

**SCIENCE EDUCATION  
CHEMISTRY CONCENTRATION**

**Grade Levels 5-12  
REPA 3**

<b>NOT VALID WITHOUT OFFICIAL TRANSCRIPT EVALUATION</b>
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**CONTENT**

**Semester  
Hours**

***Each of the following:***

CHM	24100	Introductory Inorganic Chemistry	4
CHM	29400	Sophomore Chemistry Seminar (not required if student declares major after the sophomore year)	1
CHM	34200	Inorganic Chemistry	3
CHM	37300	Physical Chemistry	3
CHM	37400	Physical Chemistry	3
PHYS	17200	Modern Mechanics	4

***One of the following:***

CHM	13600	General Chemistry Honors(4) <b>OR</b>	4-10
CHM	11500	General Chemistry (4)	
CHM	11600	General Chemistry (4) <b>OR</b>	
CHM	12300	General Chemistry for Engineers I (4)	
CHM	12400	General Chemistry for Engineers II (4) <b>OR</b>	
CHM	12500	Introduction to Chemistry I (5)	
CHM	12600	Introduction to Chemistry II (5)	

***One of the following:***

CHM	26100	Organic Chemistry (3)	3
CHM	26505	Organic Chemistry (3)	

***One of the following:***

CHM	26300	Organic Chemistry Laboratory (1)	1-2
CHM	26500	Organic Chemistry Laboratory (2)	
CHM	26700	Organic Chemistry Laboratory Honors (2)	

***One of the following:***

CHM	26200	Organic Chemistry (3)	3
CHM	26605	Organic Chemistry (3)	

***One of the following:***

CHM	26400	Organic Chemistry Laboratory (1)	1-2
CHM	26600	Organic Chemistry Laboratory (2)	
CHM	26800	Organic Chemistry Laboratory Honors (2)	

***One of the following:***

CHM	32100	Analytical Chemistry I (4)	4
CHM	32300	Analytical Chemistry I Honors (4)	

***One of the following:***

BCHM	56100	General Biochemistry I (3)	3
CHM	33300	Principles of Biochemistry (3)	
CHM	53300	Introductory Biochemistry (3)	

(Chemistry continued)

<b>One of the following:</b>			2
CHM	37301	Physical Chemistry Laboratory (1) <b>AND</b>	
CHM	37401	Physical Chemistry Laboratory (1)	
<b>OR</b>			
CHM	37600	Physical Chemistry Laboratory (2)	

<b>One of the following (Calculus I):</b>			4-5
MA	16100	Plane Analytic Geometry and Calculus I (5)	
MA	16500	Analytic Geometry and Calculus I (4)	

<b>One of the following (Calculus II):</b>			4-5
MA	16200	Plane Analytic Geometry and Calculus II (5)	
MA	16600	Analytic Geometry and Calculus II (4)	

<b>One of the following (Calculus III):</b>			4-5
MA	26100	Multivariate Calculus (4)	
MA	27101	Honors Multivariate Calculus (5)	

<b>One of the following:</b>			4
PHYS	24100	Electricity and Optics (3) <b>AND</b>	
PHYS	25200	Electricity and Optics Laboratory (1)	
<b>OR</b>			
PHYS	27200	Electric and Magnetic Interactions (4)	

**Total Content 55-66**

## **PROFESSIONAL EDUCATION**

### **Foundational Courses**

EDCI	20500	Exploring Teaching as a Career	3
EDCI	27000	Introduction to Education Technology and Computing	3
EDCI	28500	Multiculturalism and Education	3
EDPS	23500	Learning and Motivation	3
EDPS	26500	The Inclusive Classroom	3
EDST	20010	Educational Policies and Laws	1
EDPS	32700	Classroom Assessment	1
EDPS	43010	Secondary Creating and Managing Learning Environments	1

### **Methods Courses**

EDCI	30900	Reading in Middle and Secondary Schools: Methods and Problems	3
EDCI	42400	The Teaching of Earth and Physical Science in the Secondary Schools	3
EDCI	49800	Supervised Teaching (10 weeks)	10

<b>One of the following:</b>			2-3
EDCI	42800	Teaching Science in the Middle and Junior High School (2)	
EDCI	55800	Integrated Science, Technology, Engineering and Mathematics (STEM) Education Methods-Secondary (3)	

**Total Professional Education 36-37**