Required Lower-Level Biomedical Courses: 40-42 credits

Chemistry Courses: 18 Credits Total
- 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

Biology Courses: 8 Credits Total
- BSC 2010 □ BSC 2010L Cellular Processes & Lab
- BSC 2011 □ BSC 2011L BioDiversity & Lab

Mathematics Courses: 6-8 Credits Total
- MAC 2242 Life Sci. Calc. II OR MAC 2312 Calc. II OR STA 2023 Intro. Stats

Physics Courses*: 8 Credits Total
- PHY 2053 □ PHY 2053L Physics I & Lab
- PHY 2054 □ PHY 2054L Physics II & Lab
- PHY 2048 □ PHY 2048L Physics I & Lab
- PHY 2049 □ PHY 2049L Physics II & Lab

Required Upper-Level Biomedical Courses: 21 Credits

Total 7-8 Credits Required Courses:
- BCH 3053 (3cr)
- MCB 3020 (3cr) & MCB 3020L (1cr) OR
  Choose 1 Lecture: □ PCB 3063 or □ PCB 3023 AND Choose 1 Lab: □ PCB 3063L or □ PCB 3023L or □ BCH 3023L

Total 14 Additional Biomedical Credits to include ONE Lab: *No duplicate credit allowed*
- Upper-Level BIOLOGY Course Choose ONE: 3 credit minimum lecture
- Upper-Level CHEMISTRY Course Choose ONE: 3 credit minimum lecture
- Upper-Level CHEMISTRY OR BIOLOGY Course Choose ONE: 3 credit minimum lecture
- Upper-Level CHEMISTRY OR BIOLOGY LAB: 1 credit minimum lab
- Biomedical Science Major Options: 4 credit minimum lecture and/or lab

Upper-Level Biology Major Options
- BOT 3850 Medical Botany (3cr)
- MCB 3410 Cellular Metabolism (3cr)
- MCB 4115 Determinative Bacteriology (3cr)-Fall
- MCB 4404 Microbial Phys. & Genetics (4cr)
- MCB 4503 Virology (3cr)-Fall
- PCB 3023 Cell Biology (3cr)
- PCB 3063 General Genetics (3cr)
- PCB 3712 General Physiology (3cr)
- PCB 4234 Principles of Immunology (3cr)
- PCB 4522C** Experimental Genetics (3cr)
- PCB 4744 Biomedical Physiology (3cr)
- ZOO 3713C** Comp. Vert. Anatomy (5cr)-Spring
- ZOO 4753 Human Histology & Mole Path Disease (3cr)

**Combined Course-will satisfy lab requirement

Upper-Level Chemistry Major Options
- BCH 4033* Advanced Biochemistry I (3cr)-Fall
- BCH 4034 Advanced Biochemistry II (3cr)-Spring
- CHM 3120C**Elem. Analytical Chemistry (4cr)
- CHM 3610 Intermediate Inorganic Chemistry (3cr)
- CHM 3941 Peer Leading in Chemistry (3cr)
- CHM 4300 Biomolecules (3cr)-Fall
- CHM 4230 Spectroscopic Analysis of Organic Compounds (3cr)
- CHM 4292 Introduction to Medicinal Chemistry (3cr) Spring
- CHM 4274 Introduction to Drug Discovery (3cr) Fall
- CHM 4307 BioOrganic Chemistry (3cr)
- CHM 4455 Chemistry of High Polymers (3cr)
- CHM 4932 Special Topics in Chemistry
- CHS 4300 Clinical Chemistry (3cr)-Fall

*Only applicable if student has not previously completed BCH 3023

Upper-Level Science Major Options
- BIOS 4400 Use of Chemical Literature (1cr)
- HSC 4504 Public Health Immunology (3cr) - Cannot be combined with (or substituted for) PCB 4234

The following 2 courses & Physics I & II complete a MINOR in Biomedical Physics:
- PHZ 4702 Apps. Of Physics to Bio & Med I (4cr)
- PHZ 4703 Apps. Of Physics to Bio & Med II (4cr)
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 Biomedical Sciences 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)

<table>
<thead>
<tr>
<th>General Education Common Core &amp; Additional USF Enhanced General Education courses:</th>
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<tbody>
<tr>
<td>- ENC 1101 (3cr)</td>
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<td>- ENC 1102 (3cr)</td>
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<tr>
<td>- Gen Ed Core Social/Behavioral Sciences (3cr)</td>
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<tr>
<td>- Gen Ed Core Humanities (3cr)</td>
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<tr>
<td>- Enhanced General Education— Information &amp; Data Literacy (3cr)</td>
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<tr>
<td>- Enhanced General Education – Ethical Reasoning &amp; Civic Engagement (3cr)</td>
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<td>- Enhanced General Education – Creative Thinking (3cr)</td>
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<td>- Enhanced General Education – Human/Cultural Diversity (3cr)</td>
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<tr>
<td>- Enhanced General Education—High Impact Practice (3cr)</td>
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- 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 Biomedical Sciences 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.

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.