Biology BS: Environmental Microbiology major – 2014/15 Catalog
USF BioAdvise - SCA 203 bioadvise@usf.edu Ph: 813/974-3250 Fax: 813/974-2876 - http://biology.usf.edu/bioadvise/

**Biology Major Requirements: 40 hours total**
- Must receive a C- or better to meet major requirements.
- Cascading Prerequisites are strictly enforced. CR = co-requisite, courses that can be taken concurrently.
- Must maintain a 2.0 GPA in all Majors’ coursework; this is the Applied Attempts GPA in the Major block in Degreeworks.
- Must have fewer than 3 D and/or F grades in the Biology major and supporting science requirement lectures.
- Must complete a minimum of 20 credit hours of Environmental Microbiology major requirements at USF Tampa.

**Biology Core Curriculum: 16 hours**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisite(s)</th>
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<tbody>
<tr>
<td>BSC 2010 &amp; 2010L</td>
<td>Biology I Cellular Processes</td>
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<tr>
<td>BSC 2011 &amp; 2011L</td>
<td>Biology II Diversity</td>
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<tr>
<td>PCB 3043 &amp; 3043L</td>
<td>Ecology and Lab</td>
<td>BSC 2011/L, CHM 2046</td>
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<tr>
<td>PCB 3063 &amp; 3063L</td>
<td>Genetics and Lab</td>
<td>BSC 2010/L, CHM 2046</td>
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**Environmental Microbiology Core Curriculum: 24 hours**
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<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>MCB 3020C</td>
<td>General Microbiology</td>
<td>BSC 2010/L, CHM 2210</td>
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<tr>
<td>MCB 4404/L</td>
<td>Microbial Physiology &amp; Genetics</td>
<td>MCB 3020C, BSC 2011/L, CHM 2210</td>
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- Advanced Micro Core option, Choose 2 from:
  - BSC 4933 | Applied/Environmental Micro            | 3 hrs. |
  - MCB 4___ | Micro of Waterborne Diseases           | 3 hrs. |
  - MCB 4202 | Ecology of Infectious Diseases         | BSC 2011/L, CHM 2046, & MCB 3020C or PCB 3043 |
  - BSC 4933 | Epigenetics                            | 3 hrs. |
  - BSC 4933 | Genomics                               | 3 hrs. |
  - ZOO 4233 | Parasitology                           | BSC 2011/L, CHM 2210 |

- Choose 9 additional hours of Biology Major courses from Tampa Campus IB Department or CMMB Department courses (course code prefix of BOT, BSC, MCB, PCB, or ZOO), with the exception of BSC 4905 and courses labeled as “not for major credit”
  - Must complete remaining hours necessary to meet the total 40 hours of biology required. If 15 hours completed in the rest of the environmental micro core requirement, then must complete 9 hours in the advanced curriculum.
  - Most advanced biology courses are not offered every semester; there are no set offerings for summer semesters.
  - Maximum of four (4) semester hours BSC 4910 Undergraduate Research can apply.
  - BCH 4033/3023L Advanced Biochemistry (Fall only) and lab are the only approved options not offered by IB or CMMB. (chemistry)

**Supporting Sciences: 32-34 hours total**
- Students must receive a C- or better to meet requirements for degree
- CHM 2045& CHM 2045L General Chemistry I and Lab 4 hrs. C (2.0) grade min
- CHM 2046 & CHM 2046L General Chemistry II and Lab 4 hrs. C (2.0) grade min
- CHM 2210 & CHM 2210L Organic Chemistry I and Lab 5 hrs. C (2.0) grade min
- CHM 2211& CHM 2211L Organic Chemistry II and Lab 5 hrs. C (2.0) grade min
- One of the General Physics sequences 8 hrs.:
  - PHY 2053/L & 2054/L (non-calculus based, recommended for life science/pre-health majors)
  - PHY 2048/L & 2049/L (calculus based – must take MAC 2311 and 2312 math sequence)
- Calc I: MAC 2241 Life Sciences, MAC 2311, or MAC 2281 Engineering 3-4 hrs. C (2.0) grade min to take Calc II
- Calc II or Statistics: MAC 2242, MAC 2312, MAC 2282, or STA 2023 3-4 hrs. C- or better

02/03/2015
Additional USF Degree Requirements

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Foundations of Knowledge and Learning Lower-level Requirements:

- English Composition (2 courses) ENC 1101 ENC 1102
- Social/Behavioral Sciences (2 courses)
- Fine Arts (1 course)
- Human/Cultural Diversity in a Global Context (1 course)
- Humanities (2 courses)
- Human Historical Context and Process dimension two courses from above must also meet HHCP*
  ENC 1101

Foundations of Knowledge and Learning Upper-level Requirements:

- Capstone (1 course)
- Writing Intensive (1 course)

*If HHCP was not completed in Lower-level FKL it can be completed as Upper-level FKL

Other University and College Requirements:

- 120 hours
- 48 hour rule
- Summer rule
- GPA Requirement - Students must earn an Overall 2.0 GPA and USF 2.0 GPA
- USF Residency - Students must complete 30 hours of the last 60 hours in USF coursework.
- FLENT (Foreign Language Entrance Requirement)
- Gordon Rule Communication and Computation

“BioAdvise at USF” on Facebook for new opportunities within the Biology field!

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