Required Chemistry Courses: 33 Total Credits

Please note that a grade of “C” or higher is required for all courses in the major

### Required Chemistry Courses: 33 Total Credits

#### Lower-Level Chemistry Courses: 18 credits
- 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: 15 credits
- CHM 3120C □ CHM 3120C Elementary Analytical Chemistry
- CHM 3610 □ Intermediate Inorganic Chemistry
- CHM 3610L □ Intermediate Inorganic Chemistry Lab
- CHM 4410 □ Physical Chemistry I (Fall Only)
- CHM 4413 □ Biophysical Chemistry (Spring Only)

#### Required Chemistry Electives: Choose 6 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>□ BCH 4033 (Fall only)</td>
<td>Advanced Biochemistry I</td>
<td>3</td>
<td>CHM 2211, BSC 2010</td>
</tr>
<tr>
<td>□ BCH 3023L</td>
<td>Biochemistry Lab</td>
<td>2</td>
<td>BCH 3053 or BCH 4033</td>
</tr>
<tr>
<td>□ BCH 4034 (Spring only)</td>
<td>Advanced Biochemistry II</td>
<td>3</td>
<td>BCH 4033</td>
</tr>
<tr>
<td>□ CHM 4060</td>
<td>Use of Chemical Literature</td>
<td>1</td>
<td>CHM 2046</td>
</tr>
<tr>
<td>□ CHM 4070</td>
<td>Historical Perspectives in Chemistry</td>
<td>3</td>
<td>CHM 2046 and 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 (Fall Only)</td>
<td>Introduction to Drug Discovery</td>
<td>3</td>
<td>BSC 2010 &amp; CHM 2211</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 4410L</td>
<td>Physical Chemistry 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</td>
</tr>
<tr>
<td>□ CHM 4611(Spring only)</td>
<td>Advanced Inorganic Chemistry</td>
<td>3</td>
<td>CHM 3610, CHM 4410 or Consent of Instructor</td>
</tr>
<tr>
<td>□ CHM 4455</td>
<td>Chemistry of High Polymers</td>
<td>3</td>
<td>CHM 2210</td>
</tr>
<tr>
<td>□ CHS 4300 (Fall only)</td>
<td>Clinical Chemistry</td>
<td>3</td>
<td>BCH 3023 or BCH 3053</td>
</tr>
<tr>
<td>□ CHS 4301L (Spring only)</td>
<td>Clinical Chemistry Lab</td>
<td>2</td>
<td>CHS 4300</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>

### Upper-Division Residency Requirement: At least 9 credit hours of major-applicable upper-level courses must be completed at USF.

### Required Supporting Courses: 16 Credits

#### 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

#### Required Natural Science Courses: 8 Credits
- BSC 2010 □ BSC 2010L Cellular Processes & Lab (4cr)
- BSC 2111 □ BSC 2111L Biodiversity & Lab (4cr)
- GLY 2010 □ GLY 2000L Intro. to Physical Geology & Lab (4cr)
- GLY 2100 □ GLY 2100L Historical Geology (4cr)
- EVR 2001 □ EVR 2001L Environ Science & Lab (4cr)
- CGS 2060 Intro. To Computers I (3cr)
- STA2023 Intro. To Statistics (3cr)
USF Chemistry Advising  
SCA 203; tel. 813-974-3250; fax. 813-974-2876 Email: chemadvise@usf.edu  
Schedule your advising appointment at [http://chemistry.usf.edu/advising/appt/](http://chemistry.usf.edu/advising/appt/)  
To declare your major visit: [http://www.cas.usf.edu/declare](http://www.cas.usf.edu/declare)

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 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 Canvas and OASIS)

### General Education Common Core & Additional USF Enhanced General Education courses:
- **ENC 1101 (3cr)**
- **ENC 1102 (3cr)**
- **Gen Ed Core Social/Behavioral Sciences (3cr)**  
  (Select from: AMH 2020, ANT 2000, ECO 2013, POS 2041, PSY 2012, and SYG 2000)
- **Gen Ed Core Humanities (3cr)**  
- **Enhanced General Education— Information & Data Literacy (3cr)**
- **Enhanced General Education – Ethical Reasoning & Civic Engagement (3cr)**
- **Enhanced General Education – Creative Thinking (3cr)**
- **Enhanced General Education – Human/Cultural Diversity (3cr)**
- **Enhanced General Education—High Impact Practice (3cr)**
- **Civics Literacy Requirement**  
  Select from: AMH 2020: American History II (3cr) or POS 2041: American National Government (3cr)  
  **OR** Complete the online Canvas test (pass with 60% or higher)

__120 credits__: A Bachelor’s degree requires a minimum of 120 credit hours.

__42 upper level credits__: All students are required to take at least 42 credits at the 3000 & 4000 level. Please note: The Chemistry BA major courses will satisfy ______ credits of the required 42 credits. Based on the number of upper level credits you have already taken, you have ______ upper level credits remaining, outside of the major courses.

__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, and two additional courses ____________ & ____________

__FLENT__: Foreign Language Entrance Requirement: All students must have two years of the same foreign language in high school. Students without this requirement must take two semesters of foreign language in college.

__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.

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.