2.0

Bachelor of Science in Chemistry and Education with Endorsement in Secondary Education and					
MAJOR REQUIREMENTS/CHEMISTRY: 36 Credits (a)		Sciences MAJOR REQUIREMENTS/EDUCATION: 24 Credits (b)			
CE111: General Chemistry I	3.0		(,		
CE111L: General Chemistry I Lab	1.0				
OZTTIZ. Contral onomistry i Zas	1.0	ED250: Foundations of Teaching and Learning	3.0		
CE112: General Chemistry II	3.0				
CE112L: General Chemistry II Lab	1.0				
·		EDL201: Educational Psychology	3.0		
CE221: Quantitative Analysis	3.0				
CE221L: Quantitative Analysis Lab	2.0				
		EDL206: Child and Adolescent Development	3.0		
CE241: Organic Chemistry I	3.0				
CE241L: Organic Chemistry I Lab	2.0				
		ED319: Content Literacy	3.0		
CE242: Organic Chemistry II	3.0				
CE242L: Organic Chemistry II Lab	2.0	EDOOG Tarabian Ourtrate with Disease Name	0.0		
CE311: Chemical Literature	1.0	ED320: Teaching Students with Diverse Needs	3.0		
CE322: Instrumental Analysis	3.0				
CE322L: Instrumental Analysis Lab	1.0				
OLOZZE. Motramentar/Marysis Eab	1.0	9 Credits as Follows (c):			
CE341: Physical Chemistry I	3.0	<u> </u>			
CE341L: Physical Chemistry I Lab	1.0	ED416: Student Teaching AND	8.0		
, , , ,		ED416S: Seminar in Student Teaching	1.0		
CE410: Seminar	1.0				
3 crs. of CE Electives from 400+ level					
CE4xx: (Excluding CE499)	3.0	EDUCATION METHODS REQUIREMENTS: 6 C	Credits		
		ED369: Teaching Secondary Science, Part I			
		or ED375: Secondary Teaching Methods Part I	3.0		
CHEMISTRY OUTSIDE MAJOR REQUIREMENTS: 24	Credits				
MA125: Calculus with Analytic Geometry I	4.0	ED370: Teaching Secondary Science, Part II			
MA126: Calculus with Analytic Geometry II	4.0	or ED376: Secondary Teaching Methods Part II	3.0		
PH211: General Physics and Calculus I	4.0				
PH211L: General Physics w/Calculus I Lab	1.0				
PH212: General Physics w/Calculus II	4.0				
PH212L: General Physics w/Calculus II Lab	1.0				
PH301: Modern Physics	3.0				
PH302: Applied Physics	3.0				
FREE ELECTIVES: 2 Credits Credits					

(a) Students desiring certification by the ACS should enroll in the BS.CE ACS program

⁽b) Minimum grade of "C" required for Education Courses

⁽c) Students must complete the appropriate test requirement(s) with a passing score PRIOR to Student Teaching.

Bachelor of Science in Chemistry and Education with Endorsement in Secondary Education and Physical Sciences

ENERAL EDUCATION REQUIREMENTS: 36 Credits		
First Year Seminar	FY-101: First Year Seminar *(Select Section "CE")	3.0
Reading and Writing	EN101: College Composition I	3.0
Ç Ç	EN102: College Composition II	3.0
Mathematics	Fulfilled in Outside Major Requirements with MA125 or MA126	0.0
Natural Sciences	Fulfilled in Major Requirements with required CE courses	0.0
Literature	3 Credits from courses designated with Course*Type: LIT	3.0
Aesthetics and Creativity	3 Credits from Art, Music, Theatre, or Dance	3.0
Technological Literacy	IT102: Information Technology for Scientists	3.0
Reasoned Oral Discourse	Fulfilled in the Major Requirements with ED320	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	3 Credits from courses designated with Course*Type: SS.SV	3.0
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV	3.0
	or 3 Credits from courses designated with Course*Type: SS.SV	
Interdisciplinary Perspectives	3 Credits from courses designated with Course*Type: ISP	3.0
Cultural Diversity and Global	3 Credits from courses designated with Course*Type: CD	6.0
Understanding or	and 3 Credits from courses designated with Course*Type: GU	
Foreign Language	or 6 Credits from the SAME foreign language	
Experiential Education	One course designated with Course*Type: EX	0.0
Writing Intensive	Two courses from Chemistry (CE) designated with	0.0
	Course*Type: WT	0.0
	Two courses from Education (ED, EDL, EDS) designated with	0.0
	Course*Type: WT	0.0

Minimum Credits for a Bachelor of Science in Chemistry and Education with Endorsement in Secondary Education and Physical Sciences = 128.0

ADDITIONAL ENDORSEMENTS AVAILABLE:

- TSD Teacher of Students with Disabilities Secondary
 - ESL English as a Second Language Secondary

NOTES:

- * 58 credits must be completed at the 200 level or higher.
- ** Education majors are required to have an overall GPA of 2.75 for State Certification.
- ***By state regulation, all Education Majors seeking content area endorsement must complete 12+ credits at the 300 + level in the content major.