

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

## **MATHEMATICS, GRADES 9-12**

CENTR	REPARATION PROGRAM NAME	EDUCATOR PREPARATION PROGRAM CODE 630984							
INSTRUC	TIONS								
Please co	mplete Educator Preparation Program (EPP	) Name & EPP Code	above						
10000 00									
Certificatio	on Requirements:	•							
• (	Course Number – List the course number(s)	for the course(s) or g	roups of competencies that align with the spe	ecific section c					
• (	Course Title – List the course title(s) for the c	ourse(s) or groups of	f competencies that align with the specific set	ction of the					
r	<ul> <li>Semester Hours – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest</li> </ul>								
• 5									
te ti	enth) to indicate partial use of a course to m	eet a requirement.	ne total number of semester hours must mee	et or exceed					
		5015.							
Email the	completed cover sheet, curriculum matrix, a	nd advising/program	information to DESE.MoSPETransition@des	<u>e.mo.gov</u> on					
or before t	the date established in the Transition Plan.								
DUESTIO	NS: Contact Educator Preparation, 573/751	-1668 or DESE MoS	PETransition@dese.mo.gov						
A. Profe	ssional Requirements (Minimum of 26 se	mester hours)							
1. C	Content Planning and Delivery		1	Somostor					
		Course Number	Course Title	Hours					
а	. Curriculum and Instructional Planning	ED370MA	Teaching Methods in the Content Area	0					
b	. Instructional Strategies and Techniques in Content Area Specialty	ED370	Teaching Methods in the Content Area	3					
С	Assessment, Student Data, and Data-Based	ED370MA	Teaching Methods in the Content Area	0					
4	Decision-Making	ED453	Education as a Profession	0					
u e	Critical Thinking and Problem Solving	ED471 ED453	Education as a Profession	0					
f.	English Language Learning	ED101 ED471	Foundations of Education, Diversity, and ELL Reading & Writing in the Content Area	2					
		LDHI	Roading a Whiting in the Content / tod	0					
2. Ir	ndividual Student Needs								
		Course Number	Course Title	Semester Hours					
а	. Psychological Development of the Child and Adolescent	Course Number PY223	Course Title Developmental Psychology	Semester Hours 3					
a b	<ul> <li>Psychological Development of the Child and Adolescent</li> <li>Psychology/Education of the Exceptional Child</li> </ul>	Course Number PY223 PY342	Course Title           Developmental Psychology           Psychology of the Exceptional Child	Semester Hours 3 2					
a b c	<ul> <li>Psychological Development of the Child and Adolescent</li> <li>Psychology/Education of the Exceptional Child</li> <li>Differentiated Learning</li> </ul>	Course Number PY223 PY342 ED370MA DY342	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Daughter of the Exceptional Child	Semester Hours 3 2 0					
a b c	Psychological Development of the Child and Adolescent     Psychology/Education of the Exceptional Child     Differentiated Learning     Classroom Management	Course Number PY223 PY342 ED370MA PY342 ED313	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management	Semester Hours 3 2 0 0 3					
a b c d	<ul> <li>Psychological Development of the Child and Adolescent</li> <li>Psychology/Education of the Exceptional Child</li> <li>Differentiated Learning</li> <li>Classroom Management</li> </ul>	Course Number PY223 PY342 ED370MA PY342 ED313 ED370MA	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area	Semester Hours 3 2 0 0 0 3 0					
a b c d	<ul> <li>Psychological Development of the Child and Adolescent</li> <li>Psychology/Education of the Exceptional Child</li> <li>Differentiated Learning</li> <li>Classroom Management</li> <li>Cultural Diversity</li> </ul>	Course Number PY223 PY342 ED370MA PY342 ED313 ED370MA ED101 ED453	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Foundations of Education, Diversity, and ELL           Education as a Profession	Semester Hours 3 2 0 0 0 3 0 0 0 0					
a b c d e f.	Psychological Development of the Child and Adolescent     Psychology/Education of the Exceptional Child     Differentiated Learning     Classroom Management     Cultural Diversity     Educational Psychology	Course Number PY223 PY342 ED370MA PY342 ED313 ED370MA ED101 ED453 PY210	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Foundations of Education, Diversity, and ELL           Education as a Profession           Educational Psychology	Semester Hours 3 2 0 0 0 3 0 0 0 0 0 0 3 3					
a b c d e f. 3. S	<ul> <li>Psychological Development of the Child and Adolescent</li> <li>Psychology/Education of the Exceptional Child</li> <li>Differentiated Learning</li> <li>Classroom Management</li> <li>Cultural Diversity</li> <li>Educational Psychology</li> <li>Schools and the Teaching Profession</li> </ul>	Course Number PY223 PY342 ED370MA PY342 ED313 ED370MA ED101 ED453 PY210	Course TitleDevelopmental PsychologyPsychology of the Exceptional ChildTeaching Methods in the Content AreaPsychology of the Exceptional ChildClassroom & Behavior ManagementTeaching Methods in the Content AreaFoundations of Education, Diversity, and ELLEducation as a ProfessionEducational Psychology	Semester Hours 3 2 0 0 0 3 0 0 0 0 0 0 3 3					
a b c d e <u>f.</u> 3. S	Psychological Development of the Child and Adolescent     Psychology/Education of the Exceptional Child     Differentiated Learning     Classroom Management     Cultural Diversity     Educational Psychology     Schools and the Teaching Profession	Course Number PY223 PY342 ED370MA PY342 ED313 ED370MA ED101 ED453 PY210 Course Number	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Poundations of Education, Diversity, and ELL           Education as a Profession           Educational Psychology	Semester Hours 3 2 0 0 0 3 0 0 0 0 3 3 5 Semester Hours					
a b c d e f. 3. S	Psychological Development of the Child and Adolescent     Psychology/Education of the Exceptional Child     Differentiated Learning     Classroom Management     Cultural Diversity     Educational Psychology     Schools and the Teaching Profession     Consultation and Collaboration	Course Number           PY223           PY342           ED370MA           PY342           ED313           ED370MA           ED101           ED453           PY210	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Poundations of Education, Diversity, and ELL           Educational Psychology           Course Title           Education as a Profession	Semester Hours           3           2           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0					
a b c d e f. 3. S	Psychological Development of the Child and Adolescent     Psychology/Education of the Exceptional Child     Differentiated Learning     Classroom Management     Cultural Diversity     Educational Psychology     Schools and the Teaching Profession     Consultation and Collaboration	Course Number           PY223           PY342           ED370MA           PY342           ED313           ED370MA           ED101           ED453           PY210           Course Number           ED453           ED101	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Poundations of Education, Diversity, and ELL           Education as a Profession           Education as a Profession           Education as a Profession           Education as a Profession	Semester Hours           3           2           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0					
a b c d e f. 3. S f. 3. S b	Psychological Development of the Child and Adolescent     Psychology/Education of the Exceptional Child     Differentiated Learning     Classroom Management     Cultural Diversity     Educational Psychology     Schools and the Teaching Profession     Consultation and Collaboration     Legal/Ethical Aspects of Teaching	Course Number           PY223           PY342           ED370MA           PY342           ED313           ED370MA           PY342           D011           ED453           PY210           Course Number           ED453           ED101           ED453	Course Title           Developmental Psychology           Psychology of the Exceptional Child           Teaching Methods in the Content Area           Psychology of the Exceptional Child           Classroom & Behavior Management           Teaching Methods in the Content Area           Psychology of Education, Diversity, and ELL           Education as a Profession           Education as a Profession           Foundations of Education, Diversity, and ELL           Education as a Profession           Foundations of Education, Diversity, and ELL           Education as a Profession	Semester Hours           3           2           0					

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4. Secondary Literacy (Minimum of six semester hours)								
			Course Number	Course Title	Semester Hours			
		a. Reading and Writing in the Content Area	ED471	Reading & Writing in the Content Area	3			
		<ul> <li>Instructional Interventions for Students with Reading Deficits</li> </ul>	ED470	Instructional Interventions for Students with Reading Deficits	3			
		0	Professiona	I Requirements - Total Semester Hours	26			
В.	B. Field and Clinical Experiences (Minimum of ten semester hours)							
			Course Number	Course Title	Semester Hours			
	1.	Early Field Experiences (Minimum of one	ED102 (18 hours)	Field Experience I	1			
		semester hour with a minimum of 30 clock hours)	ED105 (12 hours)	Field Experience II	0			
	2.	Mid-Level Field Experiences (Minimum of one	PY343 (18 hours)	Psychology of the Exceptional Child (Prac)	1			
		semester hour with a minimum of 45 clock hours)	ED370MA (15 hrs)	Teaching Methods in the Content Area	0			
			ED471 (12 hours)	Reading & Writing in the Content Area	0			
	3.	Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12	ED462 (16 week placement)	Supervised Student Teaching	10			
		weeks in one placement)	, ,					
	Field and Clinical Experiences - Total Semester Hours							
С.	Ma	thematics Content Knowledge Area (Minimu	Im of 36 semester h	ours)				
			Course Number	Course Title	Semester			
			Course Mulliber	Course fille	Hours			
	1.	Calculus and Analytical Geometry (nine semester	MA118	Calculus & Analytic Geometry I	5			
		hours)	MA209	Calculus & Analytic Geometry II (5 hours)	4 (1 below)			
	2.	Algebraic Structures (three semester hours)	MA317	Modern Algebra (4 hours)	3 (1 below)			
	3.	Geometry (three semester hours)	MA319	College Geometry (4 hours)	3 (1 below)			
	4.	Computer Science (three semester hours)	MA/CS320	Computers in the Math Classroom	3			
			(this number may change in the fall)					
	5.	Electives from the above coursework (six	MA209	Calculus & Analytic Geometry II	1			
		semester hours)	MA317	Modern Algebra	1			
			MA319	College Geometry	1			
			Choose 1:		3			
			MA318 or	Matrices & Linear Algebra or				
			MAZUZ	Elements in Geometry				
	6.	Additional Mathematics coursework – Minimum of			12 Hours from			
	0.	12 semester hours to include at least three of the			courses below			
		following areas of Mathematics:						
		a. History of Mathematics (three semester	MA303	History of Mathematics	3			
		hours)						
		semester hours)			-			
		c. Number Theory (three semester hours)	MA207	Discrete Mathematics	3			
		d. Completion of Calculus Sequence (three semester hours)	MA308	Calculus & Analytic Geometry III	5			
		e. Probability and Statistics (three semester	MA105	Elementary Statistics	3			
		hours)	MA305	Statistics II	3			
		f. Computer Science (three semester hours)	One of the following:		0			
			05172		3			
1			CS216	Web Programming	ວ ຊ			
1			CS231	Scientific Computer Programming	3			
1			CS236	Programming in Visual Basic	3			
			CS237	Programming with Java	3			
			CS271	.NET II	3			
1			CS272	Survey of Programming Languages	3			
1			CS275	Mobile Application Development	3			
			053/1	Concepts of MIS	3			
			000/0	Data Structures and Algorithms	3			
		g. Linear Algebra (three semester hours)	MA318 (If not used	Matrices & Linear Algebra	3			
	as Elective above)							
	Content Knowledge Area - Total Semester Hours 36							