	3
		History of Science	3
2. Biology Coursework – Minimum of 20 semester hours which must include:			
a. Cell Biology	BSC 40400	Cell Biology	4
b. Plant Form and Function	BSC 32000	Plant Biology	4
c. Animal Form and Function	BSC 32400	Animal Biology	4
d. Genetics	BSC 40800	Genetics	4
e. Evolution	BSC 46400	Evolution	4
f. Biology Electives	BSC 24400	Introduction to Biological Diversity	4
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Chemistry	CHM 23000	General Chemistry I	4
b. Physics	PHY 25100	Introductory Physics I	4
c. Earth Science	ESC 10000 or ESC 10500 or GEO 11500	Physical Geology with Lab	4
		Survey of Geology Physical Geography	3 4
d. Environmental Science	BSC 24800 or BSC 46500	Introduction to Ecology and Evolution General Ecology	4
Content Knowledge Area - Total Semester Hours			35

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), 6th 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.