# Suggested Study Plan For B.S. Chemistry Major

## Freshman Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CHE 111, 112 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MAT 151 PreCalculus II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 101 (GRD1)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Historical Perspective (GHP-GMO)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language (CFL1)</td>
<td>3 / 16</td>
</tr>
<tr>
<td>Spring</td>
<td>CHE 114, 115 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MAT 191 Calculus I</td>
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</tr>
<tr>
<td></td>
<td>Reasoning &amp; Discourse (GRD2)</td>
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<tr>
<td></td>
<td>Historical Perspective (GHP-GPM)</td>
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<tr>
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<td>Foreign Language (GFL2)</td>
<td>3 / 16</td>
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</table>

## Sophomore Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CHE 342 Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHE 351, 353 Organic Chemistry I &amp; Lab</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>MAT 292 Calculus II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Philosophical, Religious, Ethical Princ. (GRP)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Language (CFL3)</td>
<td>3 / 17</td>
</tr>
<tr>
<td>Spring</td>
<td>CHE 352 Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHE355 Inter Organic Chemistry Lab</td>
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<tr>
<td></td>
<td>PHY 291 General Physics I</td>
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<tr>
<td></td>
<td>MAT 293 Calculus III</td>
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<tr>
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<td>Foreign Language (CFL4)</td>
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</table>

## Junior Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CHE 331, 333 Quantitative Analysis</td>
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</tr>
<tr>
<td></td>
<td>PHY 292 General Physics II</td>
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</tr>
<tr>
<td></td>
<td>Literature (GLT1)</td>
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<tr>
<td></td>
<td>Fine Arts (GFA)</td>
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</tr>
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<td></td>
<td>Elective</td>
<td>3 / 17</td>
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<tr>
<td>Spring</td>
<td>CHE 531, 533 Instrumental Analysis</td>
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<tr>
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<td>Literature (GLT2)</td>
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<td></td>
<td>Social/ Behavioral Science (GSB1)</td>
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</tr>
<tr>
<td></td>
<td>Life Science (GLS)</td>
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</table>

## Senior Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>CHE 401 Chemistry Seminar</td>
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</tr>
<tr>
<td></td>
<td>CHE 481 Synthetic Techniques</td>
<td>2</td>
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<tr>
<td></td>
<td>CHE 420 Biochemistry (Or CHE 556,557)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHE 461, 463 Physical Chemistry</td>
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</tr>
<tr>
<td></td>
<td>Social/ Behavioral Science (GSB2)</td>
<td>3 / 14</td>
</tr>
<tr>
<td>Spring</td>
<td>CHE 402 Chemistry Seminar</td>
<td>P/NP</td>
</tr>
<tr>
<td></td>
<td>CHE-442 Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHE 462, 464 Physical Chemistry</td>
<td>4</td>
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<tr>
<td></td>
<td>Advanced Science Elective</td>
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</tr>
<tr>
<td></td>
<td>Social/ Behavioral Science (GSB3)</td>
<td>3 / 14</td>
</tr>
</tbody>
</table>

*Marker Courses: Four GL/GN; Two SI (one in major); Four WI (one in major, one >300 level)*
FOOTNOTES FOR B.S. CHEMISTRY STUDY PLAN

1. All B.S. majors must complete mathematics at least through MAT 293 Calculus III. Depending upon the individual mathematics background*, some students may start with Math 150 rather than Math 151 and extend the sequence of math courses by one semester. Others may start with Math 191. Majors are strongly advised to elect additional advanced mathematics courses. (*See http://www.uncg.edu/mat/undergraduate/mathplacetest.html)

2. 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. The requirement is Foreign Language through the Intermediate (204) level.

3. The sequence listed here for meeting the General Education Requirements (GEC) and College Additional Requirements (CAR) (identified by capital letters in parentheses) is a suggestion only and may be arranged to fit each student’s particular situation. Note: Four Writing Intensive, two Speaking Intensive, and four Global (including one nonwestern) marker courses must be completed.

4. Only chemistry and Related Area Requirement courses in which grades of C- or better are earned will be counted toward the major. A grade of C- must be earned in a prerequisite course before taking the subsequent course.

5. Electives may be taken in any area, including chemistry, related sciences and mathematics. Additional hours may be taken in the major and related areas, but the number of credit hours at graduation will increase accordingly. CHE 491, 492 Independent Study is encouraged.

6. Senior Chemistry majors should register for CHE 401 in their second last semester and attend seminar, whether or not they plan to present a seminar this first semester. All must register for CHE 402 in their last semester. A grade will be given in the second semester, based on presentation and attendance in CHE 401 and CHE 402. Juniors are encouraged to attend.

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, 536, 553, 555, 570 (minimum 2 credit hours total for any combination of CHE 570 courses, counts as one course); BIO 355, 392, 477, 479, 506; CSC 230, 330, 339, 523, 524; 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 (556 and 557 which counts as one course), 442, 461, 462, 463, 464, 481, 531, 533

Related Area Requirements
1. MAT 191, 292, 293
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), 493, 536, 553, 555, 570 (minimum 2 credit hours total for any combination of CHE 570 courses, counts as one course); BIO 355, 392, 477, 479, 506; CSC 230, 322, 330, 339, 523, 524; MAT 310, 311, 345, 390, 394, 395; PHY 321, 323, 325, 327, 412, 413, 421, 426