



**MIDDLE SCHOOL SCIENCE, GRADES 5-9 – POST-BACCALAUREATE**

|   |   |
|---|---|
| EDUCATOR PREPARATION PROGRAM NAME<br>DRURY UNIVERSITY | EDUCATOR PREPARATION PROGRAM CODE<br>603541 |
|---|---|

**INSTRUCTIONS**

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](mailto: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](mailto:DESE.MoSPETransition@dese.mo.gov)

**A. Professional Requirements (Minimum of 45 semester hours)**

1. Content Planning and Delivery

|  | Course Number   | Course Title   | Semester Hours  |                          |
|--|---|--|---|--------------------------|
| a. Curriculum and Instructional Planning                       | EDUC 200 or<br>SCI 621  | Technology in the Classroom<br>Educational Technology  | 1<br>1  |                          |
|  | EDUC 304<br>or<br>EDUC 619<br>or<br>EDUC 638                            | Teaching in Diverse Classrooms<br><br>Teaching in Diverse Classrooms w/Field<br>Experience<br>Teaching and Learning in Diverse<br>Classrooms | .5<br><br>1<br>1  |                          |
|  | EDUC 350<br>or<br>SCI 631   | Methods of Teaching the Biological &<br>Physical Sciences<br>Improvement of K-12 Science Instruction   | 1<br>1  |                          |
|  | EDUC 383 or<br>EDUC 633   | Middle School Curriculum & Instruction<br>Middle School Curriculum & Instruction   | 1.5<br>1.5  |                          |
|  | b. Instructional Strategies and Techniques in<br>Content Area Specialty | EDUC 308   | Secondary Area Content Literacy   | 3                        |
|  |   | EDUC 350<br>or<br>SCI 631  | Methods of Teaching the Biological &<br>Physical Sciences<br>Improvement of K-12 Science Instruction  | .5<br>.5                 |
| EDUC 383 or<br>EDUC 633  |   | Middle School Curriculum & Instruction<br>Middle School Curriculum & Instruction   | .5<br>.5  |                          |
| EDUC 407 or<br>EDUC 665  |   | Methods of Teaching Literacy<br>Improvement of Reading Instruction   | 3<br>3  |                          |
| c. Assessment, Student Data, and Data-Based<br>Decision-Making | EDUC 302 or<br>EDUC 605   | Educational Psychology & Assessment<br>Advanced Educational Psychology &<br>Assessment   | 1<br>1  |                          |
|  | EDUC 383 or<br>EDUC 633   | Middle School Curriculum & Instruction<br>Middle School Curriculum & Instruction   | .5<br>.5  |                          |
| d. Strategies for Content Literacy                             | EDUC 331 or<br>EDUC 632   | Content Area Literacy<br>Literacy Instruction in the Content Area  | 2<br>2  |                          |
|  | e. Critical Thinking and Problem Solving                                | EDUC 205 or<br>EDUC 621<br>Or<br>EDUC 203 or<br>SS 624   | Diversity & Social Justice in Education<br>Social Justice & Diversity in Education<br><br>The American Classroom<br>Home, School, & Community | .5<br>.5<br><br>.5<br>.5 |

|  |  |  |                       |
|--|--|--|-----------------------|
| f. English Language Learning                             | EDUC 205 or<br>EDUC 621<br>Or<br>EDUC 203 or<br>SS 624           | Diversity & Social Justice in Education<br>Social Justice & Diversity in Education                   | .5<br>.5              |
|  | EDUC 304<br>or<br>EDUC 619<br>or<br>EDUC 638                     | The American Classroom<br>Home, School, & Community<br><br>Teaching in Diverse Classrooms            | .5<br>.5<br><br>.5    |
|  | EDUC 304<br>or<br>EDUC 619<br>or<br>EDUC 638                     | Teaching in Diverse Classrooms<br>Teaching in Diverse Classrooms w/Field<br>Experience               | .5<br>.5              |
|  | EDUC 331 or<br>EDUC 632  | Teaching and Learning in Diverse<br>Classrooms<br><br>Content Area Literacy                          | .5<br><br>1           |
|  | EDUC 331 or<br>EDUC 632  | Literacy Instruction in the Content Area   | 1                     |
|  | EDUC 340 or<br>EDUC 606  | Education of the Exceptional Child<br>Psychology of the Exceptional Child                            | .5<br>.5              |
|  | <b>2. Individual Student Needs</b>                               |  |                       |
|  | <b>Course Number</b>   | <b>Course Title</b>  | <b>Semester Hours</b> |
| a. Psychological Development of the Child and Adolescent | EDUC 207<br>or   | Psychology of Human Growth &<br>Development  | 3                     |
|  | EDUC 607   | Psychology of Human Growth &<br>Development  | 3                     |
| b. Psychology/Education of the Exceptional Child         | EDUC 340 or<br>EDUC 606  | Education of the Exceptional Child<br>Psychology of the Exceptional Child                            | 2.5<br>2.5            |
| c. Differentiated Learning                               | EDUC 350<br>or<br>SCI 631  | Methods of Teaching the Biological &<br>Physical Sciences<br>Improvement of K-12 Science Instruction | .5<br>.5              |
|  | EDUC 383 or<br>EDUC 633  | Middle School Curriculum & Instruction<br>Middle School Curriculum & Instruction                     | .5<br>.5              |
| d. Classroom Management                                  | EDUC 361 or<br>EDUC 608  | Collaborative Classroom Environments<br>Classroom Management   | 3<br>3                |
| e. Cultural Diversity                                    | EDUC 205 or<br>EDUC 621<br>Or<br>EDUC 203 or<br>SS 624           | Diversity & Social Justice in Education<br>Social Justice & Diversity in Education                   | 1<br>1                |
|  | EDUC 205 or<br>EDUC 621<br>Or<br>EDUC 203 or<br>SS 624           | The American Classroom<br>Home, School, & Community  | 1<br>1                |
|  | EDUC 304<br>or<br>EDUC 619<br>or<br>EDUC 638                     | Teaching in Diverse Classrooms   | .5                    |
|  | EDUC 304<br>or<br>EDUC 619<br>or<br>EDUC 638                     | Teaching in Diverse Classrooms w/Field<br>Experience   | .5                    |
|  | EDUC 304<br>or<br>EDUC 619<br>or<br>EDUC 638                     | Teaching and Learning in Diverse<br>Classrooms   | .5                    |
| f. Educational Psychology                                | EDUC 302 or<br>EDUC 605  | Educational Psychology & Assessment<br>Advanced Ed Psychology & Assessment                           | 2<br>2                |
|  | <b>3. Schools and the Teaching Profession</b>                    |  |                       |
|  | <b>Course Number</b>   | <b>Course Title</b>  | <b>Semester Hours</b> |
| a. Consultation and Collaboration                        | EDUC 304<br>or   | Teaching in Diverse Classrooms   | .5                    |
|  | EDUC 619<br>or<br>EDUC 638                                       | Teaching in Diverse Classrooms w/Field<br>Experience   | 1                     |
|  | EDUC 619<br>or<br>EDUC 638                                       | Teaching and Learning in Diverse<br>Classrooms   | 1                     |
| b. Legal/Ethical Aspects of Teaching                     | EDUC 200 or<br>SCI 621   | Technology in the Classroom<br>Educational Technology  | 1<br>1                |
|  | EDUC 205 or<br>EDUC 621<br>Or                                    | Diversity & Social Justice in Education<br>Social Justice & Diversity in Education                   | 1<br>1                |
|  | EDUC 203 or<br>SS 624  | The American Classroom<br>Home, School, & Community  | 1<br>1                |
|  | EDUC 203 or<br>SS 624  | The American Classroom<br>Home, School, & Community  | 1<br>1                |
| c. Middle School Philosophy and Organization             | EDUC 379 or<br>EDUC 603  | Middle School Philosophy<br>Middle School Philosophy & Organization                                  | 3<br>3                |
|  | <b>4. Middle School Literacy (Minimum of six semester hours)</b> |  |                       |
|  | <b>Course Number</b>   | <b>Course Title</b>  | <b>Semester Hours</b> |
| a. Reading and Writing in the Content Area               | EDUC 331 or<br>EDUC 632  | Content Area Literacy<br>Literacy Instruction in the Content Area                                    | 3<br>3                |

|  |   |   |                          |
|--|---|---|--------------------------|
| b. Instructional Interventions for Students with Reading Deficits  | EDUC 308  | Secondary Content Area Literacy   | 3                        |
|  | EDUC 407 or<br>EDUC 665                                       | Methods of Teaching Literacy<br>Improvement of Reading Instruction  | 3<br>3                   |
| 5. Content Knowledge for Teaching (Minimum of 24 semester hours with appropriate distribution in one of the following certificate subject areas) |   |   |                          |
|  | <b>Course Number</b>  | <b>Course Title</b>   | <b>Semester Hours</b>    |
| a. Agricultural Education  | NA  |   |                          |
| b. Business Education  | NA  |   |                          |
| c. Technology and Engineering  | NA  |   |                          |
| d. Language Arts   | NA  |   |                          |
| e. Mathematics   | NA  |   |                          |
| f. Science   | BIOL 102<br>or<br>BIOL 181<br>BIOL 181L<br>or<br>BIOL 201     | General Biology<br><br>Mechanisms of Genetic Inheritance<br>Mechanisms of Genetic Inheritance Lab<br><br>Biodiversity | 4<br><br>3<br>1<br><br>3 |
|  | CHEM 107 or<br>CHEM 238                                       | General Chemistry<br>Inorganic Chemistry  | 4<br>3                   |
|  | PHYS 100  | Earth Science   | 3                        |
|  | PHYS 111<br>PHYS 111L<br>or<br>PHYS 201                       | Physical Science<br>Physical Science Lab<br><br>Principles of Physics   | 3<br>1<br><br>4          |
|  | <b>Elective if needed<br/>to equal at least<br/>24 hours:</b> |   |                          |
|  | BIOL 110  | Fundamentals of Cell Biology  | 4                        |
|  | BIOL 160  | Exploration & Discovery in Biology  | 3                        |
|  | BIOL 171  | Scientific Endeavors  | 3                        |
|  | BIOL 172  | Exploring Molecular Biology   | 3                        |
|  | BIOL 182  | Evolution   | 2                        |
|  | BIOL 200  | Ecology   | 3                        |
|  | BIOL 205  | Human Anatomy   | 4                        |
|  | BIOL 206  | Human Physiology  | 4                        |
|  | BIOL 207  | Anatomy & Physiology  | 4                        |
|  | BIOL 208  | Microbiology  | 4                        |
|  | BIOL 210  | Wildlife Management   | 3                        |
|  | BIOL 214  | Environmental Microbiology  | 3                        |
|  | BIOL 217  | Anatomy & Physiology II   | 4                        |
|  | BIOL 301  | Advanced Evolutionary Biology   | 3                        |
|  | BIOL 306  | Medical Botany  | 3                        |
|  | BIOL 307  | Botany  | 4                        |
|  | BIOL 308  | Immunology  | 3                        |
|  | BIOL 309  | Zoology   | 4                        |
|  | BIOL 310  | Field & Systematic Botany   | 4                        |
|  | BIOL 312  | Advanced Ecology  | 4                        |
|  | BIOL 313  | Advanced Microbiology   | 4                        |
|  | BIOL 314  | Field & Systematic Zoology  | 4                        |
|  | BIOL 315  | Field Techniques  | 3                        |
|  | BIOL 316  | Comparative Anatomy   | 5                        |
|  | BIOL 317  | Vertebrate Embryology   | 4                        |
|  | BIOL 320  | Vertebrate Physiology   | 4                        |
|  | BIOL 321  | Comprehensive Human Anatomy   | 5                        |
|  | BIOL 322  | Advanced Genetics   | 4                        |
|  | BIOL 324  | Cellular & Molecular Biology  | 3                        |
|  | BIOL 325  | Epidemiology  | 3                        |
|  | BIOL 328  | Parasitology  | 3                        |
|  | BIOL 329  | Introduction to Marine Biology  | 4                        |
|  | BIOL 330  | Field Study in Marine Biology   | 3                        |
|  | BIOL 332  | Biology of Terrestrial Plants & Animals   | 4                        |
|  | BIOL 333  | Histology   | 4                        |
|  | BIOL 334  | Developmental Biology   | 3                        |
|  | BIOL 337  | Introduction to Virology  | 3                        |
|  | BIOL 338  | Biology of Lakes & Streams  | 4                        |
|  | BIOL 341  | Limnology   | 4                        |
|  | BIOL 344  | Toxicology  | 3                        |
|  | BIOL 351  | Junior Seminar  | 1                        |
|  | BIOL 371  | Entomology  | 3                        |
|  | BIOL 373  | Herpetology   | 4                        |

|   |  |   |                       |
|---|--|---|-----------------------|
|   | BIOL 378<br>BIOL 379<br>BIOL 381<br>BIOL 382 | Advanced Human Physiology I<br>Advanced Human Physiology II<br>Pharmacology<br>Pathophysiology  | 5<br>5<br>3<br>4      |
| g. Social Science   | NA   |   |                       |
| h. Speech/Theatre   | NA   |   |                       |
| <b>Professional Requirements - Total Semester Hours</b>   |  |   | <b>70-71</b>          |
| <b>B. Field and Clinical Experiences (Minimum of ten semester hours)</b>  |  |   |                       |
|   | <b>Course Number</b>                         | <b>Course Title</b>   | <b>Semester Hours</b> |
| 1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)                        | EDUC 201<br>or<br>EDUC 208                   | Teacher Aide I<br>or<br>Introductory Practicum  | 1<br><br>1            |
| 2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)                    | EDUC 303<br>or<br>EDUC 619                   | Secondary Education Field Experience I<br><br>Teaching in Diverse Classrooms w/Field Experience | 1<br><br>3            |
| 3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement) | EDUC 477<br>Or<br>EDUC 699*                  | Student Teaching on the Middle School Level<br>Culminating Internship                           | 10<br><br>3           |
| <b>Field and Clinical Experiences - Total Semester Hours</b>  |  |   | <b>8-14</b>           |

\*Troops to Teachers Candidates Teaching on a Provisional

The Department of Elementary and Secondary Education does not discriminate on the basis of race, color, religion, gender, national origin, age, or disability in its programs and activities. Inquiries related to Department programs and to the location of services, activities, and facilities that are accessible by persons with disabilities may be directed to the Jefferson State Office Building, Office of the General Counsel, Coordinator – Civil Rights Compliance (Title VI/Title IX/504/ADA/Age Act), 6<sup>th</sup> Floor, 205 Jefferson Street, P.O. Box 480, Jefferson City, MO 65102-0480; telephone number 573-526-4757 or TTY 800-735-2966 email [civilrights@dese.mo.gov](mailto:civilrights@dese.mo.gov).