

**UNCP Department of Chemistry and Physics
Requirements for a Bachelor of Science in Chemistry – Molecular Biotechnology Track
(120 total credit hours)**

Freshman Seminar (1 credit hour)						
General Education (44 credit hours)*						
CORE SCIENCE COURSES – 55(53) total credit 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 <u>OR</u> 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* - <u>OR</u> PHY 2000, 2010, 2060, and 2070			
BIO 1000	Biology	3				
MOLECULAR BIOTECHNOLOGY TRACK (CMOL) – 32(34) credit hours						
Advanced Chemistry – 13 credit hours				Other Courses – 19 (21) credit hours		
Course Number	Course Title	Credit Hours	Course Number	Course Title	Credit Hours	
CHM 3110	Biochemistry I	3	BIO 3150	Microbiology	4	
CHM 3120	Biochemistry I Lab	1	**PHY 3410	Biophysics	3	
CHM 3210	Biochemistry II	3	Electives (*BTEC 3220, BIO 3710, and CHM 4270 (WD) recommended)		12 (14)	
CHM 3240	DNA Analysis Lab	1				
CHM 3990	Research in Chemistry	2	*replace	BTEC 3220 / BTEC 3610	3	
BTEC 3510	Bioprocessing	3	**replace	BTEC 4300	3	

- Twelve hours of General Education courses are listed separately above as specific core requirements.
 - Writing in Discipline (WD) Writing Enriched (WE)
 - TWO ICC DESIGNATED COURSES ARE REQUIRED (one course for transfer students with more than 60 hours).
- NOTE: ICC courses applies only for the students beginning Fall 2022.