

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Date Admitted Into Major: \_\_\_\_\_

## BACHELOR OF SCIENCE MATHEMATICS

### GENERAL EDUCATION REQUIREMENTS

#### Competencies

|                          |                         |
|--------------------------|-------------------------|
| <input type="checkbox"/> | ◆ Basic College Math    |
| <input type="checkbox"/> | ◆ Reading Comprehension |

#### ◆ General Education Categories (34-35 credits total)

|      |                                    |                 |  |  |     |
|------|------------------------------------|-----------------|--|--|-----|
| ◆FYS | First Year Seminar                 |                 |  |  | 3   |
| ◆W-I | Written Communication - Level I    |                 |  |  | 3   |
| ◆OC  | Oral Communication                 |                 |  |  | 3   |
| PGR  | Personal Growth & Responsibility   |                 |  |  | 3   |
| CEA  | Creative Expression & Appreciation |                 |  |  | 3   |
| WC   | World Cultures                     |                 |  |  | 3   |
| HP   | The Human Past                     |                 |  |  | 3   |
| CS   | Contemporary Society               |                 |  |  | 3   |
| SR   | Scientific Reasoning:              | # Any SR course |  |  | 3-4 |
|      |                                    | # SR Lab course |  |  | 4   |
| QR   | Quantitative Reasoning             |                 |  |  | 3   |

#### ‡ Written Communication (Level II and Level III)

|       |                                   |  |  |  |                          |
|-------|-----------------------------------|--|--|--|--------------------------|
| W-II  | Written Communication - Level II  |  |  |  | <input type="checkbox"/> |
| W-III | Written Communication - Level III |  |  |  | <input type="checkbox"/> |

#### Free Electives/Minor (48 credits minimum)

May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.

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### COURSES IN MAJOR (37 credits total)

#### Major Core Courses (28 credits)

|     |      |                                  |   |  |
|-----|------|----------------------------------|---|--|
| MAT | 218  | Intro. to Mathematical Computing | 1 |  |
| MAT | 220  | Calculus I                       | 4 |  |
| MAT | 221  | Calculus II                      | 4 |  |
| MAT | 234  | Intro. to Mathematical Proof     | 3 |  |
| MAT | 303A | Abstract Algebra I               | 3 |  |
| MAT | 304A | Linear Algebra                   | 3 |  |
| MAT | 320  | Calculus III                     | 4 |  |
| MAT | 411  | Real Analysis                    | 3 |  |
| MAT | 490  | Senior Sem. In Mathematics       | 3 |  |

#### Major Electives (9 credits minimum)

(Three courses numbered above 300 with at most 3 credits from MAT572.)

|     |  |  |  |  |
|-----|--|--|--|--|
| MAT |  |  |  |  |
| MAT |  |  |  |  |
| MAT |  |  |  |  |

(The above major courses must satisfy *one* of the following sequences.)

|                                   |                        |
|-----------------------------------|------------------------|
| Algebra sequence                  | MAT303A, MAT306 or 403 |
| Analysis sequence                 | MAT409, MAT411 or 412  |
| Discrete Mathematics sequence     | MAT314, MAT316         |
| Geometry sequence                 | MAT406, MAT412         |
| Probability & Statistics sequence | MAT407, MAT417         |

Note: A course may count as both a major core course and as part of a sequence.

♥ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

- ◆ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
- # These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.
- ‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

|  |  |
|--|--|
| ◆ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS | ◆ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS |
|--|--|

Exceptions in the timing of courses will be made for transfer students

**Total credits for graduation: 120**

**Effective: 9/2017**

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Date Admitted Into Major: \_\_\_\_\_

**COMBINED BACHELOR OF SCIENCE IN MATHEMATICS  
 AND  
 MASTER OF EDUCATION IN SECONDARY EDUCATION  
 WITH A MINOR IN TEACHER EDUCATION  
 TEACHER LICENSURE FOR MATHEMATICS EDUCATION: GRADES 5-8 OR 8-12**

**GENERAL EDUCATION REQUIREMENTS**

**Competencies**

♦ Basic College Math  
 ♦ Reading Comprehension

**◆ General Education Categories - 34-35 credits**

|      |                                    |                 |     |  |
|------|------------------------------------|-----------------|-----|--|
| ◆FYS | First Year Seminar                 |                 | 3   |  |
| ◆W-I | Written Communication - Level I    |                 | 3   |  |
| ◆OC  | Oral Communication                 |                 | 3   |  |
| PGR  | Personal Growth & Responsibility   |                 | 3   |  |
| CEA  | Creative Expression & Appreciation |                 | 3   |  |
| WC   | World Cultures                     |                 | 3   |  |
| HP   | The Human Past                     |                 | 3   |  |
| CS   | Contemporary Society               |                 | 3   |  |
| SR   | Scientific Reasoning:              | # Any SR course | 3-4 |  |
|      |                                    | # SR Lab course | 4   |  |
| QR   | Quantitative Reasoning             |                 | 3   |  |

**‡ Written Communication (Level II and Level III)**

|       |                                   |  |  |                          |
|-------|-----------------------------------|--|--|--------------------------|
| W-II  | Written Communication - Level II  |  |  | <input type="checkbox"/> |
| W-III | Written Communication - Level III |  |  | <input type="checkbox"/> |

**▼ Required Support Courses for the Teacher Education Minor (6 credits)**

|     |     |   |   |  |
|-----|-----|---|---|--|
| PSY | 252 | Adolescent Psychology                   | 3 |  |
| HST | 204 | U.S. History and Constitutional Gov't I | 3 |  |

**Minor (Teacher Education):\***

Required (30 Credits; courses with asterisk carry graduate and undergraduate credit)

|      |     |  |     |  |
|------|-----|--|-----|--|
| EDC  | 115 | Exploring Education                    | 3   |  |
| EDC  | 404 | Intro to Teaching and Assessment       | 3   |  |
| EDC  | 405 | Culturally Responsive Teaching         | 3   |  |
| EDC  | 415 | Teaching Exceptional Learners          | 3   |  |
| EDC  | 416 | Assessment Methods                     | 3   |  |
| *EDC | 774 | Methods of Teaching Mathematics I      | 3   |  |
| *EDC | 760 | Adolescent Literacy in the Disciplines | 3   |  |
| *EDC | 762 | Technology Methods                     | 1.5 |  |
| *EDS | 775 | Methods of Teaching Mathematics II     | 3   |  |
| *EDS | 860 | Sheltering Content for ELLs            | 3   |  |
| *EDS | 763 | Classroom Mgmt and Community Bldg      | 1.5 |  |

**COURSES IN MAJOR (37 credits total)**

**Required (34 credits total)**

|     |      |                                    |   |  |
|-----|------|------------------------------------|---|--|
| MAT | 218  | Intro to Mathematical Computing    | 1 |  |
| MAT | 220  | Calculus I                         | 4 |  |
| MAT | 221  | Calculus II                        | 4 |  |
| MAT | 234  | Intro to Mathematical Proof        | 3 |  |
| MAT | 303A | Abstract Algebra                   | 3 |  |
| MAT | 304A | Linear Algebra                     | 3 |  |
| MAT | 320  | Calculus III                       | 4 |  |
| MAT | 406  | Modern Geometry                    | 3 |  |
| MAT | 407  | Probability and Math. Statistics I | 3 |  |
| MAT | 411  | Real Analysis                      | 3 |  |
| MAT | 490  | Senior Seminar                     | 3 |  |

**Mathematical Sequence Elective (3 credits total)**

**One of the following:**

|     |     |                               |   |  |
|-----|-----|-------------------------------|---|--|
| MAT | 403 | Abstract Algebra II           | 3 |  |
| MAT | 409 | Complex Variables             | 3 |  |
| MAT | 412 | Topology                      | 3 |  |
| MAT | 414 | Linear Algebra II             | 3 |  |
| MAT | 417 | Probability and Statistics II | 3 |  |

**Free Electives (12 credits)**

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**5<sup>th</sup> Year Courses (M.Ed.): (18 credits)**

|     |              |                                |   |  |
|-----|--------------|--------------------------------|---|--|
| EDC | 884PS        | Practicum Seminar Tchg Math    | 3 |  |
| EDC | 884P OR 885P | Stu Tchg Pract. Math (8-12)    | 3 |  |
| EDC | 885P         | Stu Tchg Pract. Math (5--8)    | 3 |  |
| EDC | 804          | School-Based Internship        | 3 |  |
| EDC | 805          | Professional Lives of Teachers | 3 |  |
|     |              | Elective                       | 3 |  |
|     |              | Elective                       | 3 |  |

▼ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

◆ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.

# These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

\* Students accepting into the combined undergraduate/graduate program who choose not to continue in the combined program must complete an educational studies minor in lieu of the teacher education minor.

◆ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

◆ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Exceptions in the timing of courses will be made for transfer students

**Total credits for graduation: 120**

**The additional credits listed above are required for Graduate graduation**

**Effective: 9/2017**