



**BIOLOGY, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME <b>CENTRAL METHODIST UNIVERSITY</b>	EDUCATOR PREPARATION PROGRAM CODE <b>630984</b>
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**INSTRUCTIONS**

Please complete Educator Preparation Program (EPP) Name & EPP Code above. The EPP Code may be located at <https://dese.mo.gov/sites/default/files/EPP-Code-Name.pdf>

**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	ED370SC ED453	Teaching Methods in the Content Area Education as a Profession	0 2
b. Instructional Strategies and Techniques in Content Area Specialty	ED370SC	Teaching Methods in the Content Area	3
c. Assessment, Student Data, and Data-Based Decision-Making	ED370SC ED453	Teaching Methods in the Content Area Education as a Profession	0 0
d. Strategies for Content Literacy	ED471	Reading & Writing in the Content Area	0
e. Critical Thinking and Problem Solving	ED453	Education as a Profession	0
f. English Language Learning	ED101 ED471	Foundations of Education, Diversity, and ELL Reading & Writing in the Content Area	2 0
<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	PY223	Developmental Psychology	3
b. Psychology/Education of the Exceptional Child	PY342	Psychology of the Exceptional Child	2
c. Differentiated Learning	ED370SC PY342	Teaching Methods in the Content Area Psychology of the Exceptional Child	0 0
d. Classroom Management	ED313 ED370SC	Classroom & Behavior Management Teaching Methods in the Content Area	3 0
e. Cultural Diversity	ED101 ED453	Foundations of Education, Diversity, and ELL Education as a Profession	0 0
f. Educational Psychology	PY210	Educational Psychology	3
<b>3. Schools and the Teaching Profession</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
a. Consultation and Collaboration	ED453	Education as a Profession	0
b. Legal/Ethical Aspects of Teaching	ED101 ED453 ED454	Foundations of Education, Diversity, and ELL Education as a Profession Student Teaching Seminar	0 0 2
<b>4. Secondary 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	ED471	Reading & Writing in the Content Area	3
b. Instructional Interventions for Students with Reading Deficits	ED470	Instructional Interventions for Students with Reading Deficits	3
<b>Professional Requirements - Total Semester Hours</b>			<b>26</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)	ED102 (18 hours) ED105 (12 hours)	Field Experience I Field Experience II	1 0
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	PY343 (18 hours) ED370SC (15 hrs) ED471 (12 hours)	Psychology of the Exceptional Child (Prac) Teaching Methods in the Content Area Reading & Writing in the Content Area	1 0 0
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	ED462 (16 week placement)	Supervised Student Teaching	10
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>12</b>
<b>C. Biology Content Knowledge Area (Minimum of 35 semester hours)</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Semester Hours</b>
1. History/Philosophy of Science and Technology (Minimum of three semester hours)	SC382	History and Philosophy of Science	3
2. Biology Coursework – Minimum of 20 semester hours which must include:			
a. Cell Biology	B1101 B1102	General Biology (w/ a lab) General Biology (w/ a lab)	4 4
b. Plant Form and Function	B1101 B1108	General Biology (w/ a lab) Biodiversity (w/ a lab)	0 4
c. Animal Form and Function	B1102 B1108	General Biology (w/ a lab) Biodiversity (w/ a lab)	0 0
d. Genetics	B1101	General Biology (w/ a lab)	0
e. Evolution	B1108	Biodiversity (w/ a lab)	0
f. Biology Electives	Choose 8 hours from the following: B1107 B1109 B1205 B1206 B1300 B1301 B1302 B1304 B1305 B1306 B1307 B1309 B1311  B1315	Human Anatomy (5 hours) Anatomy & Physiology (5 hours) General Physiology (5 hours) Invertebrate Zoology/Parasitology (4 hours) Ornithology (4 hours) Ecology (3 hours)—If not used below Botany (3 hours) Mammalogy (4 hours) Microbiology (4 hours) Genetics (4 hours) Comparative Animal Behavior (4 hours) Histology (4 hours) Conservation Biology and Natural Resource management (3 hours)—If not used below Immunology (3 hours)	8
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Chemistry	CH111	General Chemistry (w/ a lab)	4
b. Physics	PH111	General Physics I (w/ a lab)	4
c. Earth Science	GL105 OR SC103	Exploring Geology Introduction to Meteorology	3-4
d. Environmental Science	One of the following: B1/ES105 B1301 B1311	Into to Environmental Science (w/ a lab) (4) Ecology (w/ a lab) (4) Conservation Biology and Natural Resource Management (3)	3-4
<b>Content Knowledge Area - Total Semester Hours</b>			<b>37-39</b>

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