

MATHEMATICS, M.ED.

Mathematics Proficiencies - MED MATH

| Code | Title | Hours |
|--|--------------------------------|-----------|
| Demonstrated mathematical proficiency is required for the MED Mathematics. Deficiencies will be addressed in your offer of admission. If you have met proficiency requirements, and this is not reflected as complete, your advisor should notify the College of Graduate and Professional Studies | | |
| Required Mathematics Proficiencies | | |
| Linear Algebra Proficiency Needed | | 4 |
| MATH 502 | Linear Algebra | |
| Probability Statistics Proficiency Needed | | 4 |
| MATH 503 | Probability and Stats for Tchr | |
| Modern Algebra Proficiency Needed | | 3 |
| MATH 504 | Modern Algebra for Teachers | |
| Transformational Geometry Proficiency Needed | | 4 |
| MATH 505 | Classical & Modern Geometry | |
| Real Analysis Proficiency Needed | | 3 |
| MATH 506 | Modern Analysis for Teachers | |
| Total Hours | | 18 |

MED Professional Core Requirements

| Code | Title | Hours |
|---|---------------------------------|----------|
| PROFESSIONAL CORE | | |
| Methods of Research or Statistical Methods I - Choose 1 of the following: | | 3 |
| EDFN 601 | Research Methods | |
| MATH 535 | Statistical Methods 1 | |
| Psychological Core Requirement - Choose 1 of the following: | | 3 |
| EDFN 545 | Advanced Educational Psychology | |
| PSYC 525 | Advanced Child Psychology | |
| PSYC 526 | Advanced Adolescent Psychology | |
| PSYC 625 | Human Growth and Development | |
| Philosophical Core Requirement - Choose 1 of the following: | | 3 |
| EDFN 511 | Comparative Education | |
| EDFN 590 | Social Foundation of Educ | |
| EDFN 603 | Philosophy of Education | |
| EDFN 604 | Education and Public Policy | |
| Total Hours | | 9 |

Major in Mathematics Education - MED

| Code | Title | Hours |
|--|--------------------------------|-------|
| No more than 2 courses numbered lower than 510 may count toward your major. A B- or better must be earned. | | |
| MATHEMATICS REQUIRED COURSES | | |
| MATH 603 and 604 are considered equivalent courses. Credit will not be given for both. | | |
| Required Math Courses - Choose 4 of the following: | | 12-15 |
| MATH 502 | Linear Algebra | |
| MATH 503 | Probability and Stats for Tchr | |
| MATH 504 | Modern Algebra for Teachers | |
| MATH 505 | Classical & Modern Geometry | |

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| MATH 506 | Modern Analysis for Teachers |
| MATH 520 | Logic and Foundations of Math |
| MATH 535 | Statistical Methods 1 |
| MATH 536 | Statistical Methods 2 |
| MATH 566 | Complex Variables |
| MATH 577 | Problems in Applied Math |
| MATH 592 | Graph Theory |
| MATH 642 | Linear Algebra |
| MATH 650 | Topics in Geometry |
| MATH 670 | Operations Research |
| MATH 675 | Numerical Analysis |
| MATH 683 | General Topology |
| MATH 691 | Combinatorics |
| MATH 693 | Number Theory |
| MATH 695 | Topics in Mathematics |
| MATH 696 | Independent Study |

Required Math Education Courses - Choose 3 classes from:

| | |
|----------------------------|--------------------------------|
| MATH 602 | Equity Issues in Math Ed |
| MATH 603 | History of Mathematics |
| MATH 604 | Ethnomathematics |
| MATH 610 | Problem Solving Seminar |
| MATH 611 | Learning Mathematics |
| MATH 613 | Elem/Sec Math Connections |
| Any MATH 614-617 course(s) | |
| MATH 672 | Math Modeling in Secondary Sch |
| MATH 679 | Technol in Secondary Schl Math |
| MATH 697 | Topics in Math Education |
| MATH 698 | Independent Study |

THESIS OR NON-THESIS REQUIREMENTS

| | |
|---|---------|
| undefined - Choose 1 of the following options 1-2: | 6 |
| Option 1. Non-Thesis Option - Mathematic Electives - Choose 6 hours from: | |
| Any MATH 510-698 course(s) | |
| Option 2. Thesis Option | |
| MATH 699 | Thesis: |

Field Experience

All students must complete a field experience through a math education thesis or a research project in math education.

Capstone Requirement

Comprehensive oral presentation required.

Total Hours 18-21