



## Chemistry (9-12) with (5-8) Science

### Secondary Education Requirements

Block One	Course	Cr	Pre-Req / Co-Req
EDUC 210	Education's Place in Society & Fld Exp I	4	
(456)	Part I: Inclusion & Belonging	--	
EDUC 212	Human Relations / Multicultural Ed	4	

**Assessment at Transition Point I: Exploration (Praxis Exam I, PPST required for Block Two)**

#### Block Two

EDUC 330	Psychology for Teaching & Learning	4	Pre: EDUC 210 / Co: EDUC 332
EDUC 332	Fld Exp II: Learning & Teaching	0	Pre: EDUC 210 & Fld Exp I
(456)	Part II: Inclusion Examples & Strategies.	--	
EDUC 355	Reading for the 5-12 Teacher	4	

**Assessment at Transition Point II: Learning & Teaching**

#### Block Three

EDUC 381	C&I: (5-12) Science	4	Pre: EDUC 330 / Co: EDUC 383
EDUC 383	Fld Exp III: Curriculum & Instruction	0	Pre: EDUC 332
(456)	Part III: Partnerships	--	

**Assessment at Transition Point III: Curriculum & Instruction**

#### Block Four *Praxis II Exams (PLT #0524) and (Content #0439 & #0245) required for licensure*

EDUC 460	Clinical Practice & Seminar	10	Pre: Blocks 1-3 & content area courses
EDUC 456	Inclusive School Community Part IV	2	Concurrent registration 460, 456

**Assessment at Transition Point IV: Clinical Practice – Recommendation for Licensure**

**Required Credits: 32**

9-12 Chemistry Co-Major Requirements		5-8 General Science Requirements	
CHEM 111	General Chemistry I	BIOL 101	General Biology (or the sequence BIOL 201, 202, 204)
CHEM 112	General Chemistry II (or substitute CHEM 115 for CHEM 111 & 112)	PHYS 101	Physics as a Liberal Arts Student (or PHYS 109 & 110 or PHYS 111 & 112)
CHEM 201	Organic Chemistry I	GEOL 111	Intro Physical Geology (or <i>one of</i> GEOL 110, 113, 114, 115)
CHEM 202	Organic Chemistry II	PHYS 104	Astronomy
CHEM 300	Quantitative Analysis		
CHEM 331	Chemical Thermodynamics & Reaction Dynamics		
CHEM 391	Research (1 credit)		
CHEM 392	Research (1 credit)		
CHEM 481	Seminar (1 credit)		
CHEM 484	Seminar (1 credit)		
MATH 113	Calculus I		
MATH 114	Calculus II		
PHYS 111	Intro to Classical Physics I		
PHYS 112	Intro to Classical Physics II		

**\*\*Additional courses required to complete a major in Chemistry; see catalog**