## 2012-2013

(Revised 12/2015)

## Bachelor of Science (BS) Teaching Degree Code 215A

## Program of Study for Chemistry Majors CHEMISTRY, SECONDARY EDUCATION LICENSURE

I.	CORE CURRICULUM
II.	PROFESSIONAL EDUCATION REQUIREMENTS
Α	minimum grade of C is required in each professional education course. Cl 2300 & FDN 2400 are required prior to admission to Teacher Educ.         Cl 2300       (2) Teaching and Learning in the Digital Age (Entry course to teacher education)         FDN 2400       (2) Critical Perspectives on Teaching and Learning (Pre or Co: Cl 2300) (Entry course to teacher education)         PSY 3010       (3) Psychology Applied to Teaching (Pre or Co: Cl 2300)       PROFICIENCIES:         SPE 3300*       (3) Creating Inclusive Learning Communities (Pre: Cl 2300, FDN 2400, PSY 3010)       Reading
	*Admission to Teacher Education required.
	<b>NOTE:</b> To be admitted to the Teacher Education Program students must take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exams are required for student teaching.
III.	MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above)
Α.	Chemistry (32 semester hours)         CHE 1101/1110       (4)       Introductory Chemistry I & Lab         CHE 1102/1120       (4)       Introductory Chemistry II & Lab ( <i>Pre: CHE 1101/1110; Co: 1120</i> )         CHE 2210       (3)       Quantitative Analysis ( <i>Pre: CHE 1102/1120; Co: 2211</i> )         CHE 2211       (1)       Quantitative Analysis Lab ( <i>Co: CHE 2210</i> )         CHE 3000       (1)       Introduction to Chemical Research ( <i>Pre: CHE 2101 or 2202; 2210</i> )         CHE 3301       (3)       Physical Chemistry I ( <i>Pre: CHE 2210 &amp; 2211; MAT 1120; PHY 1151</i> )         CHE 3303       (1)       Physical Chemistry I Laboratory [WID] ( <i>Co: CHE 3301; Pre: ENG 2001</i> )         CHE 3404       (3)       Inorganic Chemistry ( <i>Pre: CHE 3301</i> )         CHE 3521       (1)       Secondary Science Field Experience ( <i>Pre: Jr/Sr standing</i> )
	Experience as a tutor through the Learning Assistance Program or the Supplemental Instruction Program is strongly recommended.
	CHOOSE ONE GROUP OF 11 semester hours:         CHE 2101(3) Fundamentals of Organic Chemistry (Pre: CHE 1102/1120; Co: 2102)         CHE 2102(1) Fundamentals of Organic Chemistry Lab (Pre: CHE 1102/1120; Co: 2101)         Plus 7 semester hours of chemistry courses (CHE 4580, Biochemistry I is recommended)
	OR
	CHE 2201       (3)       Organic Chemistry I ( <i>Pre: CHE 1102/1120; Co: 2203</i> )         CHE 2203       (1)       Organic Chemistry I Lab ( <i>Pre: CHE 1102/1120; Co: 2201</i> )         CHE 2202       (3)       Organic Chemistry II ( <i>Pre: CHE 2201/2203 w/minimum grade "C-"; Co: CHE 2204</i> )         CHE 2204       (1)       Organic Chemistry II Lab ( <i>Pre: CHE 2201/2203 w/grade "C-"; Co: CHE 2202</i> )         Plus 3 semester hours of chemistry courses (CHE 4580, Biochemistry I is recommended)
в.	Physics (10 semester hours)PHY 1150(5)Analytical Physics I (Pre: MAT 1110)PHY 1151(5)Analytical Physics II (Pre: MAT 1120)
C.	Mathematics (8 semester hours)         MAT 1110       (4)       Calculus with Analytic Geometry I (Pre: MAT 1025 w/min grade C-)         MAT 1120       (4)       Calculus with Analytic Geometry II (Pre: MAT 1110 w/min grade C-)
D.	Education (5 semester hours) Minimum "C" grade is required in both these courses.         G S 4403       (3)       Teaching Science in Middle and High Schools [WID] (Pre: ENG 2001)         R E 4630       (2)       Reading in the Content Areas
E.	Other Science (8 semester hours)         BIO 1801      (4)       Biological Concepts I (Co: CHE 1101)         GLY 1101      (4)       Introduction to Physical Geology

- IV. MINOR (optional)
- V. ELECTIVES (taken to total 122 hours for the degree)
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   2 semester hours of free electives must be outside the major discipline.
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