



**BIOLOGY, GRADES 9-12**

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| EDUCATOR PREPARATION PROGRAM NAME<br><b>AVILA UNIVERSITY</b> | EDUCATOR PREPARATION PROGRAM CODE<br><b>511932</b> |
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**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)

| <b>A. Professional Requirements (Minimum of 26 semester hours)</b>   |  |   |                       |
|--|--|---|-----------------------|
| <b>1. Content Planning and Delivery</b>                              |  |   |                       |
|  | <b>Course Number</b>                   | <b>Course Title</b>   | <b>Semester Hours</b> |
| a. Curriculum and Instructional Planning                             | ED 185/585<br>ED 315/515               | Practicum<br>General Methods & Differentiated Learning  | 1<br>1                |
| b. Instructional Strategies and Techniques in Content Area Specialty | ED 455/555                             | Special Methods   | 1                     |
| c. Assessment, Student Data, and Data-Based Decision-Making          | ED 245/545                             | Tests and Measurements  | 3                     |
| d. Strategies for Content Literacy                                   | ED 375/575                             | Reading Strategies & Interventions in the Content Area  | -                     |
| e. Critical Thinking and Problem Solving                             | ED 184/584<br>ED 185/585<br>ED 494/594 | Introduction to Educational Technology<br>Practicum<br>Final Clinical Experience Seminar                      | 1<br>1<br>1           |
| f. English Language Learning   | ED 322/522                             | Language & Literacy in the Global Context   | -                     |
| <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             | ED 229/529                             | Developmental Educational Psychology  | 1.5                   |
| b. Psychology/Education of the Exceptional Child                     | ED 235/535                             | Psychology of the Exceptional Child   | 2                     |
| c. Differentiated Learning   | ED 314/514<br>ED 315/515<br>ED 455/555 | Methods & Educational Technology<br>General Methods & Differentiated Learning<br>Special Methods              | 1<br>1<br>1           |
| d. Classroom Management  | ED 381/581<br>ED 419/519               | Health & Safety Issues in the Schools<br>Managing the Learning Environment                                    | 1<br>2                |
| e. Cultural Diversity  | ED 287/587                             | Multicultural Foundations of Education  | 3                     |
| f. Educational Psychology  | ED 229/529                             | Developmental Educational Psychology  | 1.5                   |
| <b>3. Schools and the Teaching Profession</b>                        |  |   |                       |
|  | <b>Course Number</b>                   | <b>Course Title</b>   | <b>Semester Hours</b> |
| a. Consultation and Collaboration                                    | ED 366/566                             | Consultation, Collaboration, and Family Engagement: Middle/Secondary  | 1                     |
| b. Legal/Ethical Aspects of Teaching                                 | ED 235/535<br>ED 419/519<br>ED 494/594 | Psychology of the Exceptional Child<br>Managing the Learning Environment<br>Final Clinical Experience Seminar | 1<br>1<br>1           |

| 4. Secondary Literacy (Minimum of six semester hours)   |   |  |                |
|---|---|--|----------------|
|   | Course Number                           | Course Title   | Semester Hours |
| a. Reading and Writing in the Content Area  | ED 375/575                              | Reading Strategies & Interventions in the Content Area   | 3              |
| b. Instructional Interventions for Students with Reading Deficits   | ED 322/522                              | Language & Literacy in the Global Context  | 3              |
| <b>Professional Requirements - Total Semester Hours</b>   |   |  | <b>33</b>      |
| 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)                        | ED 185/585                              | Practicum  | 1              |
| 2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)                    | ED 315/515                              | General Methods & Differentiated Learning  | 1              |
| 3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement) | ED 495/595                              | Final Clinical Experience  | 10             |
|   | <b>OR</b><br>ED 596                     | <b>OR</b><br>Internship  | 10             |
|   | <b>OR</b><br>(ED 597 <b>and</b> ED 598) | <b>OR</b><br>(Beginning Internship <b>and</b> Advanced Internship)   | 3              |
|   |   |  | 7              |
| <b>Field and Clinical Experiences - Total Semester Hours</b>  |   |  | <b>12</b>      |
| 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)                                 | NS 380<br><b>OR</b><br>IS 369           | Special Topics: History/Philosophy of Science & Technology <b>OR</b> Reasoning, History & Social Implications of Science | 3              |
| 2. Biology Coursework – Minimum of 20 semester hours which must include:  |   |  |                |
| a. Cell Biology   | BI 111                                  | General Biology: Cells/Genes   | 4              |
| b. Plant Form and Function  | BI 313                                  | Plant Form & Function  | 3              |
| c. Animal Form and Function   | BI 311                                  | Animal Form, Function & Development  | 3              |
| d. Genetics   | BI 318                                  | Genetics   | 3              |
| e. Evolution  | BI 310                                  | Evolution  | 3              |
| f. Biology Electives  | Any BI Course                           | Biology Elective(s)  | 4              |
| 3. Additional Science Coursework – Minimum of 12 semester hours which must include:                               |   |  |                |
| a. Chemistry  | CH 131                                  | General Chemistry I  | 4              |
| b. Physics  | PH 231                                  | General Physics I  | 5              |
| c. Earth Science  | NS 125 <b>OR</b><br>NS 221              | Introductory Physical Science <b>OR</b> Physical Geology   | 4              |
| d. Environmental Science  | BI 215                                  | Humans & the Environment   | 3              |
| <b>Content Knowledge Area - Total Semester Hours</b>  |   |  | <b>39</b>      |

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