

**Undergraduate-Level Teacher Certification Checklist
(Undergrad-level Post-Baccalaureate)
SECONDARY MATH (Grades 9-12)**



Education department

**POST BACCALAUREATE STUDENTS ARE ONLY ELIGIBLE TO TAKE COURSES
REQUIRED FOR CERTIFICATION. NON-CERTIFICATION COURSES ARE NOT COVERED BY FINANCIAL AID.**

CONTENT AREA COURSEWORK FOR MATH

36 hrs minimum

Grade	Course #	Course Title	Cr Hrs
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Calculus and Geometry (9 hrs)

	MATH 201	Calculus and Analytical Geometry I	5
	MATH 222	Calculus and Analytical Geometry II	5

	MATH 150	College Algebra (<i>Algebraic Structures 3 hrs</i>) (<i>Optional courses for this category: MATH 303 – Linear Algebra [if not used below] or MATH 304 – Introduction to Abstract Algebra</i>)	3
	MATH 331	Foundations of Geometry (<i>Geometry 3 hrs</i>)	3
	Choose:	COSC 176 - Introduction to Computer Science or COSC 145 - Introduction to Python Programming (<i>Computer Science 3 hrs</i>)	3
	Electives:	Math Electives: 6 hours from the above listed categories. MATH 155 – Algebraic Reasoning for Elementary and Middle School Teachers (Recommended) MATH 165 – Geometric Reasoning for Elementary and Middle School Teachers (Recommended) MATH 180 – Precalculus MATH 215 – Differential Calculus MATH 226 – Integral Calculus I MATH 235 – Integral Calculus II MATH 304 – Introduction to Abstract Algebra MATH 380 – Advanced Calculus	6

Minimum twelve (12) hrs from at least three of the following areas:

	MATH 330	History of Mathematics (<i>History of Mathematics</i>)	3
	EDUC/MATH 102	Teaching and Learning Elementary Mathematics from an Advanced Perspective (<i>Structure of the Real/Number System</i>)	3
	MATH 305	Number Theory (<i>Number Theory 3 hrs</i>)	3
	MATH 300	Multivariate Calculus (<i>Completion of Calculus Sequence 3 hrs</i>)	3
	Choose:	MATH 250 - Statistics I Recommended , MATH 338 - Mathematical Statistics and Probability, MATH 340 – Introduction to Probability Theory (<i>Probability and Statistics 3 hrs</i>)	3
	COSC 240	Introduction to Programming (<i>Computer Science 3 hrs</i>)	3
	MATH 303	Linear Algebra (<i>Linear Algebra</i>)	3

NOTE: Specific courses are listed above as “recommended” because the knowledge gained in these courses will aid in passing the Missouri Content Assessment for Secondary Math.

Professional Education Coursework

Grade	Course #	Course Title	Cr Hrs	Field Experience (observation hrs) included
	SOCI 270	Diversity and Society	3	none
	EDUC 100	Introduction to Education	3	15 hrs
	EDUC 200	Law, Ethics, and Education	3	none
	EDUC 220	Methods of Teaching English Learners	3	none
	EDUC 230	Educational Psychology	3	none
	EDUC 300	Techniques of Teaching	3	15 hrs
	EDUC 390	Education & Psychology of the Exceptional Child	3	none
	Choose option	EDUC 396 – Child and Adolescent Development; or EDUC 391 - Child Psychology and EDUC 392 – Adolescent Psychology	3	none
Admission to the Teacher Certification Program (See Teacher Certification Program checklist)				
	EDUC 311	Classroom Management Techniques	3	15 hrs
	EDUC 322	Educational Measurement and Assessment	3	none
	EDUC 338	Content Reading and Writing	3	15 hrs
	EDUC 360	Teaching Mathematics in Middle and Secondary School	3	15 hrs
	EDUC 375	Advanced Content Methods	3	15 hrs
	EDUC 376	Adolescent Literacy	3	none
	EDUC 400	Senior Seminar	3	none
Approval for Student Teaching (See Student Teaching Checklist)				
	EDUC 425	Undergraduate Student Teaching	12	16 weeks
		Total Credit Hours	57	
Approval for DESE certification recommendation (See DESE Certification checklist)				

Retention Criteria:

- Complete at least 6 hours of professional education each year
- Complete Field Experiences and receive favorable evaluations from cooperating teachers and college supervisors
- Maintain a cumulative GPA of 3.0 or above in professional education courses and content area courses

Other requirements that must be completed prior to certification:

- Successful completion/passing of appropriate Content Area Assessment – MoCA
- Successful completion of program certification performance assessment - MEES

Other Requirements:

Post Baccalaureate certification students completing the FAFSA to receive financial aid for certification must complete the following questions on the 2023-24 FAFSA accordingly:

Question 26 – “5th year/other undergraduate”

Question 27 – “Teaching credential (nondegree program)”

Question 44 – “No”

You can do this online at: <https://studentaid.gov/h/apply-for-aid/fafsa>.