



EARTH SCIENCE, GRADES 9-12 (MAT)

EDUCATOR PREPARATION PROGRAM NAME MISSOURI STATE UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 119119
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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	SFR797	Advanced Studies in Teaching and Learning	2(9)
b. Instructional Strategies and Techniques in Content Area Specialty	SFR797	Advanced Studies in Teaching and Learning	2(9)
c. Assessment, Student Data, and Data-Based Decision-Making	SFR797	Advanced Studies in Teaching and Learning	2(9)
d. Strategies for Content Literacy	RDG710	Content Area Literacy	.25(3)
e. Critical Thinking and Problem Solving	SFR797	Advanced Studies in Teaching and Learning	1(9)
f. English Language Learning	RDG710	Content Area Literacy	0(3)
	RDG640 or	Analysis and Correction of Difficulties in Literacy	.5(3)
	RDG574/624	Analysis and Correction of Difficulties in Adolescent Literacy	.5(3)
2. Individual Student Needs			
	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	PSY710	Psychology of Education	1.25(3)
b. Psychology/Education of the Exceptional Child	SPE715	Foundations in Special Education	3
c. Differentiated Learning	SFR797	Advanced Studies in Teaching and Learning	1(9)
	RDG710	Content Area Literacy	.25(3)
	RDG640 or	Analysis and Correction of Difficulties in Literacy	0(3)
	RDG574/624	Analysis and Correction of Difficulties in Adolescent Literacy	0(3)
	d. Classroom Management	SFR797	Advanced Studies in Teaching and Learning
	PSY710	Psychology of Education	.25(3)
	SEC783 or	Internship in Teaching I	1(3)
	SCI783	Internship in Teaching Secondary Science I	1(3)
e. Cultural Diversity	RDG560 or	Diversity Issues in Literacy and Content Area Instruction	2(3)
	RDG660 or		
	RDG665	Cultural Diversity in Literacy and Instruction: Classrooms and Community	2(3)
	SFR797	Advanced Studies in Teaching and Learning	.25(9)
f. Educational Psychology	PSY710	Psychology of Education	1.5(3)

3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	SFR797 RDG710 SEC784 or SCI784	Advanced Studies in Teaching and Learning Content Area Literacy Internship in Teaching II Internship in Teaching Secondary Science II	.25(9) 0(3) 1(10) 1(10)
b. Legal/Ethical Aspects of Teaching	SFR797	Advanced Studies in Teaching and Learning	.25(9)
4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	RDG710 RDG560 or RDG660 or RDG665	Content Area Literacy Diversity Issues in Literacy and Content Area Instruction Cultural Diversity in Literacy and Instruction: Classrooms and Community	2.5(3) .5(3) .5(3)
b. Instructional Interventions for Students with Reading Deficits	RDG640 or RDG574/624 RDG560 or RDG660 or RDG665	Analysis and Correction of Difficulties in Literacy Analysis and Correction of Difficulties in Adolescent Literacy Diversity Issues in Literacy and Content Area Instruction Cultural Diversity in Literacy and Instruction: Classrooms and Community	2.5(3) 2.5(3) .5(3) .5(3)
Professional Requirements - Total Semester Hours			26
B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number	Course Title	Semester Hours
a. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	SEC783 or SCI783	Internship in Teaching I Internship in Teaching Secondary Science I	1(3) 1(3)
b. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	SEC783 or SCI783	Internship in Teaching I Internship in Teaching Secondary Science I	1(3) 1(3)
c. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	SEC784 or SCI784	Internship in Teaching II Internship in Teaching Secondary Science II	9(10) 9(10)
Field and Clinical Experiences - Total Semester Hours			11
C. Earth Science Content Knowledge Area (Minimum of 35 semester hours)			
	Course Number	Course Title	Semester Hours
1. History/Philosophy of Science and Technology (three semester hours)	SCI505	Intellectual Foundations of Science and Technology	3
2. Earth Science Coursework – Minimum of 20 semester hours which must include:			
a. Astronomy	AST115	Basic Astronomy/Lab	4
b. Meteorology	GRY135	Principles of Weather and Climate	4
c. Geology/Physical Geography	GLG110	Principles of Geology	4
d. Earth Science Electives	GLG314 GLG318 GLG412 GRY348 GLG171	Historical Geology Physical Oceanography Field Geology of the Mid-Continent Region Geomorphology Environmental Geology	5 3 4 3 3
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Chemistry	CHM116/117 or CHM160/161	Fundamentals of Chemistry/Lab General Chemistry I/Lab	5 5
b. Biology	BIO101/111	Biology in Your World/Lab	4
c. Physics	PHY100	Survey of Physics/Lab	4
d. Environmental Science	GRY351	Conservation of Natural Resources	3
Content Knowledge Area - Total Semester Hours			MAT=49

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