



CHEMISTRY, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME SOUTHEAST MISSOURI STATE UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 120120
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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	ED280	Introduction to Education as a Profession	0.5
	SE350	Pedagogy 1 Principles of Effective Teaching in Middle and Secondary	0.5
	SE365	Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology	0.5
	SE385	Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.25
	SE320	Techniques of Teaching Science	1
	EF400	Seminar in Educational Issues	.25
b. Instructional Strategies and Techniques in Content Area Specialty	SE320	Techniques of Teaching Science	1
	EF400	Seminar in Educational Issues	.25
c. Assessment, Student Data, and Data-Based Decision-Making	ED280	Introduction to Education as a Profession	.25
	SE350	Pedagogy 1 Principles of Effective Teaching in Middle and Secondary	.5
	SE365	Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology	.5
	SE385	Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.5
d. Strategies for Content Literacy	SE320	Techniques of Teaching Science	.25
	SE307	Content Literacy Methods for Middle and High School	Hours are counted under "Secondary Literacy"
e. Critical Thinking and Problem Solving	SE350	Pedagogy 1 Principles of Effective Teaching in Middle and Secondary	.25
	SE365	Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology	.25
	SE385	Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.25
	SE320	Techniques of Teaching Science	.5
f. English Language Learning	SE385	Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.25
	SE307	Content Literacy Methods for Middle and High School	Hours are counted under "Secondary Literacy"
	SE390	Instructional Interventions for Middle and High School Students with Special Literacy Needs	
2. Individual Student Needs			
	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PY222	Development of the Adolescent	3

b.	Psychology/Education of the Exceptional Child	EX390	Psychology and Education of the Exceptional Child	3
c.	Differentiated Learning	ED280 SE350 SE365 SE385	Introduction to Education as a Profession Pedagogy 1 Principles of Effective Teaching in Middle and Secondary Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.25 .25 .5 .5
d.	Classroom Management	SE350 SE365 SE385 EF400	Pedagogy 1 Principles of Effective Teaching in Middle and Secondary Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology Pedagogy 3 Advanced Methods of Middle and Secondary Teaching Seminar in Educational Issues	.5 .5 .5 .25
e.	Cultural Diversity	ED280 SE350 SE365 SE385	Introduction to Education as a Profession Pedagogy 1 Principles of Effective Teaching in Middle and Secondary Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.25 .5 .25 .25
f.	Educational Psychology	SE365 SE385	Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology Pedagogy 3 Advanced Methods of Middle and Secondary Teaching	.25 .25
3. Schools and the Teaching Profession				
		Course Number	Course Title	Semester Hours
a.	Consultation and Collaboration	ED280 SE350 SE365 SE385 EF400	Introduction to Education as a Profession Pedagogy 1 Principles of Effective Teaching in Middle and Secondary Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology Pedagogy 3 Advanced Methods of Middle and Secondary Teaching Seminar in Educational Issues	.25 .5 .25 .25 .25
b.	Legal/Ethical Aspects of Teaching	ED280 SE365	Introduction to Education as a Profession Pedagogy 2 Secondary School-Interdisciplinary Methods and Technology	.5 1
4. Secondary Literacy (Minimum of six semester hours)				
		Course Number	Course Title	Semester Hours
a.	Reading and Writing in the Content Area	SE307	Content Literacy Methods for Middle and High School	3
b.	Instructional Interventions for Students with Reading Deficits	SE390	Instructional Interventions for Middle and High School Students with Special Literacy Needs	3
Professional Requirements - Total Semester Hours				28
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)	ED280	Introduction to Education as a Profession	1
2.	Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	SE355 SE380	Field Experience Advanced Field Experience	3 3
3.	Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	SE465	Middle and Secondary Student Teaching Field Experience	12
Field and Clinical Experiences - Total Semester Hours				19
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)	UI422	Scientific Reasoning	3
2.	Chemistry Coursework – Minimum of 20 semester hours which must include:			
a.	Inorganic Chemistry	CH186	Foundations of Inorganic Chemistry	3

b. Analytical Chemistry	CH271	Foundations of Analytical Chemistry	5
c. Organic Chemistry	CH341/342 OR CH340	Foundations of Organic Chemistry with lab Essentials of Organic Chemistry	5
d. Physical Chemistry	CH306 OR CH311	Survey of Physical Chemistry Foundations of Physical Chemistry	3
e. Biochemistry	CH531/UI331	Foundations of Biochemistry	3
f. Chemistry Electives	CH187	Inorganic Chemistry and Qualitative Analysis Lab	2
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Biology	BS108 OR BS218	Biology for Living Bio Science: A Process Approach	3
b. Physics	PH120	Introductory Physics I	5
c. Earth Science	GO110 OR GO220 OR GO320 OR UI318	Physical Geology OR Meteorology OR Oceanography OR Earth Science: A Process Approach	3
d. Environmental Science	BI332 OR BS105 OR CH450/EV450 OR GO150 OR GO305 OR UI360 OR UI372	General Ecology OR Environmental Biology OR Environmental Chemistry OR Earth Science: Environmental Hazards OR Environmental Geoscience OR Recycling and Waste Management OR Earthquakes and Society	3
Content Knowledge Area - Total Semester Hours			38

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