

**SCIENCE EDUCATION
CHEMISTRY CONCENTRATION
Grade Levels 5-12
REPA 3**

<u>CONTENT</u>	<u>Semester Hours</u>
<i>Each of the following:</i>	
CHM 24100 Introductory Inorganic Chemistry (4)	4
CHM 29400 Sophomore Chemistry Seminar (1) (not required if student declares major after the sophomore year)	1
CHM 34200 Inorganic Chemistry (3)	3
CHM 37300 Physical Chemistry (3)	3
CHM 37400 Physical Chemistry (3)	3
PHYS 17200 Modern Mechanics (4)	4
<i>One of the following:</i>	
CHM 11500 General Chemistry (4)	4-5
CHM 12500 Introduction to Chemistry I (5)	4-5
<i>One of the following:</i>	
CHM 12901 General Chemistry with Biological Focus (5)	4-5
CHM 11600 General Chemistry (4)	
CHM 12600 Introduction to Chemistry II (5)	
CHM 13600 General Chemistry Honors (4)*	
*Takes the place of CHM 11500 and 11600, or CHM 12500 and 12600	
<i>One of the following:</i>	
CHM 26100 Organic Chemistry (3)	3
CHM 26505 Organic Chemistry (3)	
<i>One of the following:</i>	
CHM 26300 Organic Chemistry Laboratory (1)	1-2
CHM 26500 Organic Chemistry Laboratory (2)	
CHM 26700 Organic Chemistry Laboratory Honors (2)	
<i>One of the following:</i>	
CHM 26200 Organic Chemistry (3)	3
CHM 26605 Organic Chemistry (3)	
<i>One of the following:</i>	
CHM 26400 Organic Chemistry Laboratory (1)	1-2
CHM 26600 Organic Chemistry Laboratory (2)	
CHM 26800 Organic Chemistry Laboratory Honors (2)	

(Chemistry continued)

			Semester Hours
One of the following:			4
CHM	32100	Analytical Chemistry I (4)	
CHM	32300	Analytical Chemistry I Honors (4)	
One of the following:			3
BCHM	56100	General Biochemistry I (3)	
CHM	33300	Principles of Biochemistry (3)	
CHM	53300	Introductory Biochemistry (3)	
One of the following:			2
CHM	37301	Physical Chemistry Laboratory (1) AND	
CHM	37401	Physical Chemistry Laboratory (1)	
		OR	
CHM	37600	Physical Chemistry Laboratory (2)	
One of the following (Calculus I):			4-5
MA	16100	Plane Analytic Geometry and Calculus I (5)	
MA	16500	Analytic Geometry and Calculus I (4)	
One of the following (Calculus II):			4-5
MA	16200	Plane Analytic Geometry and Calculus II (5)	
MA	16600	Analytic Geometry and Calculus II (4)	
One of the following (Calculus III):			4-5
MA	26100	Multivariate Calculus (4)	
MA	27101	Several Variable Calculus Honors (5)	
One of the following:			4
PHYS	24100	Electricity and Optics (3) AND	
PHYS	25200	Electricity and Optics Lab (1)	
		OR	
PHYS	27200	Electric and Magnetic Interactions (4)	
			<hr/> Total Content 59-66

(Chemistry continued)

**Semester
Hours**

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	Assessment Literacy	1-2
EDPS	XXXXX	Secondary Classroom Management course**	1

**If EDPS XXXXX is offered, students should make every attempt to take EDPS 32700 for one (1) credit and EDPS XXXXX for one (1) credit. If EDPS XXXXX is not offered, EDPS 32700 should be taken for two (2) credits.

Methods Courses

EDCI	30900	Reading in Middle and Secondary Schools: Methods and Problems	3
EDCI	42400	The Teaching of Earth/Physical Science in Secondary Schools	3
EDCI	42800	Teaching Science in the Middle and Junior High School	2
EDCI	49800	Supervised Teaching	10

Total Professional Education 36