



CHEMISTRY, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME DRURY UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 603541
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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.MoSPETtransition@dese.mo.gov on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or DESE.MoSPETtransition@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	EDUC 200	Technology in the Classroom	1
	EDUC 304 or EDUC 638	Teaching in Diverse Classrooms	.5
		Teaching and Learning in Diverse Classrooms	.5
	EDUC 350	Methods of Teaching the Biological & Physical Sciences	1
b. Instructional Strategies and Techniques in Content Area Specialty	EDUC 385	Secondary School Curriculum	1.5
	EDUC 308 EDUC 350	Secondary Content Area Literacy	3
		Methods of Teaching the Biological & Physical Sciences	.5
EDUC 385	Secondary School Curriculum	.5	
c. Assessment, Student Data, and Data-Based Decision-Making	EDUC 302	Educational Psychology & Assessment	1
	EDUC 385	Secondary School Curriculum	.5
d. Strategies for Content Literacy	EDUC 331 or EDUC 632	Content Area Literacy	2
		Literacy Instruction in the Content Area	2
e. Critical Thinking and Problem Solving	EDUC 205 or EDUC 203	Diversity & Social Justice in Education	.5
		The American Classroom	.5
f. English Language Learning	EDUC 205 or EDUC 203	Diversity & Social Justice in Education	.5
		The American Classroom	.5
	EDUC 304 or EDUC 638	Teaching in Diverse Classrooms	.5
		Teaching and Learning in Diverse Classrooms	.5
	EDUC 331 or EDUC 632	Content Area Literacy	1
		Literacy Instruction in the Content Area	1
EDUC 340	Education of the Exceptional Child	.5	

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDUC 207	Psychology of Human Growth & Development	3
b. Psychology/Education of the Exceptional Child	EDUC 340	Education of the Exceptional Child	2.5
c. Differentiated Learning	EDUC 350	Methods of Teaching the Biological & Physical Sciences	.5
	EDUC 385	Secondary School Curriculum	.5
d. Classroom Management	EDUC 361 or EDUC 608	Collaborative Classroom Environments	3
		Classroom Management for Teachers	3

e. Cultural Diversity	EDUC 205 or EDUC 203	Diversity & Social Justice in Education The American Classroom	1 1
	EDUC 304 or EDUC 638	Teaching in Diverse Classrooms Teaching and Learning in Diverse Classrooms	.5 .5
f. Educational Psychology	EDUC 302	Educational Psychology & Assessment	2
3. Schools and the Teaching Profession			
	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDUC 304 or EDUC 638	Teaching in Diverse Classrooms Teaching and Learning in Diverse Classrooms	.5 .5
b. Legal/Ethical Aspects of Teaching	EDUC 200	Technology in the Classroom	1
	EDUC 205 or EDUC 203	Diversity & Social Justice in Education The American Classroom	1 1

4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDUC 331 or EDUC 632	Content Area Literacy Literacy Instruction in the Content Area	3 3
b. Instructional Interventions for Students with Reading Deficits	EDUC 308	Secondary Content Area Literacy	3
Professional Requirements - Total Semester Hours			37

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 201 or EDUC 208	Teacher Aide I or Introductory Practicum	1 1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDUC 303	Secondary Education Field Experience I	1
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDUC 478	Student Teaching on the Secondary School Level	10
Field and Clinical Experiences - Total Semester Hours			12

C. Chemistry 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 277	Philosophy of Science	3
2. Chemistry Coursework – Minimum of 20 semester hours which must include:			
a. Inorganic Chemistry	CHEM 238	Inorganic Chemistry	3
b. Analytical Chemistry	CHEM 208	Analytical Chemistry	3
c. Organic Chemistry	CHEM 312 or CHEM 315	Organic Chemistry Reactions Organic Chemistry	3 3
d. Physical Chemistry	CHEM 327	Physical Chemistry	3
e. Biochemistry	CHEM 336	Biochemistry	3
f. Chemistry Electives	Choose courses to bring total chemistry coursework to at least 20 hours:		
	CHEM 308	Advanced Analytical Chemistry	3
	CHEM 312	Organic Chemistry Reactions	3
	CHEM 336	Biochemistry	3
	CHEM 338	Advanced Inorganic Chemistry	3
	CHEM 390	Selected Topics	3
	CHEM 412	Advanced Organic Chemistry Reactions	3
	CHEM 414	Medicinal Chemistry	3
	CHEM 415	Advanced Organic Chemistry	3
	CHEM 427	Advanced Physical Chemistry	3
	CHEM 436	Advanced Biochemistry	3
	CHEM 208-L	Analytical Chemistry Lab	1
	CHEM 238-L	Inorganic Chemistry Lab	1
	CHEM 308-L	Advanced Analytical Chemistry Lab	2
	CHEM 312-L	Organic Chemistry Reactions Lab	2
	CHEM 315-L	Organic Chemistry Lab	2
	CHEM 327-L	Physical Chemistry Lab	2
	CHEM 336-L	Biochemistry Lab	2

	CHEM 338-L	Advanced Inorganic Chemistry Lab	2
	CHEM 414-L	Medicinal Chemistry Lab	1
	CHEM 415-L	Advanced Inorganic Chemistry Lab	2
	CHEM 427-L	Advanced Physical Chemistry Lab	2
	CHEM 436-L	Advanced Biochemistry Lab	2
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Biology	BIOL 172	Exploring Molecular Biology	3
b. Physics	PHYS 211	General Physics I	5
c. Earth Science	PHYS 100	Earth Science	3
d. Environmental Science	BIOL 200 or ENVR 170	Ecology Introduction to Environmental Science	3 3
Content Knowledge Area - Total Semester Hours			37

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