



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

CHEMISTRY, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME PARK UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 511931
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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 351	Strategies for Higher-Order Learning	1.5
b. Instructional Strategies and Techniques in Content Area Specialty	EDS 395C	Methodology in the Content Area (Science)	3.0
c. Assessment, Student Data, and Data-Based Decision-Making	EDU 362	Observation, Assessment & Data-based Decision Making	3.0
d. Strategies for Content Literacy	EDS 358 EDU 384	Literacy in the Content Area Meeting Literacy Needs of All Learners	1.5 1.5
e. Critical Thinking and Problem Solving	EDU 351	Strategies for Higher-Order Learning	1.5
f. English Language Learning	EDU 345	Teaching Linguistically and Culturally Diverse Learners	2.5
2. Individual Student Needs			
	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PS 125	LifeSpan Development	1.5
b. Psychology/Education of the Exceptional Child	EDU 375	Exceptional Children & Differentiated Learning	1.5
c. Differentiated Learning	EDU 375	Exceptional Children & Differentiated Learning	1.5
d. Classroom Management	EDS 352	Building an Effective, Equitable Learning Environment	3.0
e. Cultural Diversity	EDU 345	Teaching Linguistically and Culturally Diverse Learners	0.5
	EDU 310	Issues in Diversity & World Cultures	3.0
f. Educational Psychology	EDU 203	Educational Psychology	1.5
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU 347	Family, School, and Community Collaboration	3.0
b. Legal/Ethical Aspects of Teaching	EDU 210	The School as a Social System	3.0

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4. Secondary Literacy (Minimum of 6 semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU 300 EDS 358	Writing in Education Reading and Writing in the Content Area	3.0 1.5
b. Instructional Interventions for Students with Reading Deficits	EDU 384	Meeting Literacy Needs in All Learners	1.5
Professional Requirements - Total Semester Hours			39
B. Field and Clinical Experiences (Minimum of 10 semester hours)			
	Course Number	Course Title	Semester Hours
1. Early Field Experiences (Minimum of 1 semester hour with a minimum of 30 clock hours)	EDS 360A	Field Experience I	2.0
2. Mid-Level Field Experiences (Minimum of 1 semester hour with a minimum of 45 clock hours)	EDS 360B	Field Experience II	2.0
3. Culminating Clinical Experiences (Minimum of 8 semester hours with a minimum of 12 weeks in 1 placement)	EDS 410	Field Experience III	12.0
Field and Clinical Experiences - Total Semester Hours			16
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 3 semester hours)	NS 241 OR NS 304	Philosophy and History of Science OR Science, Technology, and Society	3.0 OR 3.0
2. Chemistry Coursework – Minimum of 20 semester hours which must include			
a. Inorganic Chemistry	CH 107 w/lab	General Chemistry I w/lab	4.0
b. Analytical Chemistry	CH 328 w/lab	Analytical Chemistry w/lab	4.0
c. Organic Chemistry	CH 317 w/lab	Organic Chemistry I w/lab	4.0
d. Physical Chemistry	CH 108 w/lab	General Chemistry II w/lab	4.0
e. Biochemistry	CH 337 w/lab	Biochemistry w/lab	4.0
f. Chemistry Electives	CH 306 OR CH 318 w/lab OR CH 429 w/lab	Chemical Bibliography OR Organic Chemistry II w/lab OR Instrumental Analysis w/lab	3.0 OR 4.0 OR 4.0
3. Additional Science Coursework – Minimum of 12 semester hours which must include			
a. Biology	BIO 221 w/lab OR BIO 225 w/lab	Zoology w/lab OR Botany w/lab	4.0 OR 4.0
b. Physics	PY 155 w/lab	Concepts of Physics I w/lab	4.0
c. Earth Science	GO 141 w/lab	Physical Geology w/lab	4.0
d. Environmental Science	BI 111 OR GGP 120 OR BI 301	Environmental Biology OR Global Sustainability OR Human Ecology	4.0 OR 3.0 OR 3.0
Content Knowledge Area - Total Semester Hours			41-43