

# MATHEMATICS EDUCATION (B.S.ED.)

## Curriculum Map

| Course   | Title  | Hours     |
|--|--|-----------|
| <b>Freshman</b>  |  |           |
| <b>Fall</b>  |  |           |
| ENG 104<br>or ENG 103<br>or ENG 111                        | COMPOSITION I<br>or English Composition I with Co-requisite Support<br>or COMPOSITION & LITERATURE FOR L | 3         |
| MATH 241   | CALCULUS I WITH LABORATORY   | 3         |
| UNIV 100   | UNIVERSITY SUCCESS   | 2         |
| Humanities & Fine Arts Option                              |  | 3         |
| Natural Science Option                                     |  | 3         |
| Social & Behavioral Science Option                         |  | 3         |
| <b>Hours</b>   |  | <b>17</b> |
| <b>Spring</b>  |  |           |
| ENG 105<br>or ENG 112                                      | COMPOSITION II<br>or COMPOSITION   | 3         |
| MATH 242   | CALCULUS II WITH LABORATORY  | 3         |
| Humanities & Fine Arts Option                              |  | 3         |
| Pathway Option   |  | 3         |
| General Elective   |  | 3         |
| <b>Hours</b>   |  | <b>15</b> |
| <b>Sophomore</b>   |  |           |
| <b>Fall</b>  |  |           |
| EDCI 100   | INTRODUCTION TO EDUCATION  | 3         |
| MATH 243   | CALCULUS III WITH LABORATORY   | 3         |
| Humanities & Fine Arts Option                              |  | 3         |
| Social & Behavioral Science Option                         |  | 3         |
| Pathway Option   |  | 3         |
| <b>Hours</b>   |  | <b>15</b> |
| <b>Spring</b>  |  |           |
| MATH 244   | CALCULUS IV WITH LABORATORY  | 3         |
| MATH 303   | INT TO SET THEO & LOGC I (W)   | 3         |
| SPED 311   | EXCEP CHILD & YOUTH IN THE SCHO  | 3         |
| UNIV 200   | CIVIC ENGAGEMENT   | 1         |
| Pathway Option   |  | 3         |
| General Elective   |  | 3         |
| <b>Hours</b>   |  | <b>16</b> |
| <b>Junior</b>  |  |           |
| <b>Fall</b>  |  |           |
| EDCI 301   | CLASSROOM MANAGEMENT AND EFFECTIVE<br>LEARNING ENVIRONMENTS  | 3         |
| MATH 311   | ABSTRACT ALGEBRA I (W)   | 3         |
| MATH 368   | DIFFERENTIAL EQUATIONS   | 3         |
| MATH 399   | PROBLM SLVG FOR PRE S MATH TEA   | 0         |
| PHY 201<br>& PHYL 201<br>or PHY 211 <i>and</i><br>PHYL 211 | BASIC PHYSICS I<br>or General Physics I <i>and</i> GENERAL PHYSICS LAB I                                 | 4         |
| Mathematics Elective                                       |  | 3         |
| <b>Hours</b>   |  | <b>16</b> |
| <b>Spring</b>  |  |           |
| ETEC 367   | INTRO TO ASSMNT MSRMT & EVALTN   | 3         |
| MATH 331   | LINEAR ALGEBRA & MATRIX THEORY   | 3         |
| MATH 321   | MODERN GEOMETRY I (W)  | 3         |
| MATH 355   | PROBABILITY&STATISTICS I   | 3         |
| MATH 493   | HIST IN MATH CLASSROOM I (W)   | 3         |
| <b>Hours</b>   |  | <b>15</b> |

**Senior**

**Fall**

|                      |   |   |
|----------------------|---|---|
| EDCI 401             | Unit Planning, Assessment, and Classroom Management | 3 |
| MATH 402             | MTHDS OF TCHNG MATH IN SECD SC (W)                  | 3 |
| MATH 403             | SEMINAR IN MATHEMATICS                              | 3 |
| RE 310               | TCHNG READING IN CONTENT AREAS                      | 3 |
| Mathematics Elective |   | 3 |
| Mathematics Elective |   | 3 |

**Hours** **18**

**Spring**

|          |                                |    |
|----------|--------------------------------|----|
| EDCI 402 | CLINICAL INTERNSHIP IN STD TCH | 12 |
|----------|--------------------------------|----|

**Hours** **12**

**Total Hours** **124**

**Notes:**

- Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100 UNIVERSITY SUCCESS; however, the student must take 2 hours of general electives to replace the UNIV course.
- Online Graduation Clearance (**to be completed during the graduating semester only**).

**Specialization Courses**

| Code                                    | Title                    | Hours |
|---|--------------------------|-------|
| <b>Pure Mathematics</b>                 |                          |       |
| MATH 311                                | ABSTRACT ALGEBRA I       | 3     |
| MATH 431                                | REAL ANALYSIS I          | 3     |
| MATH 441                                | COMPLEX ANALYSIS I       | 3     |
| MATH 321                                | MODERN GEOMETRY I        | 3     |
| MATH 451                                | GENERAL TOPOLOGY I       | 3     |
| <b>Applied Mathematics</b>              |                          |       |
| MATH 415                                | PARTIAL DIFF EQUATIONS I | 3     |
| MATH 466                                | OPERATIONS RESEARCH      | 3     |
| <b>Applied Statistics (See Advisor)</b> |                          |       |