### Bachelor of Interdisciplinary Studies (BIS)

#### Focus: Middle School Mathematics 4th-8th Grade Teacher Certification

**Class Plan**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**First Year**

**Fall**

1. **Choose 1** Communication (Core)  
   Grade C  010  
   For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.  
   See General Education Core for more details  
   Options: ENGL 1301

2. **MATH 1350** Fundamentals of Mathematics I  
   Grade C  020  
   Minimum grade of C in one of the following: MATH 1314, MATH 1414, MATH 2412, or MATH 2413.

3. **Choose 1** American History (Core)  
   Grade C  060  
   See General Education Core for more details.

1. **UTC 1101** Inquiry Approaches to Teaching  
   Grade C  090  
   Must be a Mathematics or Science major.

4. **MATH 2412** Precalculus (Core)  
   Grade C  020  
   MATH 1314 or MATH 1414 with a grade of "C" or better; or passing the College Algebra Exemption Test administered by the Department of Mathematics.

**Spring**

1. **Choose 1** Inquiry-Based Lesson Design  
   Grade C  060  
   UTCH 1101 with a grade of "C".

4. **MATH 2413** Calculus I  
   Grade C  080  
   MATH 2412 with a grade of "C" or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.

2. **Choose 1** Social and Behavioral Sciences (Core)  
   Grade C

**Semester Total Hours**

| 17 | 17 |

**Second Year**

**Fall**

1. **Choose 1** Life and Physical Sciences (Core)  
   Grade C  030  
   See General Education Core for course options.

3. **MATE 3301** Fundamentals of Middle School Mathematics  
   Grade C  070  
   MATH 1351 with a grade of "C" or better.

3. **POL 2305** U.S. Federal Government & Politics (Core)  
   Grade C  050  
   See General Education Core for course options.

3. **Choose 1** Creative Arts (Core)  
   Grade C  040  
   See General Education Core for course options.

3. **Choose 1** Language, Philosophy & Culture (Core)  
   Grade C  090  
   See General Education Core for course options.

**Semester Total Hours**

| 16 | 16 |

**Spring**

1. **Choose 1** Life and Physical Sciences (Core)  
   Grade C  030  
   See General Education Core for course options.

3. **MATE 3302** Fundamentals of Measurement and Geometry I  
   Grade C  070  
   MATH 1351 with a grade of "C" or better.

3. **POL 2306** Texas Government & Politics (Core)  
   Grade C  090  
   See General Education Core for course options.

3. **UTC 3301** Knowing and Learning in Mathematics and Science  
   Grade C  090  
   UTC 1101 and UTC 1102 with a grade of "C" or better or concurrent enrollment with UTC 1102 with consent of Uteach Advisor.

1. **Choose 1** Integrative/Experiential Learning Option (Core)  
   Grade C  090  
   Must apply to Teacher Education Program  
   See General Education Core for course options.

**Semester Total Hours**

| 14 | 14 |

### General Education Core (GEC) Sections:

- **010** - Communication: 010 - Communication; 020 - Mathematics: 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary; 090 - Technologies; 090 - Language Diversity & Writing.

### Symbols Key

- **Critical (**)**: sequence sensitive course.
- **Minimum Grade**: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.
- **General Education Core (GEC)** Sections:
- **Prerequisite**
- **Additional Notes**

**CORE:** The 2023-2024 list of core courses can be found in the 2023-2024 Undergraduate Catalog: www.utrgv.edu/smartcatalog > Bachelors Degree Regulations and Graduation Policies > 'Core Curriculum'
<table>
<thead>
<tr>
<th>H</th>
<th>Course #</th>
<th>Course Title</th>
<th>Min. Grade</th>
<th>GEC Prerequisite</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>MATE 3303</td>
<td>Fundamentals of Measurement and Geometry II</td>
<td>C</td>
<td>MATE 3302 with a grade of 'C' or better.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>MATE 3304</td>
<td>Fundamentals of Algebraic Structures</td>
<td>C</td>
<td>MATH 1351 with a grade of 'C' or better.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>MATE 3321</td>
<td>Functions and Modeling</td>
<td>C</td>
<td>MATH 2413 and UTCH 1102, each with a grade of 'C' or better.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>X4XX X4XX</td>
<td>Life and Physical Sciences</td>
<td></td>
<td></td>
<td>Support Course</td>
</tr>
<tr>
<td>3</td>
<td>UTCH 3302</td>
<td>Classroom Interactions</td>
<td></td>
<td>(a) A University grade point average of at least 2.75, (b) UTCH 3301 with a grade of &quot;C&quot; or better, (c) UTCH 3301 with a grade of 'C' or better, and (d) admission to the Teacher Education Program.</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total Hours**

| 16 | MATE 3305 | Fundamentals of Statistics and Probability     | C          | MATH 1351 or MATH 2413 with a grade of 'C' or better. |                  |
|    | MATE 3306 | Middle School Mathematics in a Technological Environment | C          | MATH 1351 with a grade of 'C' or better. |                  |
|    | MATE 3307 | Fundamentals of Problem Solving                 | C          | MATH 1351 with a grade of 'C' or better. |                  |
|    | MATE 3317 | Perspectives in Mathematics and Science         | C          | MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better. |                  |
|    | MATE 3313 | Fundamentals of Mathematics History             | C          | MATH 1351 and MATH 2412, each with a grade of 'C' or better. |                  |

**Semester Total Hours**

| 3 | MATE 3311 | Fundamentals of Discrete Mathematics            | C          | MATH 1351 with a grade of 'C' or better. |                  |
| 3 | MATE 3312 | Fundamentals of Number Theory                   | C          | MATH 1351 with a grade of 'C' or better. |                  |
| 3 | MATE 4392 | Research Methods in Middle & Secondary School Math | C          | One of the courses MATE 3305, STAT 3337, STAT 2334, or STAT 3301 |                  |
| 3 | MATE 3314 | Fundamentals of Mathematical Structures and Processes | C          | MATH 1351 with a grade of 'C' or better. |                  |
| 3 | UTCH 3303 | Project-Based Instruction                       | C          | (a) University grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C". |                  |

**Semester Total Hours**

| 3 | READ 4305 | Disciplinary Literacy in the Classrooms         |            |                  |                  |
| 1 | UTCH 4101 | Apprentice Teaching Seminar                     |            | (a) University grade point average of at least 2.75, (b) UTCH 3303 with a grade of "C" or better, (c) concurrent enrollment with UTCH 4601, (d) successful completion of PPR and content TExES examinations, acceptance of the Uteach Portfolio. |                  |
| 6 | UTCH 4601 | Apprentice Teaching                             |            | (a) University grade point average of at least 2.75, (b) UTCH 3303 with a grade of "C" or better, (c) concurrent enrollment with UTCH 4601, (d) successful completion of PPR and content TExES examinations, acceptance of the Uteach Portfolio. |                  |

**Semester Total Hours**

| 10 |            |                                                   |            |                  |                  |

**Note**

This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001. This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.

Mathematics Majors with Teacher Certification are attractive to the growing demand for teachers in middle schools and elementary schools. A BIS in Middle School Mathematics will prepare the graduate for an exciting and rewarding teaching position and provide the necessary preparation for graduate studies in Mathematics Education.

**Major Admission Requirements**: Admission to the Teacher Education Program at the Office of Educator Preparation and Accountability is required for completion of teacher certification requirements with the undergraduate degree. All admission requirements are in accordance to Texas Administrative Code rules §227.10 and the HEA Title II accountability requirements. All applicants must meet the current certification requirements in effect at the time of application, regardless of the catalog year of degree plan.

**Major Progression requirements**: Admission to the College of Education and P16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, UTCH 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 6 hours, as recommended by advisor. Teacher Education Program progression requirements include GPA, course grades, certification courses, benchmarks/key assessments and testing.

**Major Graduation Requirements**: Major requirements must be completed with a minimum grade of "C" and GPA of 2.5.

120 TOTAL HOURS

(42) Advanced minimum credit hours

 Approved: Wednesday, March 22, 2023

Revised: Wednesday, March 22, 2023