**Biology Major Requirements: 40 hours total**

- Students must receive a C- or better to meet major requirements.
- Cascading Prerequisites are strictly enforced. CR = co-requisite, courses that can be taken concurrently
- Students must earn a 2.0 GPA in all major coursework taken at USF; Students must have less than 3 D and/or F grades in biology major and supporting science requirement lectures
- Students must complete a minimum of 20 hours in Biology major coursework on Tampa campus at USF

### Pre-Biology Foundation 8 hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Prerequisite(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 2010 &amp; 2010L</td>
<td>Biology I Cellular Processes</td>
<td>4 hrs</td>
<td>CHM 2045 (CR)</td>
</tr>
<tr>
<td>BSC 2011 &amp; 2011L</td>
<td>Biology II Diversity</td>
<td>4 hrs</td>
<td>BSC 2010/L</td>
</tr>
</tbody>
</table>

### Biology Core Curriculum: 14 hours

- PCB 3023          | Cell Biology      | 3 hrs | BSC 2011/L, CHM 2046     |
- PCB 3043          | Ecology           | 3 hrs | BSC 2011/L, CHM 2046     |
- PCB 3063          | Genetics          | 3 hrs | BSC 2011/L, CHM 2046     |
- Any **one** of the following labs:
  - PCB 3023L Cell Biology Lab | 1 hr | PCB 3023 (CR)            |
  - PCB 3043L Ecology Lab       | 1 hr | PCB 3043 (CR)            |
  - PCB 3063L Genetics Lab      | 1 hr | PCB 3063 (CR)            |
- Any **one** of the following courses with corresponding lab (4-5 hours)
  - BOT 4503 & 4503L Plant Physiology | (4 hrs) | BOT 3373C, PCB 3xxx |
  - MCB 4404 & 4404L Microbial Physiology & Genetics | (5 hrs) | MCB 3020C & BCH 3023 (CR) |
  - PCB 3712 & 3713L General Physiology | (4 hrs) | BSC 2011/L, CHM 2046   |
  - PCB 4723 & 4723L Animal Physiology | (4 hrs) | PCB 3xxx & CHM 2210 |

### Advanced Biology Curriculum: 18 hours

- Students may select their advanced biology course options from Department of Cell, Micro, and Molecular Biology (CMMB) and Department of Integrative Biology (IB). Please see the BioAdvise website for a full listing of course options. Courses labeled as “not for major credit” cannot be used for the advanced biology curriculum.
- The only pre-approved biology major elective option outside of either biology department is BCH 3023 Introduction to Biochemistry lecture, which is offered by the USF Department of Chemistry, located on Tampa Campus. Students who wish to take other courses to count towards the advanced biology requirements must check with BioAdvise to ensure that the course will meet graduation requirements.
- May complete up to four (4) semester hours of undergraduate research (BSC 4910, MCB 4905)
- May take more than one special topics course (BSC 4933 or BSC 5931) which have different titles, offered by CMMB or IB, and are confirmed as eligible for major credit by BioAdvise
- Choose at least 8 hours of 4000+level Biology Major courses
- Choose maximum of 10 hours at 3000+level Biology Major courses

### Supporting Sciences: 34 hours total

- Students must receive a C- or better to meet supporting science requirements for the biology major. Math and chemistry courses at USF require a “C” (2.0) grade or better in order to meet the next course in the sequence’s prerequisites.
- CHM 2045/L & CHM 2046/L General Chemistry I & II (8 hours)
- CHM 2210/L & CHM 2211/L Organic Chemistry I & II (10 hours)
- One of the General Physics sequences (8 hours):
  - PHY 2053/L & 2054/L (recommended – non-calculus based)
  - PHY 2048/L & 2049/L (calculus based – must take MAC 2311 and 2312 math sequence)
- One of the following Calculus sequences (8 hours):
  - MAC 2241 & 2242 Life Sciences Calculus I and II
  - MAC 2311 & 2312 Calculus I & II (with analytic geometry)
  - MAC 2281 & 2282 Engineering Calculus I & II
  - STA 2023 Introduction to Statistics can be substituted for any Calculus II

The final responsibility for meeting all graduation requirements stated in the catalog rests with the student. See the USF catalog for a complete list of graduation requirements. [http://www.ugs.usf.edu/catalogs.htm](http://www.ugs.usf.edu/catalogs.htm)