



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

**BIOLOGY, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME

College of the Ozarks

EDUCATOR PREPARATION PROGRAM CODE

004235

**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	EDU 213	The Call to Teach, An Introduction to Teaching	3
	EDU 333	Analysis of Curriculum and Methods of Teaching	3
	EDU 353	Instructional Interventions	HLE
	EDU 4213	Best Practices in Teaching Biology	3
b. Instructional Strategies and Techniques in Content Area Specialty	EDU 4202	Implementation of Secondary School Best Practices	HLE
	EDU 201	Classroom Observation	1
	EDU 211	Classroom Participation	1
	EDU 4213	Best Practices in Teaching Biology	HLE
c. Assessment, Student Data, and Data-Based Decision-Making	EDU 4202	Implementation of Secondary School Best Practices	HLE
	EDU 423	Educational Assessment and Data-Based Decision Making	3
d. Strategies for Content Literacy	EDU 393	Methods of Teaching Literacy in the Secondary School	3
e. Critical Thinking and Problem Solving	EDU 213	The Call to Teach, An Introduction to Teaching	HLE
	EDU 333	Analysis of Curriculum and Methods of Teaching	HLE
	EDU 4213	Best Practices in Teaching Biology	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
f. English Language Learning	EDU 303	Education of the Exceptional Learner	3

**2. Individual Student Needs**

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDU 203	Psychological Development of the Child and Adolescent	3
b. Psychology/Education of the Exceptional Child	EDU 303	Education of the Exceptional Learner	HLE
c. Differentiated Learning	EDU 303	Education of the Exceptional Learner	HLE
	EDU 333	Analysis of Curriculum and Methods of Teaching	HLE
	EDU 353	Instructional Interventions	HLE

	EDU 4213	Best Practices in Teaching Biology	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
d. Classroom Management	EDU 213	The Call to Teach, An Introduction to Teaching	HLE
	EDU 4213	Best Practices in Teaching Biology	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
e. Cultural Diversity	EDU 303	Education of the Exceptional Learner	HLE
	EDU 333	Analysis of Curriculum and Methods of Teaching	HLE
	EDU 4213	Best Practices in Teaching Biology	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
f. Educational Psychology	PSY 273	Educational Psychology	3
<b>3. Schools and the Teaching Profession</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
a. Consultation and Collaboration	EDU 303	Education of the Exceptional Learner	HLE
	EDU 4213	Best Practices in Teaching Biology	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
b. Legal/Ethical Aspects of Teaching	EDU 213	The Call to Teach, An Introduction to Teaching	HLE
	EDU 303	Education of the Exceptional Learner	HLE
	EDU 333	Analysis of Curriculum and Methods of Teaching	HLE
	EDU 4213	Best Practices in Teaching Biology	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
<b>4. Secondary Literacy (Minimum of 6 semester hours)</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
a. Reading and Writing in the Content Area	EDU 393	Methods of Teaching Literacy in the Secondary School	3
b. Instructional Interventions for Students with Reading Deficits	EDU 353	Instructional Interventions	3
<b>Professional Requirements - Total Semester Hours</b>			<b>29</b>
<b>B. Field and Clinical Experiences (Minimum of 10 semester hours)</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
1. Early Field Experiences (Minimum of 1 semester hour with a minimum of 30 clock hours)	EDU 201	Classroom Observation	HLE (20 clk hrs)
	EDU 211	Classroom Participation	HLE (20 clk hrs)
	EDU 213	The Call to Teach, An Introduction to Teaching	HLE (2 clk hrs)
2. Mid-Level Field Experiences (Minimum of 1 semester hour with a minimum of 45 clock hours)	EDU 303	Education of the Exceptional Learner	HLE (5 clk hrs)
	EDU 333	Analysis of Curriculum and Methods of Teaching	HLE (10 clk hrs)
	EDU 353	Instructional Interventions and Differentiated Learning	HLE (8 clk hrs)
	EDU 393	Methods of Teaching Literacy in the Secondary School	HLE (8 clk hrs)
	EDU 4202	Implementation of Secondary School Best Practices	2 (32 clk hrs)
3. Culminating Clinical Experiences (Minimum of 8 semester hours with a minimum of 12 weeks in 1 placement)	EDU 441	Classroom Leadership	1 (1 week)
	EDU 45V	Student Teaching	11 (13 weeks)
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>15+</b>
<b>C. Biology Content Knowledge Area (Minimum of 35 semester hours)</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
1. History/Philosophy of Science and Technology (Minimum of 3 semester hours)	SCE 333	The History and Philosophy of Science and Technology	3
2. Biology Coursework – Minimum of 20 semester hours which must include			

a. Cell Biology	BIO 233	Fundamentals of Cell Biology and Genetics	3
b. Plant Form and Function	BIO 124	General Botany	4
c. Animal Form and Function	BIO 114	General Zoology	4
d. Genetics	BIO 233	Fundamentals of Cell Biology and Genetics	HLE
e. Evolution	BIO 323	Evolution and Population Biology	3
f. Biology Electives	BIO 462 BIO 314 AND	Senior Thesis Ecology AND	2 4 AND
	BIO 375 BIO 434 OR BIO 164 BIO 174	Human Anatomy Human Physiology OR Human Anatomy & Physiology I Human Anatomy & Physiology II	5 4 OR 4 4
	BIO 384 OR BIO 444	<b>Choose one Molecular Biology Elective</b> Cell Biology OR Genetics	HLE OR HLE
3. Additional Science Coursework – Minimum of 12 semester hours which must include			
a. Chemistry	CHE 114 AND CHE 124 AND CHE 215	General Chemistry I AND General Chemistry II AND Organic Chemistry I	4 4 5
	PHY 214	College Physics I	4
	PHY 124 Or PHY 1024	Introduction to Geology Or Introduction to Geology	4
d. Environmental Science	BIO 314	Ecology	HLE
<b>Content Knowledge Area - Total Semester Hours</b>			<b>52-53</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).