

# Suggested Study Plan For B.S. Chemistry Major (with MAC)

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

Freshman Year	
<u>Fall</u>	<u>Credits</u>
CHE 111, 112 General Chemistry I <sup>F,S,Su</sup> (MDA)	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
Foreign Language (CIC1)	3
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Freshman Year	
<u>Spring</u>	<u>Credits</u>
CHE 114, 115 General Chemistry II <sup>F,S,Su</sup> (MNTS)	3+1
MAT 190 Pre-Calculus (MQR) <sup>F,S,Su</sup>	4
Any Course in Oral Communications (MOC)	3
Any Course in Health & Wellness (MHW)	3
Foreign Language (CIC2)	3 / 17

Sophomore Year	
<u>Fall</u>	<u>Credits</u>
CHE 342 Inorganic Chemistry <sup>F</sup> (CIC-NDS)	3
CHE 351 <sup>F,S,Su</sup> ,353 <sup>F</sup> Organic Chem I & Lab	3 + 2
MAT 196 Calculus A (MQR) <sup>F,S,Su</sup>	4
Foreign Language (CIC3)	3
	/ 15

Sophomore Year	
<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
Foreign Language (CIC4)	3/ 16

Junior Year	
<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
Any Course in Social/ Behavioral Science (MSBS)	3
	/ 14 or 15

Junior Year	
<u>Spring</u>	<u>Credits</u>
CHE 431, 433 Instrumental Analysis and Lab <sup>S</sup>	3 + 1
Any Course in Global & Intercultural Engagement (MGIL)	3
Any Course in Diversity & Equity (MDEQ)	3
Any Course in Humanities & Fine Arts (MHFA)	3
Elective Course	3 / 16

Senior Year	
<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 TWO courses in Humanities (CIC)	3 + 3
	/ 16

Senior Year	
<u>Spring</u>	<u>Credits</u>
CHE 402 Chemistry Seminar <sup>F,S</sup>	1
CHE-442 Advanced Inorganic Chemistry <sup>S</sup>	3
CHE 462, 464 Physical Chemistry II & Lab <sup>S</sup>	3 + 1
Advanced Science Elective	3
Any Course in Social & Behavioral Science (CIC)	3
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## FOOTNOTES FOR B.S. CHEMISTRY STUDY PLAN

1. All B.S. majors must complete MAT 196 & MAT 296 Calculus A & B, and an advanced math course—either MAT 310 Elementary Linear Algebra, MAT 390 Ordinary Differential Equations, or MAT 396 Calculus C. 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. The requirement is Foreign Language through the Intermediate (204) level. If the student is able to begin Foreign Language at the intermediate level in the Freshman Year, a second year of language may not be required. Students who are native speakers of a second language may be exempted from the Foreign Language requirement.

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 are 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. 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 even if not registered for CHE 401 or CHE 402.

7. Eligible courses for Advanced Science Elective are: CHE 490, 491, 492, (minimum of 2 credit hours total for any combination of 491 and 492 count as one course), 493, 436, 453, 455, 470 (minimum 2 credit hours total for any combination of CHE 470 courses, counts as one course); BIO 355, 392, 477, 479, 406; CSC 230, 330, 339, 427; STA 271, 351; MAT 310, 311, 345, 390, 394, 395; PHY 321, 323, 325, 327, 412, 413, 421, 426. Independent study, CHE 491, 492 is encouraged. These electives may be taken earlier than the senior year if prerequisites permit.

### Major Requirements

CHE 111, 112, 114, 115, 331, 333, 342, 351, 352, 353, 355, 401 (audit), 402, 420 or (456 and 457 which counts as one course), 442, 461, 462, 463, 464, 481, 431, 433

### Related Area Requirements

1. MAT 196, 296, and one of MAT 310, 390 or 396

2. PHY 291, 292

3. At least one course selected from: CHE 490, 491, 492, (minimum of 2 credit hours total for any combination of 491 and 492 count as one course), 436, 453, 455, 493, 470 (minimum 2 credit hours total for any combination of CHE 470 courses, counts as one course); BIO 355, 392, 406, 479; CSC 230, 330, 339, 427; STA 271, 351; MAT 310, 311, 390, 394, 395, 396 (if not used in 1.); PHY 321, 323, 325, 327, 412, 421.