

## Curriculum Map: Program: B. S. Biology (Area) – Biology/MSU Teach

NOTE: If you are required to complete any developmental courses, you may not be able to complete the degree in four years. This curriculum map assumes that you have not transferred in any previously completed college level courses.

| FIRST YEAR COURSE SCHEDULE |  |       |           |                           |   |       |           |
|----------------------------|--|-------|-----------|---------------------------|---|-------|-----------|
|                            | Fall Semester  | Code  | Credits   |                           | Spring Semester                                     | Code  | Credits   |
|                            | FYS 101 First Year Seminar                             | G     | 3         |                           | BIOL 210 Zoology                                    | P,R   | 4         |
|                            | BIOL 171 Principles of Biology (NCS I Exchange)        | P,R,G | 4         |                           | BIOL 210L Zoology Lab                               | P,R   | 0         |
|                            | BIOL 171L Prin. Biol. Lab                              | P,R,G | 0         |                           | CHEM 111 Intro. Chem. I (NSC II Exchange)           | P,R,G | 4         |
|                            | ENG 100 – Writing I                                    | P,G   | 3         |                           | CHEM 111L Intro. Chem. I Lab                        | P,R,G | 0         |
|                            | MATH 152 and 141, 174 or 175 <sup>1</sup>              | P,R,G | 3         |                           | ENG 200 – Writing II                                | P,G   | 3         |
|                            | COMM 108 – Fundamentals of Speech Communication        | G     | 3         |                           | MATH 141, 174 or 175 <sup>1</sup>                   | P,R   | 3         |
|                            | <b>SCI 199 - STEP 1 Inquiry Approaches to Teaching</b> | R,T   | 1         |                           | <b>SCI 299 - STEP 2 Inquiry-Based Lesson Design</b> | P,R,T | 1         |
| <b>Total Credit Hours</b>  |  |       | <b>17</b> | <b>Total Credit Hours</b> |   |       | <b>15</b> |

| SECOND YEAR COURSE SCHEDULE |  |       |           |                           |  |         |           |
|-----------------------------|--|-------|-----------|---------------------------|--|---------|-----------|
|                             | Fall Semester  | Code  | Credits   |                           | Spring Semester                              | Code    | Credits   |
|                             | BIOL 215 Botany  | P,R   | 4         |                           | BIOL 304 Genetics                            | P,R,U   | 3         |
|                             | BIOL 215L Botany Lab                                       | P,R   | 0         |                           | BIOL 304L Genetics Lab                       | P,R,U   | 0         |
|                             | SBS I – Social/Behavioral Sciences Elective                | G     | 3         |                           | SBS II – Social/Behavioral Sciences Elective | G       | 3         |
|                             | CHEM 112 Intro. Chem. II                                   | P,R,S | 4         |                           | PHYS 201 Elementary Physics I                | P,R,S   | 3         |
|                             | CHEM 112L Intro. Chem. II Lab                              | P,R,S | 0         |                           | PHYS 201A Elem. Physics Lab I                | P,R,S   | 1         |
|                             | HUM II – Humanities Elective                               | G     | 3         |                           | MATH 353 Statistics                          | P,R,S,U | 3         |
|                             | <b>EDSE 399 - Knowing and Learning in Math and Science</b> | P,R,T | 3         |                           | <b>UTCH 200 - Classroom Interactions</b>     | P,R,T   | 3         |
| <b>Total Credit Hours</b>   |  |       | <b>17</b> | <b>Total Credit Hours</b> |  |         | <b>16</b> |

| THIRD YEAR COURSE SCHEDULE |   |         |           |                           |  |         |           |
|----------------------------|---|---------|-----------|---------------------------|--|---------|-----------|
|                            | Fall Semester                               | Code    | Credits   |                           | Spring Semester  | Code    | Credits   |
|                            | BIOL 317 Prin. of Microbiology              | P,R,U   | 4         |                           | BIOL 380 Cell Biology  | P,R,U   | 3         |
|                            | BIOL 317L Prin. of Micro. Lab               | P,R,U   | 0         |                           | BIOL 380L Cell Biology Lab   | P,R,U   | 0         |
|                            | PHYS 202 Elementary Physics II              | P,R,S   | 3         |                           | BIOL 461 Ecology   | P,R,U   | 3         |
|                            | PHYS 202A Elem. Physics Lab II              | P,R,S   | 1         |                           | BIOL 461L Ecology Lab  | P,R,U   | 0         |
|                            | CHEM 326 Organ. Chem. I                     | P,R,S,U | 4         |                           | BIOL 155 Environmental Biology                                       | P,R,U   | 3         |
|                            | CHEM 326L Organ. Chem. Lab I                | P,R,S,U | 0         |                           | BIOL/CHEM 301 Biochemistry   | P,R,U   | 4         |
|                            | <b>UTCH 400 – Problem-Based Instruction</b> | P,R,U,T | 3         |                           | BIOL/CHEM 301L Biochem. Lab  | P,R,U   | 0         |
|                            |   |         |           |                           | <b>UTCH 2xx - Perspectives on Science and Math (HUM I Exchange?)</b> | P,R,T,G | 3         |
| <b>Total Credit Hours</b>  |   |         | <b>15</b> | <b>Total Credit Hours</b> |  |         | <b>16</b> |

| FOURTH YEAR COURSE SCHEDULE |  |         |           |                           |                                       |         |           |
|-----------------------------|--|---------|-----------|---------------------------|---------------------------------------|---------|-----------|
|                             | Fall Semester                                | Code    | Credits   |                           | Spring Semester                       | Code    | Credits   |
|                             | BIOL 499D Capstone (Evolution)               | P,R,U,G | 3         |                           | <b>UTCH 4xx - Apprentice Teaching</b> | P,R,U,T | 12        |
|                             | BIOL 425 or 426 Physiol. Course              | P,R,U   | 3         |                           |                                       |         |           |
|                             | BIOL 425L or 426L Physiol. Lab               | P,R,U   | 0         |                           |                                       |         |           |
|                             | Adv. Biology Elective <sup>2</sup>           | P,R,U   | 3         |                           |                                       |         |           |
|                             | Adv. Biology Elective <sup>2</sup>           | P,R,U   | 3         |                           |                                       |         |           |
|                             | <b>UTCH 300 - Research Methods - Biology</b> | P,R,U,T | 3         |                           |                                       |         |           |
| <b>Total Credit Hours</b>   |  |         | <b>15</b> | <b>Total Credit Hours</b> |                                       |         | <b>12</b> |

<sup>1</sup>There are various MATH options available. Please consult with your academic advisor.

<sup>2</sup>Denotes approved 300- or 400-level Biology Elective.

## Codes

- (P) Pre-Requisite Course(s) must be successfully passed, or minimum ACT score/subscore required, for course enrollment eligibility.
- (G) General Education Course
- (R) Required Course
- (S) Supplemental Course
- (T) MSUTeach Course
- (U) Upper Division Course 300-400 level (minimum 42 hours required)

**Note: All students must have passed the PRAXIS II Biology Content Knowledge Test (passing score 146) and Principles of Learning and Teaching: Grades 7-12 Test (passing score 160), and have completed a minimum of 200 hours of relevant field experience prior to enrolling in Apprentice Teaching.**

## **CANDIDATES MUST MEET THE FOLLOWING REQUIREMENTS BEFORE APPLYING TO THE TEP:**

### **A. GPA AND COURSE REQUIREMENTS**

- **Active enrollment at MSU** – In pursuit of completing a program leading to teacher certification.
- **Completion of minimum semester hours**
  - 29 hours of MSUTeach coursework including Apprentice Teaching
- **Minimum GPA of 2.75 on a 4.0 scale.** All college courses attempted must be part of the applicant's MSU transcript. All transfer courses, as well as MSU credit, are used in calculating GPA. There is no rounding up.
- **Completion of the following three core courses** with grades of "C" or better:
  - ENG 100 Writing I
  - ENG 200 Writing II
  - COMS 108 Fundamentals of Speech Communication

### **B. TESTING REQUIREMENTS**

- **PRIOR** to TEP admission, students must obtain the following scores on the *Praxis Core Academic Skills for Educators* – <http://www.ets.org> - must successfully complete Praxis Core by 1 November of 3<sup>rd</sup> semester. Can be taken in the summer after 2<sup>nd</sup> semester of study:
  - Praxis Core Academic Skills for Educators: Reading, passing score 156 AND
  - Praxis Core Academic Skills for Educators: Writing, passing score 162 AND
  - Praxis Core Academic Skills for Educators: Math, passing score 150

**MSUTeach Link:** <http://www.moreheadstate.edu/msuteach/>