

# Suggested Study Plan For B.S. Chemistry Major: Concentration in Biochemistry (with MAC)

MXX = Minerva; CIC = College Requirement; CW = College Writing

<b>Freshman Year</b>	
<u>Fall</u>	<u>Credits</u>
CHE 111, 112 General Chemistry I <sup>F,S,Su</sup> (MSDA)	3+1
FYE 101 Succeed at the G (Chem/Biochem Section) <sup>F</sup> (MFND)	3
Any Course in Written Communication (MWC) (Ex. ENG 101)	3
Any Course in Social/ Behavioral Science (MSBS)	3
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<b>Freshman Year</b>	
<u>Spring</u>	<u>Credits</u>
CHE 114, 115 General Chemistry II <sup>F,S,Su</sup> (MSDA)	3+1
MAT 190 Pre-Calculus (MQR) <sup>F,S,Su</sup>	4
Any Course in Oral Communications (MOC)	3
BIO 111 Principles of Biology I & Lab (MNTS)	3+1
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<b>Sophomore Year</b>	
<u>Fall</u>	<u>Credits</u>
CHE 342 Inorganic Chemistry I <sup>F</sup> (CIC-NDS)	3
CHE 351 <sup>F,S,Su</sup> ,353 <sup>F</sup> Organic Chem I & Lab	4 + 1
MAT 196 Calculus A (MQR) <sup>F,S,Su</sup>	4
BIO 112 Principles of Biology II & Lab	3 + 1
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<b>Sophomore Year</b>	
<u>Spring</u>	<u>Credits</u>
CHE 352 Organic Chemistry II <sup>F,S,Su</sup>	3
CHE 355 Inter Organic Chemistry Lab <sup>S</sup>	2
PHY 291 General Physics I <sup>S</sup>	4
MAT 296 Calculus B <sup>F,S,Su</sup>	4
Language or Culture (CIC)	3/ 16

<b>Junior Year</b>	
<u>Fall</u>	<u>Credits</u>
CHE 331, 333 Quantitative Analysis & Lab (CW) <sup>F</sup>	3 + 1
PHY 292 General Physics II <sup>F</sup>	4
MAT 310, 390, or 396	3 or 4
BIO 355 Cell Biology or BIO 392 Genetics	3
Language or Culture (CIC)	3/ 17 or 18

<b>Junior Year</b>	
<u>Spring</u>	<u>Credits</u>
CHE 431 Instrumental Analysis <sup>S</sup>	3
Any Course in Global & Intercultural Engagement (MGIL)	3
Any Course in Health & Wellness (MHW)	3
Any Course in Humanities & Fine Arts (MHFA)	3
Any Course in Diversity & Equity (MDEQ)	3 /16

<b>Senior Year</b>	
<u>Fall</u>	<u>Credits</u>
CHE 401 Chemistry Seminar <sup>F,S</sup>	P/NP
CHE 481 Synthetic Techniques <sup>F</sup> (CW)	2
CHE 420 Biochemistry (Or CHE 456 & 457) <sup>F</sup>	3
CHE 461, 463 Physical Chemistry I & Lab <sup>F</sup>	4+1
Any Course in Social & Behavioral Science (CIC)	3

<b>Senior Year</b>	
<u>Spring</u>	<u>Credits</u>
CHE 402 Chemistry Seminar <sup>F,S</sup>	1
CHE-442 Inorganic Chemistry II <sup>S</sup>	3
CHE 462 Physical Chemistry II <sup>S</sup>	3
Advanced Elective for the Major	3
Any course in Humanities (CIC)	3

## FOOTNOTES FOR B.S. CHEMISTRY STUDY PLAN

1. All B.S. majors must complete MAT 196 & MAT 296 Calculus A & B. Depending upon the individual mathematics background\*, some students may start with MAT 190 rather than MAT 196. MAT 190 is a one-semester precalculus course for science majors. Some students may take MAT 181 Foundations of Calculus along with MAT 196. Majors are strongly advised to elect additional advanced mathematics courses. A Calculus Readiness Diagnostic Test should be taken. (\*See <https://mathstats.uncg.edu/undergraduate/placement/calculus-diagnostic-test/>)

2. **BS students (0-6 hours) – Language and Culture** can be satisfied in one of these three ways:

6 hours of additional language coursework related to a single language, between the 101-204 level, depending on their starting point in the language	3 hours of additional language coursework, between the 101-204 level, depending on their starting point in the language, and a CIC Culture course	6 hours of CIC Culture courses
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3. The sequence listed here for meeting the Minerva Academic Requirements (MAC) and College additional requirements (CIC) (identified by capital letters in parentheses) is a suggestion only and may be arranged to fit each student's particular situation. Note: Two College Writing courses must be completed.

4. Only major requirement and related area requirement courses at or below the 300-level in which grades of C- or better are earned will be counted toward the major. Students must earn a C- or better in prerequisite major requirement and related area requirement courses before advancing to subsequent courses. Students must have an overall GPA of at least 2.0 in CHE courses at UNC Greensboro.

5. General Electives may be taken in any area, including chemistry, related sciences, and mathematics. CHE 491, 492 Independent Study is encouraged.

6. Chemistry and Biochemistry majors can register for CHE 401 any time after achieving junior status. All must register for CHE 402 in their last semester. A grade will be given in the semester CHE 402 is completed, based on presentation and attendance in CHE 401 and CHE 402. All majors are encouraged to attend seminar even if not registered for CHE 401 or CHE 402.

### Major Requirements

CHE 111, 112, 114, 115, 331, 333, 342, 351, 352, 353, 355, 401 (audit), 402, 456, 457, 458, 442, 461, 462, 463, 431, 433

### Related Area Requirements

- MAT 196, 296
- PHY 291, 292
- BIO 111, 112, and either BIO 355 or BIO 392
- At least one course selected from: CHE 427, 436, 453, 455, 470B, 481\*, 491, 492, (minimum of 2 credit hours total for any combination of 491 and 492 count as one course).