



MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION
OFFICE OF EDUCATOR QUALITY – EDUCATOR PREPARATION

BIOLOGY, GRADES 9-12

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| EDUCATOR PREPARATION PROGRAM NAME UNIVERSITY OF MISSOURI – ST. LOUIS | EDUCATOR PREPARATION PROGRAM CODE 116118 |
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Please complete Educator Preparation Program (EPP) Name & EPP Code above.

Certification Requirements:

- Course Number – List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Course Title – List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Semester Hours – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to DESE.MoSPETransition@dese.mo.gov on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or DESE.MoSPETransition@dese.mo.gov

A. Professional Requirements (Minimum of 26 semester hours)

1. Content Planning and Delivery

| | Course Number | Course Title | Semester Hours |
|--|---------------|---|----------------|
| a. Curriculum and Instructional Planning | TCH ED 3310 | Introduction to Methods of Teaching* | 3 |
| | SPEC ED 3318 | Inclusive Classrooms | 3 |
| b. Instructional Strategies and Techniques in Content Area Specialty | SEC ED 4985 | Curriculum and Methods of Teaching Life Sciences | 4 |
| | TCH ED 4391 | Literacy for Adolescent Learners in Content Areas | 3 |
| c. Assessment, Student Data, and Data-Based Decision-Making | TCH ED 3310 | Introduction to Methods of Teaching* | 3 |
| | ED PSY 3312 | Psychology of Learning, Instruction, and Assessment | 3 |
| | SEC ED 4985 | Curriculum and Methods of Teaching Life Sciences | 4 |
| d. Strategies for Content Literacy | SEC ED 4989 | Practicum I: Site Based Experience | 2 |
| | TCH ED 4391 | Literacy for Adolescent Learners in Content Areas | 3 |
| e. Critical Thinking and Problem Solving | TCH ED 3310 | Introduction to Methods of Teaching* | 3 |
| | ED PSY 3312 | Psychology of Learning, Instruction, and Assessment | 3 |
| | SEC ED 4985 | Curriculum and Methods of Teaching Life Sciences | 4 |
| f. English Language Learning | SEC ED 4989 | Practicum I: Site Based Experience | 2 |
| | TCH ED 3310 | Introduction to Methods of Teaching* | 3 |
| | TCH ED 4391 | Literacy for Adolescent Learners in Content Areas | 3 |

2. Individual Student Needs

| | Course Number | Course Title | Semester Hours |
|--|---------------|--------------------------------------|----------------|
| a. Psychological Development of the Child and Adolescent | ED PSY 2212 | Child and Adolescent Development* | 3 |
| b. Psychology/Education of the Exceptional Child | ED PSY 2212 | Child and Adolescent Development * | 3 |
| | SPEC ED 3318 | Inclusive Classrooms | 3 |
| c. Differentiated Learning | TCH ED 3310 | Introduction to Methods of Teaching* | 3 |

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| | SPEC ED 3318 SEC ED 4985 | Inclusive Classrooms Curriculum and Methods of Teaching Life Sciences | 3 4 |
| d. Classroom Management | TCH ED 3310 SEC ED 4985 | Introduction to Methods of Teaching* Curriculum and Methods of Teaching Life Sciences | 3 4 |
| | SEC ED 4989 | Practicum I: Site Based Experience | 2 |
| e. Cultural Diversity | ED PSY 2212 SPEC ED 3318 TCH ED 2209 | Child and Adolescent Development* Inclusive Classrooms Foundations of Teaching in American Schools | 3 3 2** |
| | TCH ED 2001 SEC ED 4989 | Early Clinical Experience: Schools Practicum I: Site Based Experience | 1 2 |
| f. Educational Psychology | ED PSY 3312 | Psychology of Learning, Instruction, and Assessment | 3 |

3. Schools and the Teaching Profession

| | Course Number | Course Title | Semester Hours |
|--------------------------------------|-----------------------------|--|----------------|
| a. Consultation and Collaboration | ED PSY 3312 | Psychology of Learning, Instruction, and Assessment | 3 |
| | TCH ED 2209 | Foundations of Teaching in American Schools | 2** |
| | TCH ED 2001 SPEC ED 3318 | Early Clinical Experience: Schools Inclusive Classrooms | 1 3 |
| b. Legal/Ethical Aspects of Teaching | TCH ED 2209 | Foundations of Teaching in American Schools | 2** |
| | SPEC ED 3318 | Inclusive Classrooms | 3 |

4. Secondary Literacy (Minimum of six semester hours)

| | Course Number | Course Title | Semester Hours |
|---|---------------|---|----------------|
| a. Reading and Writing in the Content Area | SEC ED 4880 | Writing for Teachers | 3 |
| b. Instructional Interventions for Students with Reading Deficits | TCH ED 4391 | Literacy for Adolescent Learners in Content Areas | 3 |

Professional Requirements - Total Semester Hours

27

B. Field and Clinical Experiences (Minimum of ten semester hours)

| | Course Number | Course Title | Semester Hours |
|---|----------------------------|---|----------------|
| 1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours) | EDUC 1001 | Early Clinical Experience: Community Agency | 1 |
| 2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours) | TCH ED 3001 SEC ED 4989 | Mid-Level Clinical Experience: Diverse Learners Practicum I: Site Based Experience | 1 1 |
| 3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement) | SEC ED 4990 | Practicum II: Site Based Experience | 12 |

Field and Clinical Experiences - Total Semester Hours

15

C. Biology Content Knowledge Area (Minimum of 35 semester hours)

| | Course Number | Course Title | Semester Hours |
|---|---------------|---|----------------|
| 1. History/Philosophy of Science and Technology (Minimum of three semester hours) | PHIL 3380 | Philosophy of Science | 3 |
| 2. Biology Coursework – Minimum of 20 semester hours which must include: | | | |
| a. Cell Biology | BIOL 3622 | Cell Biology | 3 |
| b. Plant Form and Function | BIOL 1821 | Introductory Biology I: Organisms and the Environment | 5 |
| c. Animal Form and Function | BIOL 1831 | Introductory Biology II: From Molecules to Organisms | 5 |
| d. Genetics | BIOL 2012 | Genetics | 3 |

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| e. Evolution | BIOL 3302 | Introduction to Evolution | 3 |
| f. Biology Electives | BIOL 2402 or BIOL 3802 | Vertebrate Anatomy or Vertebrate Physiology | 3 |
| 3. Additional Science Coursework – Minimum of 12 semester hours which must include: | | | |
| a. Chemistry | CHEM 1111 | Introductory Chemistry I | 5 |
| b. Physics | PHYSICS 1011 | Basic Physics I with Lab | 4 |
| c. Earth Science | GEOL 1001 or GEOL 1001A | General Geology with Lab or General Geology without Lab | 3-4 |
| d. Environmental Science | BIOL 2102/2103 | General Ecology with Lab | 5 |
| Content Knowledge Area - Total Semester Hours | | | 42-43 |

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* Course title change will be reflected in future Bulletin. See attachment for revised course description.

**Credit hour change will be reflected in future Bulletin.