MATHEMATICS (Teacher Certification Track), B.S.

42 courses of three or more credits, 3 one-credit PE courses, and 3 one-credit Field Experiences

| GENERAL EDUCATION CORE | MAJOR – Mathematics |
|---|--|
| BASIC REQUIREMENTS (2 courses and 3 one- | |
| credit PE courses) | Secondary Teacher Certification Track |
| Composition and Rhetoric | Core Courses (12): |
| ☐ EN 103 Composition and Rhetoric I | ☐ MA 121: Calculus I |
| ☐ EN 104 Composition and Rhetoric II | ☐ MA 122: Calculus II |
| Physical Education Courses | ☐ MA 222: Statistical Analysis with R |
| □ PE 100 | ☐ MA 223: Calculus III |
| □ PE | ☐ MA 224: Calculus IV |
| □ PE | ☐ MA 231: Discrete Mathematics |
| MODES OF THINKING (3 courses) | ☐ MA 243: Differential Equations |
| Literature (Select one) | ☐ MA 301: Probability Theory |
| ☐ EN 110, EN 112, EN 115 | ☐ MA 331: Linear Algebra |
| Mathematics (Satisfied by Major) | <u> </u> |
| Natural Science (Select one) | ☐ MA 445: Advanced Calculus |
| ☐ BI 209, BI 210, BI 211, BI 242, CH 209, | or MA 471: Abstract Algebra |
| PH 209 | ☐ MA 453: Senior Coordinating Seminar |
| Philosophy | ☐ CS 115: Introduction to Python |
| □ PL 109 | |
| Social Sciences | Track Specific Courses (4): |
| ☐ ED 209 (Required by STEP) | ☐ MA 351: Fundamentals of Modern Geometry |
| | • |
| CULTURAL LITERACY (6 courses) | ☐ MA 445: Advanced Calculus or MA 471: Abstract Algebr |
| Humanities I and II. Preferably select a set (e.g., | (whichever was not taken as part of the core above) |
| HI 201/202). However, a combination (e.g., PO | ☐ ED412: Teaching Mathematics in Secondary Schools |
| 201 + HI 214) is acceptable. <i>HI 201-202</i> | ☐ Elective: any one MA course at 300 level or above |
| recommended. | |
| ☐ Hum. I: HI 201, PO 201, HI 213 | Education |
| ☐ Hum. II: HI 202, PO 202, HI 214, HI 262 | □ ED 109 □ ED 3801* |
| Humanities III: Great Works of Art & Music | □ ED 205 □ ED 3802* |
| (See Master Schedule of Day Classes; | □ ED 218 (or 216) □ ED 405 |
| | □ ED 2801* □ ED 412 |
| Humanities IV: Great Works of Literature | □ ED 330 □ ED 450 |
| (See Master Schedule of Day Classes) | □ ED 364 □ ED 452 |
| □ | □ ED 366 □ ED 454 |
| Foreign Language/World Cultures | \square ED 373 \square ED 456 |
| (Select either two of the same language, any | *One-credit course |
| two WC, or one WC and one approved | |
| course with international study) | OTHER REQUIREMENTS |
| <u> </u> | PPST: |
| □ | \square Reading (0710) \square Writing (0730) |
| | ☐ Mathematics (0720) |
| CHRISTIAN VALUES AND THEOLOGY | |
| (3 courses) | ☐ Mathematics: Content Knowledge (0061) |
| Catholic Theology | (graphing calculator required) |
| □ TH 109 | ☐ SP-164 Criminal Record Check |
| Intermediate Theology (200/300 level TH) | ☐ CY-113 Child Abuse History Clearance |
| □ TH | ☐ FBI Federal Criminal History Check |
| Values Seminar | ☐ Tuberculin (TB) Test |
| (See Master Schedule of Day Classes) | |

For the most up-to-date record of progress toward completion of degree requirements, students should use the Academic Evaluation tool, which is listed under the Academic Planning heading in WebAdvisor.

STEP CERTIFICATION

Typical Program: MATHEMATICS MAJOR-Teacher Certification Track (B. S.)

First Year

Fall Semester

Communication & Thought I (EN 103) Philosophical Thinking MOT (PL 109) Foreign Language/World Cultures Introduction to Python (CS 115) Calculus I (MA 121) Lifetime Fitness and Wellness (PE 100) 1 (credit)

Spring Semester

Communication & Thought II (EN 104) Catholic Theology (TH 109) Foreign Language/World Cultures Calculus II (MA 122) The Educative Process (ED 109) Physical Education Activity (1 credit)

Second Year

Calculus III (MA 223) Linear Algebra (MA 331) Humanities 1 - HI 201 Literature MOT Cognition and Learning (ED 209) STEP Clinical Field Experience 1 (ED 2801) (1 credit) Physical Education Activity (1 credit)

Calculus IV (MA 224) Discrete Math (MA 231) Humanities 2 - HI 202 Introduction to Exceptionality (ED 218) or (ED 216) Natural Science MOT Technology for Educators (ED 205) (overload)+

Third Year

Probability & Statistics I (MA 301) Fundamentals of Modern Geometry (MA 351) Mathematics Elective * **Humanities 3** Intermediate Theology Literacy Interventions, Gr. 4-12 (ED 366) STEP Clinical Field Experience 2 (ED 3801) 1 credit (overload)+

Differential Equations (MA 243) Statistical Analysis with R (MA 222) Introduction to Analysis (MA 445) Humanities 4 Values Seminar (ED 475 recommended) Curriculum & Instruction I (ED 330) STEP Clinical field Experience (ED 3802) 1 credit (overload) +

Fourth Year

Senior Coordinating Seminar (MA 453) Abstract Algebra (MA 471) The Inclusive Classroom (ED 364) Teaching English Learners (ED 373) Advanced Teaching and Assessment (ED 405) Teaching Mathematics in the Secondary Schools (ED 412) (overload)+

Student Teaching + ED 450 Planning of Instruction ED 452 Classroom Management

ED 454 Instructional Delivery

ED 456 Professionalism

No other courses may be taken during student teaching.

+Due to student teaching and certification requirements, students will need to either overload four semesters, or take four summer school classes. No other courses may be taken during student teaching.

Dr. Katrin Blamey, Chair of Education A. Koefer, Director of the Academic Resource Center Effective fall, 2020