



**CHEMISTRY, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME <b>COLLEGE OF THE OZARKS</b>	EDUCATOR PREPARATION PROGRAM CODE <b>004235</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 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 4223	Best Practices in Teaching Chemistry	3
	EDU 4202	Implementation of Secondary School Best Practices	HLE
b. Instructional Strategies and Techniques in Content Area Specialty	EDU 201	Classroom Observation	1
	EDU 211	Classroom Participation	1
	EDU 4223	Best Practices in Teaching Chemistry	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
c. Assessment, Student Data, and Data-Based Decision-Making	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	HLE
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 4223	Best Practices in Teaching Chemistry	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 4223	Best Practices in Teaching Chemistry	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 4223	Best Practices in Teaching Chemistry	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 4223	Best Practices in Teaching Chemistry	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 4223	Best Practices in Teaching Chemistry	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 4223	Best Practices in Teaching Chemistry	HLE
	EDU 4202	Implementation of Secondary School Best Practices	HLE
<b>4. Secondary Literacy (Minimum of six 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 Sem Hrs</b>
<b>B. Field and Clinical Experiences (Minimum of ten semester hours)</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
1. Early Field Experiences (Minimum of one 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 one 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)
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU 4202	Implementation of Secondary School Best Practices	2 (32 clk hrs)
	EDU 441 EDU 45V	Classroom Leadership Student Teaching	1 (1 week) 11 (13 weeks)
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>15+ Sem Hrs</b>

<b>C. Chemistry 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 three semester hours)	SCE 333	History and Philosophy of Science and Technology	3
2. Chemistry Coursework – Minimum of 20 semester hours which must include:			
a. Inorganic Chemistry	CHE 114 CHE 124	General Chemistry I General Chemistry II	4 4
b. Analytical Chemistry	CHE 334 CHE 344	Quantitative Chemical Analysis Instrumental Chemical Analysis	4 4
c. Organic Chemistry	CHE 215 CHE 225	Organic Chemistry I Organic Chemistry II	5 5
d. Physical Chemistry	CHE 314	Physical Chemistry I	4
e. Biochemistry	CHE 424 OR CHE 444	Biochemistry OR Biochemistry I	4
f. Chemistry Electives			
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Biology	BIO 134	Environment and Society	4
b. Physics	PHY 214 OR PHY 234	College Physics I  General Physics I	4
c. Earth Science	PHY 124 OR PHY 1024	Intro to Geology OR Intro to Geology	4
d. Environmental Science	BIO 134 OR BIO 1034 OR CHE 234	Environment and Society OR Introduction to Environmental Science OR Environmental Chemistry	HLE  OR 4
<b>Content Knowledge Area - Total Semester Hours</b>			<b>49</b>

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\*HLE-Hours Listed Elsewhere