Chemistry, B.A., Biochemistry Emphasis (CHM) Catalog Years 2015 & Later

Required Chemistry Courses: 30 Total Credits
Please note that a grade of “C” or higher is required for all courses in the major

### Lower-Level Chemistry Courses
- CHM 2045 □ CHM 2045L General Chem. I & Lab
- CHM 2046 □ CHM 2046L General Chem. II & Lab
- CHM 2210 □ CHM 2210L Organic Chem. I & Lab
- CHM 2211 □ CHM 2211L Organic Chem. II & Lab

### Upper-Level Chemistry Courses
- CHM 3610 □ CHM 3610L Intermediate Inorganic Chemistry
- CHM 4060 □ CHM 4070 □ CHM 4230 □ CHM 4274 □ CHM 4300 (Fall only) □ CHM 4307 □ CHM 4410 (Fall only) □ CHM 4410L □ CHM 4411 (Spring only) □ CHM 4413(Spring only) □ CHM 4455 □ CHM 4932 □ CHM 4970

### Required Chemistry Electives: Choose 9 credits of courses from the following list:

<table>
<thead>
<tr>
<th>Course Prefix &amp; Number</th>
<th>Course Title</th>
<th>Credits</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ CHM 3610</td>
<td>Intermediate Inorganic Chemistry</td>
<td>3</td>
<td>CHM 2046 &amp; Lab</td>
</tr>
<tr>
<td>□ CHM 3610L</td>
<td>Intermediate Inorganic Chemistry Lab</td>
<td>1</td>
<td>CHM 2046 &amp; Lab AND CHM 3610 as co-requisite</td>
</tr>
<tr>
<td>□ CHM 4060</td>
<td>Use of Chemical Literature</td>
<td>1</td>
<td>CHM 2211</td>
</tr>
<tr>
<td>□ CHM 4070</td>
<td>Historical Perspectives in Chemistry</td>
<td>3</td>
<td>CHM 2045 &amp; Junior Standing</td>
</tr>
<tr>
<td>□ CHM 4230</td>
<td>Spectroscopic Analysis of Organic Compounds</td>
<td>3</td>
<td>CHM 2211</td>
</tr>
<tr>
<td>□ CHM 4274</td>
<td>Introduction to Drug Discovery</td>
<td>3</td>
<td>CHM 2211 &amp; BSC 2010</td>
</tr>
<tr>
<td>□ CHM 4300 (Fall only)</td>
<td>Biomolecules</td>
<td>3</td>
<td>CHM 2211</td>
</tr>
<tr>
<td>□ CHM 4307</td>
<td>BioOrganic Chemistry</td>
<td>3</td>
<td>BCH 3053 or BCH 4033</td>
</tr>
<tr>
<td>□ CHM 4410 (Fall only)</td>
<td>Physical Chemistry I</td>
<td>4</td>
<td>CHM 2046 &amp; lab, MAC 2312, AND PHY 2054 &amp; lab or PHY 2049 &amp; lab</td>
</tr>
<tr>
<td>□ CHM 4410L</td>
<td>Physical Chemistry I Lab</td>
<td>1</td>
<td>CHM 4410</td>
</tr>
<tr>
<td>□ CHM 4411 (Spring only)</td>
<td>Physical Chemistry II</td>
<td>4</td>
<td>CHM 2046 &amp; lab, MAC 2312, AND PHY 2054 &amp; lab or PHY 2049 &amp; lab</td>
</tr>
<tr>
<td>□ CHM 4413(Spring only)</td>
<td>Biophysical Chemistry</td>
<td>3</td>
<td>CHM 4410</td>
</tr>
<tr>
<td>□ CHM 4455</td>
<td>Chemistry of High Polymers</td>
<td>3</td>
<td>CHM 2210</td>
</tr>
<tr>
<td>□ CHM 4932</td>
<td>Special Topics in Chemistry</td>
<td>1-3</td>
<td>Vary dependent on course</td>
</tr>
<tr>
<td>□ CHM 4970</td>
<td>Undergraduate Research</td>
<td>1</td>
<td>Only 1hr max counts towards Chemistry hours</td>
</tr>
</tbody>
</table>

*Contact advisor for approval of courses

### Required Supporting Courses

**Mathematics Courses: 8 Credits**
- MAC 2311 Calculus I
- MAC 2312 Calculus II

**Physics Courses: 8 Credits**
- PHY 2048 & PHY 2048L OR PHY 2053 & PHY 2053L Physics I & Lab
- PHY 2049 & PHY 2049L OR PHY 2054 & PHY 2054L Physics II & Lab
- BSC 2010 □ BSC 2010L Cellular Processes & Lab □ PCB 3023 □ PCB 3023L Cell Biology & Lab

**Suggested Additional Electives—Do Not count towards the major!**
- CHM 4932, PCB 3063, PCB 4843, PCB 5235, STA 2023, MCB 3020C, MCB 4503, ZOO 3713C, ZOO 4753C, EVR 2001
Students should regularly review their DegreeWorks audit to ensure they are on track to complete all graduation Requirements, and in preparation for all advising appointments.
If you are already declared as a Chemistry BA—Biochemistry emphasis major, follow these steps to review your Degree Works report online:
Go to [http://Degreeworks.usf.edu](http://Degreeworks.usf.edu) → Type in NetID and password → View your degree audit! (DegreeWorks can also be accessed through BlackBoard and OASIS)

### General Education Common Core/Foundation of Knowledge and Learning Lower-Level Requirements

- **General Education Common Core**
  - ENC 1101 (3cr)
  - ENC 1102 (3cr)
  - Social/Behavioral Sciences (3cr)
    - (Select from: AMH 2020, ANT 2000, ECO 2013, POS 2041, PSY 2012, and SYG 2000)
  - Humanities (3cr)

- **Additional USF Foundations of Knowledge and Learning (FKL) courses (*No duplicate credit allowed):**
  - Social/Behavioral Sciences (3cr)
  - Humanities (3cr)
  - Fine Arts (3cr)
  - Human/Cultural Diversity in a Global Context (3cr)
  - Two Courses from the above categories must meet the Human Historical Context and Process dimension (6cr)
    - ENC1101 (3cr)
    - _________________ (3cr)

### Upper-Level Requirements:

*Require 60 completed credit hours and must be chosen only from the list in the Catalog or Schedule of Classes.

- Capstone exit course (3cr)
- Writing Intensive exit course (3cr) _________________

- __cr → 120 credits: A Bachelor’s degree requires a minimum of 120 credit hours.

- __cr → 48 upper level credits: All students are required to take at least 48 credits at the 3000 & 4000 level. Please note: The Chemistry BA—Biochemistry emphasis major courses will satisfy _____ credits of the required 48 credits and the exit courses-combined will satisfy another _____ credits. Based on the number of upper level credits you have already taken, you have _____ upper level credits remaining, outside of the major and exit courses.

- __cr → 9 credit summer rule: All students who enter USF with fewer than 60 credits are required to take at least 9 credits of course work in the summer at a State University System (SUS) 4-year University.

- **12 cr of Gordon Rule Writing** ENC 1101 & ENC 1102, Writing Intensive Exit Course and one additional course __________

- **FLENT**: Foreign Language Entrance Requirement: All students must have two years of the same foreign language in high school.

- **FLEX**: Foreign Language Exit Requirement: Bachelor of Arts students are required to take two semesters of a foreign language in college. Please visit Cooper 419 if you choose to test out of this requirement. American Sign Language will count for science majors.

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**See the USF catalog for a complete list of graduation requirements. The final responsibility for meeting all graduation requirements stated in the catalog rests with the student. This sheet is not meant to be a complete list of University Graduation requirements.***