

## Mathematics

### Bachelor of Science in Education: Secondary Education/Special Education

Program Code: UCOESEUSMT  
 Version Number: 2118-Fall 2011  
 Program Effective: August 29, 2011  
 Credit Total: 141

| GENERAL EDUCATION   |     |      |
|---|-----|------|
| I. University Core: 12 S.H.                               | GR. | S.H. |
| a. Oral Communication:<br><b>COM 010 or above</b>         |     | 3    |
| b. Written Communication:<br><b>ENG 023, 024 or 025 ♦</b> |     | 3    |
| c. Mathematics:<br><b>MAT 017 or above ♦</b>              |     | 3    |
| d. Wellness:<br><b>Any 3 credit HEA course</b>            |     | 3    |

| II. University Distribution: 15 S.H.   | GR. | S.H. |
|--|-----|------|
| a. Natural Sciences:<br>Any lab or non-lab course with prefix AST, BIO, CHM, ENV, GEL, MAR, NSE or PHY; or certain GEG courses with advisement               |     | #    |
| b. Social Sciences:<br>Any course with prefix ANT, CRJ, ECO, HIS, MCS, POL, PSY, SOC, SSE or SWK; or certain GEG courses with advisement                     |     | 3    |
| c. Humanities:<br>Any course with prefix ENG, HUM, PAG, PHI, WGS, WRI, or Modern Language<br><br><b>ENG 010 or higher (English Literature) (suggested) ♦</b> |     | 3    |
| d. Arts:<br>Any course prefix ARC, ARH, ART, CDE, CDH, CFT, DAN, FAR, FAS, MUP, MUS, or THE  |     | 3    |
| e. Free Elective:<br><b>Any course carrying university credit</b>  |     | 3    |

| IV. College Distribution: 21 S.H.   | GR. | S.H. |
|---|-----|------|
| a. <b>Math:</b> MAT 017 or above ♦  |     | #    |
| b. <b>Special Education:</b> SPU 201 Cognitive Development                    |     | 3    |
| c. <b>Technology:</b> ITC 321 Instructional Technology in Education           |     | 3    |
| d. 12 credits required by major but fulfilling General Education requirements |     |      |
| COURSE: <b>MAT 220 (suggested)</b>  |     | #    |
| COURSE: <b>MAT 240 (suggested)</b>  |     | #    |
| COURSE: <b>MAT 301 (suggested)</b>  |     | #    |
| COURSE: <b>MAT 302 (suggested)</b>  |     | #    |

| III. Competencies Across the Curriculum   | S.H. |
|---|------|
| A. Writing Intensive (WI) (9 credits/3 three credit courses)<br>COURSE: <b>SEU 312</b>                        | 9    |
| COURSE: <b>SEU 342</b>  |      |
| COURSE: <b>SEU 321-325, 410</b>   |      |
| B. Quantitative Literacy (QL) (3 credits) OR<br>Computer Intensive (CP) (3 credits)<br>COURSE: <b>ITC 321</b> | 3    |
| c. Visual Literacy (VL) (3 credits) OR<br>Communication Intensive (CM) (3 credits)<br>COURSE: <b>SEU 342</b>  | 3    |
| D. Cultural Diversity (CD) (3 credits)<br>COURSE: <b>SEU 312</b>  | 3    |
| E. Critical Thinking (CT) (3 credits)<br>COURSE: <b>EDU 100</b>   | 3    |

| VI. Clinical Component: 39 S.H.  | GR. | S.H. |
|--|-----|------|
| EDU 100 Perspectives on American Education   |     | 3    |
| SPU 201 Cognitive Development of Diverse Learners in a Standards Aligned System #                          |     | 3    |
| SPU 314 Effective Instructional Strategies for Students with Disabilities in Inclusive Settings            |     | 3    |
| <sup>1</sup> SEU 312 Principles of Learning  |     | 3    |
| <sup>1</sup> SEU 313 Principles of Learning Clinical Lab (must be taken with accompanying lecture-SEU 312) |     | 3    |
| <sup>1</sup> SEU 342 Principles of Teaching  |     | 3    |
| <sup>1</sup> SEU 343 Principles of Teaching Clinical Lab (must be taken with accompanying lecture-SEU 342) |     | 3    |
| EDU 326 Introduction to Middle Level Education   |     | 3    |
| <sup>1</sup> SEU 323 Methods of Teaching Secondary School Subject: Mathematics                             |     | 3    |
| SEU 390/391 Clinical Experience and Practicum I and II   |     | 12   |
| <b>Total</b>   |     |      |

<sup>1</sup>Teacher Candidacy must be achieved for these courses and a minimum grade of B- is required.

#### TEACHER CANDIDACY REQUIREMENTS

Requirements must be met upon reaching 48 credit hours

- Required Basic Skills Assessment
  - Required Grade Point Average
  - C or better in ENG 023 or 025
  - C or better in ENG literature course
  - C or better in two mathematics courses
  - Completion of Education Exploration hours
- ♦ These courses require a grade of "C" or better

## B.S. in Secondary Education/Special Education – Mathematics

Program Code: UCOESEUSMT

Version Number: 2118-Fall 2011

| <b>V. SPECIALIZATION: 51 S.H.</b>  |            |             |
|--|------------|-------------|
| <b>1. Required Courses: 36 S.H.</b>  | <b>GR.</b> | <b>S.H.</b> |
| CSC 135 Computer Science I   |            | 3           |
| MAT 181 Calculus I   | #          | 4           |
| MAT 182 Calculus II  | #          | 4           |
| MAT 220 History of Mathematics   | #          | 3           |
| MAT 224 Foundations of Higher Mathematics  |            | 3           |
| MAT 240 Synthetic Geometry   | #          | 3           |
| MAT 260 Linear Algebra   |            | 3           |
| MAT 283 Calculus III   |            | 4           |
| MAT 301 Probability and Statistics I   | #          | 3           |
| MAT 302 Probability and Statistics II  | #          | 3           |
| MAT 311 Abstract Algebra I   |            | 3           |
| <b>Total</b>   |            |             |
| <b>2. Electives: 3 S.H. (selected from below)</b>  |            |             |
| MAT 312 Abstract Algebra II  |            | 3           |
| MAT 351 Advanced Calculus I  |            | 3           |
| <b>Total</b>   |            |             |
| <b>4. Mathematics: 12 S. H.</b>  |            |             |
| <b>Select either four MAT courses (303 or higher) OR one CSC course (136 or higher) and three MAT courses (303 or higher):</b> |            |             |
|  |            | 3           |
|  |            | 3           |
|  |            | 3           |
|  |            | 3           |
| <b>Total</b>   |            |             |

# Courses cross-list with General Education

| <b>A. Special Education Certification Courses: 27 S.H.</b>   |  |   |
|--|--|---|
| SPU 201 Cognitive Development of Diverse Learners in a Standards-Aligned System  |  | # |
| SPU 313 Assessment and Instructional Methods for Secondary Students with Disabilities  |  | 3 |
| SPU 315 Building Collaborative Networks to Support Secondary Students with Disabilities or SPU 314 Effective Instructional Strategies for Students with Disabilities in Inclusive Settings |  | # |
| SPU 316 Literacy Development and Instruction in Core and Intervention Areas  |  | 3 |
| SPU 320 Special Education Processes and IEP Development  |  | 3 |
| SPU 322 Teaching Students with High Incidence Disabilities   |  | 3 |
| SPU 327 Secondary Special Education Transition Services  |  | 3 |
| SPU 328 Positive Behavioral Intervention & Supports  |  | 3 |
| SPU 330 Teaching Students with Low Incidence Disabilities  |  | 3 |

|                      |  |                          |                        |   |             |
|----------------------|--|--------------------------|------------------------|---|-------------|
| Program:             |  | BSED SEU/SPU/MATHEMATICS |                        |   |             |
| <b>FIRST YEAR</b>    |  |                          |                        |   |             |
| <i>Fall Semester</i> |  |                          | <i>Spring Semester</i> |   |             |
| <i>Course</i>        | <i>Title</i>   | <i>C.H.</i>              | <i>Course</i>          | <i>Title</i>  | <i>C.H.</i> |
| EDU 100CT            | Perspectives on American Education   | 3                        | SPU 314                | Effective Instructional Strategies for Students with Disabilities in Inclusive Settings | 3           |
| SPU 201              | Cognitive Development of Diverse Learners in a Standards Aligned System              | 3                        |                        | General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)    | 3 or 4      |
| COM 010              | Fundamentals of Oral Communication   | 3                        | MAT 017 or above       | Mathematics General Education Requirement   | 3 or 4      |
| ENG 23, 24 or 25     | College Composition  | 3                        |                        | ENG Literature Course (Humanities General Education Requirement)                        | 3           |
| MAT 017 or above     | Mathematics General Education Requirement  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
|                      | MAT Required Course  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
| <b>Total</b>         |  | 18 or 20                 | <b>Total</b>           |   | 18 or 21    |
| <b>SECOND YEAR</b>   |  |                          |                        |   |             |
| <i>Fall Semester</i> |  |                          | <i>Spring Semester</i> |   |             |
| <i>Course</i>        | <i>Title</i>   | <i>C.H.</i>              | <i>Course</i>          | <i>Title</i>  | <i>C.H.</i> |
| ITC 321CPVL          | Instructional Technology in Education  | 3                        | SPU 318                | Assessment and Instructional Methods for Students with Disabilities                     | 3           |
| SPU 316              | Literacy Development and Instruction in Core and Intervention Areas (Free Elective)  | 3                        |                        | General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)    | 3 or 4      |
|                      | General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts) | 3 or 4                   |                        | General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)    | 3 or 4      |
|                      | MAT Required Course  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
|                      | MAT Required Course  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
|                      | MAT Required Course  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
| <b>Total</b>         |  | 18 or 22                 | <b>Total</b>           |   | 18 or 23    |
| <b>THIRD YEAR</b>    |  |                          |                        |   |             |
| <i>Fall Semester</i> |  |                          | <i>Spring Semester</i> |   |             |
| <i>Course</i>        | <i>Title</i>   | <i>C.H.</i>              | <i>Course</i>          | <i>Title</i>  | <i>C.H.</i> |
| SEU 312WICD          | Principles of Learning   | 3                        | SEU 342WIVL            | Principles of Teaching  | 3           |
| SEU 313              | Principles of Learning Clinical Component  | 3                        | SEU 343                | Principles of Teaching Clinical Component   | 3           |
| SPU 330              | Teaching Students with Low Incidence Disabilities                                    | 3                        | SPU 328                | Positive Behavioral Intervention and Supports   | 3           |
|                      | General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts) | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
|                      | MAT Required Course  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
|                      | MAT Required Course  | 3 or 4                   |                        | MAT Required Course   | 3 or 4      |
| <b>Total</b>         |  | 18 or 21                 | <b>Total</b>           |   | 18 or 21    |
| <b>FOURTH YEAR</b>   |  |                          |                        |   |             |
| <i>Fall Semester</i> |  |                          | <i>Spring Semester</i> |   |             |
| <i>Course</i>        | <i>Title</i>   | <i>C.H.</i>              | <i>Course</i>          | <i>Title</i>  | <i>C.H.</i> |
| SEU 323WI            | Methods of Teaching Secondary School Subject: Mathematics                            | 3                        | SEU 390 or SPU 392     | Clinical Experience & Practicum I   | 6           |
| SPU 317              | Intensive Reading, Writing, and Mathematical Intervention Approaches                 | 3                        | SEU 391 or SPU 393     | Clinical Experience & Practicum II  | 6           |
| SPU 320CT            | Special Education Processes and IEP Development                                      | 3                        |                        |   |             |
| SPU 322              | Teaching Students with High Incidence Disabilities                                   | 3                        |                        |   |             |
| EDU 326              | Introduction to Middle Level Education   | 3                        |                        |   |             |
|                      | MAT Required Course  | 3 or 4                   |                        |   |             |
|                      | SEU 323WI is only offered in fall semesters  |                          |                        |   |             |
| <b>Total</b>         |  | 18 or 19                 | <b>Total</b>           |   | 12          |