



CHEMISTRY, GRADES 9-12 – ALTERNATIVE

EDUCATOR PREPARATION PROGRAM NAME COLUMBIA COLLEGE	EDUCATOR PREPARATION PROGRAM CODE 515712
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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 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	EDUC 505/300	Instructional Theory Techniques/Techniques of Teaching	.75
	EDUC 365	Teaching Middle School and Secondary Science	1.5
b. Instructional Strategies and Techniques in Content Area Specialty	EDUC 505/300	Instructional Theory Techniques/Techniques of Teaching	.75
	EDUC 365	Teaching Middle School and Secondary Science	1.5
c. Assessment, Student Data, and Data-Based Decision-Making	EDUC 580/322	Methods of Effective Academic Evaluation/Educational Measurement and Assessment	3
d. Strategies for Content Literacy	EDUC 516/338	Reading and Writing Across the Curriculum/Content Reading and Writing	0
e. Critical Thinking and Problem Solving	EDUC 505/300	Instructional Theory of Techniques/Techniques of Teaching	.75
	EDUC 375	Advanced Content Methods	1
f. English Language Learning	EDUC 542 Or EDUC 600	Law, Ethics, and Education Or Education Seminar for Teacher Candidates	0
	Or EDUC 520	Or Methods of Teaching English Learners	3
2. Individual Student Needs			
	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDUC 550 (or 391 and 392) or EDUC 396	Human Development (or Child Psychology and Adolescent Psychology) or Child and Adolescent Development	3
b. Psychology/Education of the Exceptional Child	EDUC 525/390	Educating Exceptional Individuals/Education and Psychology of the Exceptional Child	1.5
c. Differentiated Learning	EDUC 375	Advanced Content Methods	.75
	EDUC 525/390	Educating Exceptional Individuals/Education and Psychology of the Exceptional Child	0
d. Classroom Management	EDUC 563/311	Management of the Classroom Environment/Classroom and Behavior Management Techniques	1.5
e. Cultural Diversity	EDUC 555/SOCI 270	Development, Gender, and Cultural Differences/Minority Cultures and Relations	3
f. Educational Psychology	EDUC 560/230	Theories of Learning/Educational Psychology	3

3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDUC 525/390	Educating Exceptional Individuals/Education and Psychology of the Exceptional Child	1.5
b. Legal/Ethical Aspects of Teaching	EDUC 542/200	Law, Ethics, and Education	3
4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDUC 516/338	Reading and Writing Across the Curriculum/Content Reading and Writing	3
b. Instructional Interventions for Students with Reading Deficits	EDUC 578/376	Adolescent Literacy Theory and Techniques/Adolescent Literacy	3
Professional Requirements - Total Semester Hours			32.75 – 35.75
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)	EDUC 505/300	Instructional Theory Techniques/Techniques of Teaching	.75
	EDUC 563/311	Management of the Classroom Environment/Classroom and Behavior Management Techniques	1.5
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDUC 516/338	Reading and Writing Across the Curriculum/Content Reading and Writing	0
	EDUC 365	Teaching Middle School and Secondary Science	0
	EDUC 375	Advanced Content Methods	1
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDUC 698 or EDUC 422	Graduate Student Teaching or Student Teaching in the Secondary School	9 or 0
	or EDUC 425 or teaching two years on Provisional Certificate	or Undergraduate Student Teaching or teaching two years on Provisional Certificate	
Field and Clinical Experiences - Total Semester Hours			12.25 or 3.25
C. Chemistry 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)	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
2. Chemistry Coursework – Minimum of 20 semester hours which must include:			
a. Inorganic Chemistry	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
b. Analytical Chemistry	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
c. Organic Chemistry	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
d. Physical Chemistry	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
e. Biochemistry	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
f. Chemistry Electives	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0

3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Biology	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
b. Physics	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
c. Earth Science	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
d. Environmental Science	Passing score on the Chemistry MoCA	Passing score on the Chemistry MoCA	0
Content Knowledge Area - Total Semester Hours			0

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