



**CHEMISTRY, GRADES 9-12**

EDUCATOR PREPARATION PROGRAM NAME <b>AVILA UNIVERSITY</b>	EDUCATOR PREPARATION PROGRAM CODE <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)

**A. Professional Requirements (Minimum of 26 semester hours)**

**1. Content Planning and Delivery**

	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	ED 185/585 ED 315/515	Practicum General Methods & Differentiated Learning	1 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 ED 185/585 ED 494/594	Introduction to Educational Technology Practicum Final Clinical Experience Seminar	1 1 1
f. English Language Learning	ED 322/522	Language & Literacy in the Global Context	-

**2. Individual Student Needs**

	Course Number	Course Title	Semester Hours
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 ED 315/515 ED 455/555	Methods & Educational Technology General Methods & Differentiated Learning Special Methods	1 1 1
d. Classroom Management	ED 381/581 ED 419/519	Health & Safety Issues in the Schools Managing the Learning Environment	1 2
e. Cultural Diversity	ED 287/587	Multicultural Foundations of Education	3
f. Educational Psychology	ED 229/529	Developmental Educational Psychology	1.5

**3. Schools and the Teaching Profession**

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	ED 366/566	Consultation, Collaboration, and Family Engagement: Middle/Secondary	1
b. Legal/Ethical Aspects of Teaching	ED 235/535 ED 419/519 ED 494/594	Psychology of the Exceptional Child Managing the Learning Environment Final Clinical Experience Seminar	1 1 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>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)	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>	<b>OR</b>	
	ED 596	Internship	10
	<b>OR</b>	<b>OR</b>	
(ED 597 <b>and</b> ED 598)	(Beginning Internship <b>and</b> Advanced Internship)	3	7
<b>Field and Clinical Experiences - Total Semester Hours</b>			<b>12</b>
<b>C. Chemistry 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)	NS 380 <b>OR</b> IS 369	Special Topics: History/Philosophy of Science & Technology <b>OR</b> Reasoning, History & Social Implications of Science	3
2. Chemistry Coursework – Minimum of 20 semester hours which must include:			
a. Inorganic Chemistry	CH 135	Advanced General Chemistry	4
b. Analytical Chemistry	CH 321	Analytical Chemistry	4
c. Organic Chemistry	CH 216	Organic Chemistry	5
d. Physical Chemistry	CH 350	Physical Chemistry for the Biological Sciences	3
e. Biochemistry	CH 342	Biochemistry I	3
f. Chemistry Electives	CH 137	General Chemistry II	4
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Biology	BI 111 BI 112	General Biology: Cells and Genes <b>OR</b> General Biology: Ecology & Evolution	4 4
b. Physics	PH 231	General Physics I	5
c. Earth Science	NS 125 <b>OR</b> 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>46</b>

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