

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

MASTER OF ARTS IN TEACHING (MAT) 9-12 UNIFIED SCIENCE: CHEMISTRY

EDUCATOR PREPARATION PROGRAM NAME

EDUCATOR PREPARATION PROGRAM CODE

MISSOURI STATE UNIVERSITY

119119

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 Gale Hairston, 573/751-1668 or DESE.MoSPETransition@dese.mo.gov

A. Professional Requirements (Minimum of 26 semester hours)						
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 RDG574 or RDG640	Content Area Literacy Analysis and Correction of Difficulties in Literacy	0(3) .5(3)			
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)			
	RDG574 or RDG640	Analysis and Correction of Difficulties in Literacy	0(3)			
d.Classroom Management	SFR797	Advanced Studies in Teaching and Learning	.25(9)			
	PSY710	Psychology of Education	.25(3)			
a Cultural Divaratty	SEC783 RDG560 or	Internship in Teaching I Diversity Issues in Literacy and Content Area	1(3)			
e.Cultural Diversity	RDG560 or	Instruction	2(3)			
	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)			
Schools and the Teaching Profession		, , , , , , , , , , , , , , , , , , , ,	- \ - \			
, , , , , , , , , , , , , , , , , , ,	Course Number	Course Title	Semester Hours			
a.Consultation and Collaboration	SFR797	Advanced Studies in Teaching and Learning	.25(9)			
	RDG710	Content Area Literacy	0(3)			
	SEC784	Internship in Teaching II	1(10)			
b. Legal/Ethical Aspects of Teaching	SFR797	Advanced Studies in Teaching and Learning	.25(9)			

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	Occoridai	ry Literacy (Minimum of six semester	nours)		Ca
			Course Number	Course Title	Semester Hours
	a. Rea	iding and Writing in the Content Area	RDG710 RDG560 or RDG660 or	Content Area Literacy Diversity Issues in Literacy and Content Area Instruction	2.5(3) .5(3)
			RDG665	Cultural Diversity in Literacy and Instruction: Classrooms and Community	.5(3)
		ructional Interventions for Students with Iding Deficits	RDG574 or RDG640 RDG560 or RDG660	Analysis and Correction of Difficulties in Literacy Diversity Issues in Literacy and Content Area Instruction	2.5(3) .5(3)
			or RDG665	Cultural Diversity in Literacy and Instruction: Classrooms and Community	.5(3)
				Requirements - Total Semester Hours	26
B. Fie	eld and C	linical Experiences (Minimum of ter	n semester hours)		
			Course Number	Course Title	Semester Hours
		y Field Experiences (Minimum of one lester hour with a minimum of 30 clock rs)	SEC783	Internship in Teaching I	1(3)
	one	-Level Field Experiences (Minimum of semester hour with a minimum of 45 k hours)	SEC783	Internship in Teaching I	1(3)
	c. Culr of e	minating Clinical Experiences (Minimum ight semester hours with a minimum of weeks in one placement)	SEC784	Internship in Teaching II	9(10)
<u> </u>				cal Experiences - Total Semester Hours	11
C. L	Jnitied Sc	ience: Chemistry Content Knowled			Semester
			Course Number	Course Title	Hours
1.	(three se	hilosophy of Science and Technology mester hours)	SCI505	Intellectual Foundations of Science and Technology	3
2.		- six semester hours which must include:			
		logy with lab any with lab	BIO121	General Biology I	4
3.	b. Bota	anv with lan	BIO122	General Biology II	
					4
٠.		y with labs (six semester hours)	CHM160	General Chemistry I	4
٠.			CHM160 CHM161	General Chemistry I General Chemistry I Lab	4 1
٠.			CHM160	General Chemistry I General Chemistry I Lab General Chemistry II	4 1 3
4.	Chemistr		CHM160 CHM161 CHM170	General Chemistry I General Chemistry I Lab	4 1
_	Chemistr	y with labs (six semester hours)	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and	4 1 3 0(1) 4 4
_	Chemistr Physics v	y with labs (six semester hours)	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or	4 1 3 0(1) 4 4
4.	Physics v Earth Sciinclude:	with labs (six semester hours) with labs (six semester hours)	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II	4 1 3 0(1) 4 4 5 5
4.	Physics v Earth Sciinclude:	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology	4 1 3 0(1) 4 4 5 5
4.	Physics v Earth Sci include: a. Geo	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology	4 1 3 0(1) 4 4 5 5
4. 5.	Physics v Earth Sci include: a. Gec	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must blogy eorology	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate	4 1 3 0(1) 4 4 5 5 5
4.	Physics v Earth Sci include: a. Gec b. Met Environm Additiona	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must blogy eorology nental Science (three semester hours) al Chemistry coursework – 20 semester	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology	4 1 3 0(1) 4 4 5 5
4.5.6.	Physics of	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must blogy eorology hental Science (three semester hours)	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate	4 1 3 0(1) 4 4 5 5 5
4.5.6.	Physics of	with labs (six semester hours) with labs (six semester hours) sience – six semester hours which must blogy eorology nental Science (three semester hours) al Chemistry coursework – 20 semester sich must include:	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135 CHM460 CHM201/202 or CHM342 and CHM343	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate Environmental Chemistry: Water and Land	4 1 3 0(1) 4 4 5 5 5
4.5.6.	Physics of	with labs (six semester hours) with labs (six semester hours) sience – six semester hours which must blogy eorology nental Science (three semester hours) al Chemistry coursework – 20 semester sich must include:	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135 CHM460 CHM201/202 or CHM342 and CHM343 or CHM342 and	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate Environmental Chemistry: Water and Land Essentials of Organic Chemistry/Lab Organic Chemistry I and Organic Chemistry II Organic Chemistry I and	4 1 3 0(1) 4 4 5 5 5 5 4 3 2(4) 3
4.5.6.	Physics v Earth Sci include: a. Gec b. Met Environm Additiona hours wh a. Org	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must blogy eorology nental Science (three semester hours) al Chemistry coursework – 20 semester lich must include: anic Chemistry	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135 CHM460 CHM201/202 or CHM342 and CHM343 or CHM342 and CHM344	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate Environmental Chemistry: Water and Land Essentials of Organic Chemistry/Lab Organic Chemistry I and Organic Chemistry II Organic Chemistry II	4 1 3 0(1) 4 4 5 5 5 5 4 3 2(4) 3
4.5.6.	Earth Sci include: a. Geo b. Met Environm Additiona hours wh a. Org	with labs (six semester hours) with labs (six semester hours) sience – six semester hours which must blogy eorology nental Science (three semester hours) al Chemistry coursework – 20 semester sich must include:	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135 CHM460 CHM201/202 or CHM342 and CHM343 or CHM342 and	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate Environmental Chemistry: Water and Land Essentials of Organic Chemistry/Lab Organic Chemistry I and Organic Chemistry II Organic Chemistry I and	4 1 3 0(1) 4 4 5 5 5 5 4 3 2(4) 3
4.5.6.	Earth Sci include: a. Gec b. Met Environm Additiona hours wh a. Org b. Phy c. Qua	with labs (six semester hours) with labs (six semester hours) ience – six semester hours which must blogy eorology nental Science (three semester hours) al Chemistry coursework – 20 semester iich must include: anic Chemistry	CHM160 CHM161 CHM170 CHM171 PHY123 and PHY124 or PHY203 and PHY204 Choose one GLG110 GLG171 GRY135 CHM460 CHM201/202 or CHM342 and CHM343 or CHM342 and CHM344 CHM505	General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab Introduction to Physics I and Introduction to Physics II or Foundations of Physics I and Foundations of Physics II Choose one (1) Principles of Geology Environmental Geology Principles of Weather and Climate Environmental Chemistry: Water and Land Essentials of Organic Chemistry/Lab Organic Chemistry I and Organic Chemistry II Organic Chemistry II Fundamentals of Physical Chemistry	4 1 3 0(1) 4 4 5 5 5 5 4 3 2(4) 3

f. Advanced Analysis	CHM435	Investigations in Chemistry for Teachers	1
·	CHM463	Environmental Analysis	0(1)
	Choose one	Choose one (1)	
	CHM201	Essentials of Organic Chemistry or	0(3-5)
	CHM342	Organic Chemistry I	0(5)
g. Environmental Chemistry	CHM463	Environmental Analysis	1
Content Knowledge Area - Total Semester Hours			