

BS Applied Mathematics: UTeach (*Major Code: 3224*)

Mathematics Courses (44hrs)



| | | | |
|--------------------------------------|--|----|--|
| MATH 1910/1911 | Calculus I/ Calculus I Lab | 4 | |
| MATH 1920/1921 | Calculus II/ Calculus II Lab | 4 | |
| MATH 2200 | Elementary Linear Algebra | 3 | |
| MATH 2450 | Intro to Differential and Difference Equations | 3 | |
| MATH 2300 | Mathematical Models, Functions and Applications (Fall and Spring only) | 3 | |
| MATH 2550 | Multivariable Calculus | 3 | |
| MATH 3000 | Foundations of Mathematics | 3 | |
| MATH 3510 | Fundamental Concepts in Analysis (Fall semesters only) | 3 | |
| MATH 3250 <i>or</i> 4200 | Intro to Modern Algebra (Fall semesters only) Linear Algebra & Matrix Theory (Spring semesters only) | 3 | |
| MATH 4010 | Basic Concepts of Geometry (Spring semesters only) | 3 | |
| MATH 3100+9 <i>or</i> 4100/4110+6 | Applied Statistics (and 9hrs of electives) <i>or</i> Introduction to Probability and Statistics/Mathematical Statistics (and 6hrs of electives) (4100 is offered in the Fall and 4110 is offered in the Spring) <i>*All Math electives must be taken at the 3000-4000 level</i> | 12 | |

Related Courses (18hrs)

| | | | |
|----------------------------------|--|---|--|
| PHYS 2300/2300L | Principles of Physics: Mechanics and Heat/Lab | 4 | |
| PHYS 2310/2310L | Principles of Physics: Electricity and Magnetism/Lab | 4 | |
| PSYCH 1010 | Introduction to Psychology | 3 | |
| CPSC 1100 | Fundamentals of Computer Science | 4 | |
| CPSC 1000 <i>or</i> EDUC 4170 | Introduction to Computing <i>or</i> Technology and Learning | 3 | |

General Education (beyond what is above) (24hrs)

| | | | |
|-----------|---|---|--|
| ENGL 1010 | Rhetoric & Composition I | 3 | |
| ENGL 1020 | Rhetoric & Composition II | 3 | |
| | Humanities and Fine Arts (<i>3hrs must be in Fine Arts</i>) | 6 | |
| | Behavioral and Social Science | 3 | |
| | Cultures and Civilizations | 9 | |

UTeaChattanooga Courses (23hrs)

| | | | |
|-----------|--|---|--|
| UTSM 1010 | Step 1: Inquiry Approaches to Teaching Mathematics and Science | 1 | |
| UTSM 1020 | Step 2: Inquiry Based Lesson Design in Mathematics and Science | 1 | |
| UTSM 2010 | Knowing and Learning in Mathematics and Science | 3 | |
| UTSM 2020 | Classroom Interactions | 3 | |
| UTSM 3010 | Perspectives on Science and Mathematics | 3 | |
| UTSM 3020 | Research Methods in Science | 3 | |
| UTSM 4010 | Project-Based Instruction | 3 | |
| UTSM 4020 | Apprentice Teaching in Secondary Mathematics and Science | 6 | |

Electives (11hrs)

| | | | |
|--------------|-------------------------------------|------------|--|
| | Must take 11hrs of elective courses | 11 | |
| TOTAL | | 120 | |

*** This form should be used for planning purposes only. Please refer to your course catalog for the most recent prerequisites and course descriptions. Information is subject to change. ***