



MATHEMATICS, GRADES 5-9

EDUCATOR PREPARATION PROGRAM NAME Columbia College	EDUCATOR PREPARATION PROGRAM CODE 515712
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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 45 semester hours)

1. Content Planning and Delivery

	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	EDUC 300 EDUC 360	Techniques of Teaching Teaching Mathematics in Middle and Secondary School	.75 1
b. Instructional Strategies and Techniques in Content Area Specialty	EDUC 300 EDUC 360	Techniques of Teaching Teaching Mathematics in Middle and Secondary School	.75 1
c. Assessment, Student Data, and Data-Based Decision-Making	EDUC 322	Educational Measurement and Assessment	3
d. Strategies for Content Literacy	EDUC 338	Content Reading and Writing	0
e. Critical Thinking and Problem Solving	EDUC 300 EDUC 375	Techniques of Teaching Advanced Content Methods	.75 .75
f. English Language Learning	or EDUC 400 or EDUC 220	or Senior Seminar or Methods of Teaching English Learners	0 3

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDUC 391 and 230 or EDUC 392 and 230 or EDUC 396	Child Psychology and Educational Psychology or Adolescent Psychology and Educational Psychology or Child and Adolescent Development	3
b. Psychology/Education of the Exceptional Child	EDUC 390	Education and Psychology of the Exceptional Child	1
c. Differentiated Learning	EDUC 375 EDUC 390	Advanced Content Methods Education and Psychology of the Exceptional Child	.75 1
d. Classroom Management	EDUC 311	Classroom and Behavior Management Techniques	1.5
e. Cultural Diversity	SOCI 270	Minority Cultures and Relations	3
f. Educational Psychology	EDUC 230	Educational Psychology	3

3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDUC 100 EDUC 390	Introduction to Education Education and Psychology of the Exceptional Child	1.5 1
b. Legal/Ethical Aspects of Teaching	EDUC 200	Law, Ethics, and Education	3
c. Middle School Philosophy and Organization	EDUC 326	Middle School Methods	3

4. Middle School Literacy (Minimum of 6 semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDUC 338 EDUC 375	Content Reading and Writing Advanced Content Methods	3 .75
b. Instructional Interventions for Students with Reading Deficits	EDUC 376	Adolescent Literacy	3
5. Content Knowledge for Teaching (Minimum of 24 semester hours with appropriate distribution in one of the following certificate subject areas)			
	Course Number	Course Title	Semester Hours
a. Agricultural Education			
b. Business Education			
c. Technology and Engineering			
d. Language Arts			
e. Mathematics	MATH/EDUC 102	Teaching and Learning Elementary Mathematics from an Advanced Perspective	3
	MATH 150	College Algebra	3
	MATH 155	Algebraic Reasoning for Elementary and Middle School Teachers	3
	MATH 165	Geometric Reasoning for Elementary and Middle School Teachers	3
	MATH 201	Calculus and Analytic Geometry I	5
	MATH 250	Statistics I	3
	Choose two courses from:	Choose two courses from:	6
	MATH 110	Quantitative Reasoning	
	MATH 170	Finite Mathematics	
	MATH 180	Precalculus	
	MATH 215	Differential Calculus	
	MATH 222	Calculus and Analytic Geometry	
	MATH 225	Discrete Mathematics I	
	MATH 226	Integral Calculus I	
	MATH 235	Integral Calculus II	
	MATH 251	Statistics II	
	MATH 300	Multivariate Calculus	
	MATH 303	Linear Algebra	
	MATH 304	Introduction to Abstract Algebra	
	MATH 305	Number Theory	
	MATH 325	Discrete Mathematics II	
	MATH 330	History of Mathematics	
	MATH 331	Foundations of Geometry	
	MATH 338	Mathematical Statistics and Probability	
	MATH 340	Introduction to Probability Theory	
	MATH 362	Introduction to Automata Theory	
	MATH 370	Languages and Computation	
	MATH 371	Differential Equations	
	MATH 380	Introduction to Complex Variables	
	MATH 399	Advanced Calculus	
	MATH 451	Math Teaching Internship	
		Introduction to Cryptography and Computer Security	
	MATH 493	Senior Seminar in Mathematics for Teachers,	
	MATH 494	Senior Seminar in Mathematics	
f. Science			
g. Social Science			
h. Speech/Theatre			
Professional Requirements - Total Semester Hours			62.5 – 65.5
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)	EDUC 100	Introduction to Education	1.5
	EDUC 298	Field Experience	4
	EDUC 300	Techniques of Teaching	1
	EDUC 311	Classroom and Behavior Management Techniques	.75
2. Mid-Level Field Experiences (Minimum of 1 semester hour with a minimum of 45 clock hours)	EDUC 338	Content Reading and Writing	0
	EDUC 360	Teaching Mathematics in Middle and Secondary School	1
	EDUC 375	Advanced Content Methods	.75
3. Culminating Clinical Experiences (Minimum of 8	EDUC 424	Student Teaching in the Middle School	12

semester hours with a minimum of 12 weeks in 1 placement)	Or EDUC 425	Or Undergraduate Student Teaching	
Field and Clinical Experiences - Total Semester Hours			18.5

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