UNCP Department of Chemistry and Physics Requirements for a Bachelor of Science in Chemistry – Analytical Chemistry (120 total credit hours)

reshman Seminar (1	credit hour)		General Education (44 credit hours)***			
	CORE SCIENCE	COURSES -	– 55(53) total cr	redit hours		
Chemistry - 30 credit hours						
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours	
CHM 1100	General Chemistry I Lab	1	CHM 2500	Organic Chemistry I	3	
CHM 1110	General Chemistry II Lab	1	CHM 2520	Organic Chemistry I Lab	1	
CHM 1300	General Chemistry I	3	CHM 2510	Organic Chemistry II	3	
CHM 1310	General Chemistry II	3	CHM 2530	Organic Chemistry II Lab	1	
CHM 2260	Inorganic Chemistry	4	CHM 3980**	Chemical Literature (WD)	2	
CHM 2270	Analytical Chemistry	4	CHM 4100**	Physical Chemistry (WE)	4	
Mathematics – 14(12) credit hours			Physics- 8 credit hours			
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours	
MAT 1070 and MAT 1080 (or MAT 1090)	College Algebra and Plane Trigonometry OR Precalculus	6 <u>OR</u> 4	PHY 1500	College Physics I	3	
MAT 2210	Calculus I	4	PHY 1510	College Physics II	3	
MAT 2220	Calculus II	4	PHY 1560	College Physics I Lab	1	
Biology – 3 credit hours			PHY 1570	College Physics II Lab	1	
Course Number	Course Title	Credit Hours	Physics -	Physics - OR PHY 2000, 2010, 2060, and 2070		
BIO 1000	Principles of Biology	3				
	ANALYTICAL TRA	ACK (CANL)	– 32 (34) cre	dit hours		
Analytical Chemistry – 30 credit hours			Other Requirements – 2 (4) credit hours			
Course Number	Course Title	Credit Hours		Electives (any area) 2 (4)		
BIOL 1000	Laboratory Investigations and Experiences in General Biology	1	Elective Course Number	Course Title	Credit Hours	
CHM 4270	Instrumental Analysis (WD)**	4				
CHM 3110	Biochemistry	3				
CHM 3120	Experim Methods in BioChem	1				
CHM 3990* and/or	Research in Chemistry	_				
CHM 4800* and/or	Internship in Chemistry	Total: 6				
CHM 4990*	Independent Study in Chemistry					
PHY 2180	Optics	3				
PHY 2210	Hardware & Software Concepts	3				
PHY 3560	Modern Electronics	3				
PHY 4200*	Advanced Laboratory I	3				
PHY 4210*	Advanced Laboratory II	3				

^{***} Twelve hours of General Education courses are listed separately above as specific core requirements.

^{**}WD: Writing in Discipline WE: Writing Enriched

^{*}six hours-must include department chair and academic advisor-approved analytical chemistry focus