

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

<b>Freshman Seminar (1 credit hour)</b>							
<b>General Education (44 credit hours)*</b>							
<b>CORE SCIENCE COURSES – 55(53) total credit hours</b>							
<b>Chemistry - 30 credit hours</b>							
	<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>		<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
	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
<b>Mathematics – 14(12) credit hours</b>				<b>Physics* - 8 credit hours</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>		<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
	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
<b>Biology – 3 credit hours</b>					PHY 1570	College Physics II Lab	1
	<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Physics* - <u>OR</u> PHY 2000, 2010, 2060, and 2070</b>			
	BIO 1000	Biology	3				
<b>MOLECULAR BIOTECHNOLOGY TRACK (CMOL) – 32(34) credit hours</b>							
<b>Advanced Chemistry – 13 credit hours</b>				<b>Other Courses – 19 (21) credit hours</b>			
	<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>		<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
	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.

\*\*WD: Writing in Discipline

\*\*WE: Writing Enriched