EDUCATION CERTIFICATION PROGRAM SECONDARY CHECKLIST MATH (Grades 9-12)



Education department

GENERAL EDUCATION 38 – 47 hrs

The general education component is to be completed according to Columbia College degree requirements. (Please refer to your entrance year catalog for specific degree requirements.)

LIBERAL ARTS AND SCIENCE DEGREE

40 - 63 hrs

It is recommended that students seeking this certification choose a major that has similar course requirements in the degree. Your academic advisor can help you with your choice of major.

Students must complete the degree requirements as set forth by Columbia College. Hours required for completion will vary depending on area chosen. (Please refer to your entrance year catalog for specific degree requirements.)

*NOTE: If completing a bachelor's degree in Math, specific math requirements listed in the Content Area section below are not required.

CONTENT AREA COURSEWORK FOR MATH*

33 hrs minimum

| Grade | Course # | Course Title | Cr Hrs |
|-------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| | Choose: | Algebra Choose from: MATH 150 - College Algebra, MATH 155 - Algebraic Reasoning for Elementary and Middle School Teachers, MATH 303 - Linear Algebra, or MATH 304 - Introduction to Abstract Algebra | 3 |
| | Choose: | Geometry Choose from: MATH 165 - Geometric Reasoning for Elementary and Middle School Teachers or MATH 331 - Foundations of Geometry | 3 |
| | MATH 180 | Trigonometry MATH 180 - Precalculus (using 1/2 of course here and 1/2 below) | 1.5 |
| | MATH 180 | Precalculus MATH 180 - Precalculus (using 1/2 of course here and 1/2 above) | 1.5 |
| | Choose: | Calculus Choose from: MATH 201 - Calculus and Analytical Geometry I, MATH 215 - Differential Calculus, MATH 222 - Calculus and Analytical Geometry II, MATH 226 - Integral Calculus I, MATH 235 - Integral Calculus II, MATH 300 - Multivariate Calculus, or MATH 380 - Advanced Calculus | 3 |
| | Choose: | Statistics Choose from: MATH 250 - Statistics I or MATH 338 - Mathematical Statistics and Probability | 3 |

Additional hours from the above categories to make up 24 hours

| Choose: | Choose from categories above: | 3 |
|---------|-------------------------------|---|
| Choose: | Choose from categories above: | 3 |
| Choose: | Choose from categories above: | 3 |

Math Electives Choose from the courses listed on the matrix (if not already taken above) to fulfill 33 hours of Math courses. (Contact advisor or Education Dept. Office for options.)

| Cho | oose: | Math Elective: | 3 |
|-----|-------|----------------|---|
| Cho | oose: | Math Elective: | 3 |
| Cho | oose: | Math Elective: | 3 |

PROFESSIONAL EDUCATION COURSEWORK

| 5/ nour |
|---------|
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| Grade | Course # | Course Title | Cr Hrs |
|-------|----------|-----------------------|-----------|
| | SOCI 270 | Diversity and Society | 3 |

[The College reserves the right to alter at any time requirements to meet state certification regulations.]

| EDUC 100 | Introduction to Education | 3 |
|---------------|------------------------------------------------------------------------------------------------------------------|----|
| EDUC 200 | Law, Ethics, and Education | 3 |
| EDUC 220 | Methods of Teaching English Learners | 3 |
| EDUC 230 | Educational Psychology | 3 |
| EDUC 300 | Techniques of Teaching | 3 |
| EDUC 311 | Classroom Management Techniques | 3 |
| EDUC 390 | Education & Psychology of the Exceptional Child | 3 |
| Choose option | EDUC 396 – Child and Adolescent Development; or EDUC 391 – Child Psychology and EDUC 392 – Adolescent Psychology | 3 |
| | Admission to the Teacher Certification Program (See Teacher Certification Program Checklist) | |
| EDUC 322 | Educational Measurement and Assessment | 3 |
| EDUC 338 | Content Reading and Writing | 3 |
| EDUC 360 | Teaching Mathematics in Middle and Secondary School | 3 |
| EDUC 375 | Advanced Content Methods | 3 |
| EDUC 376 | Adolescent Literacy | 3 |
| EDUC 400 | Senior Seminar | 3 |
| | Approval for Student Teaching (See Student Teaching checklist) | |
| EDUC 425 | Undergraduate Student Teaching | 12 |
| | Total Credit Hours | 57 |
| | Approval for DESE Certification recommendation (See DESE Certification checklist) | |

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 for certification that must be completed prior to graduation:

- Successful completion/passing of appropriate content assessment (must be passed prior to student teaching)
- Successful completion of program certification performance assessment MEES

*This is not a degree checklist Rev. 8/2024