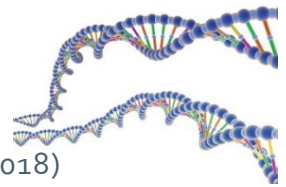


# CELL AND MOLECULAR BIOLOGY (2017-2018)



## DEPARTMENT OF CELL BIOLOGY, MICROBIOLOGY, AND MOLECULAR BIOLOGY

BioAdvise | SCA 203 | [BioAdvise@usf.edu](mailto:BioAdvise@usf.edu) | Ph: (813)974-3250 | Fax: (813)974-2876 | [www.biology.usf.edu/bioadvise/](http://www.biology.usf.edu/bioadvise/)

- Must receive a C- or better or meet major requirements
- Must maintain a 2.0 GPA in all Major's coursework: this is the Applied Attempts GPA in the Major block of DegreeWorks
- Must have fewer than 3 D and/or F grades in Biology major and supporting science requirements lectures
- Must complete a minimum of 20 credit hours of Cell and Molecular Biology major requirements at USF Tampa

## MAJOR REQUIREMENTS (25 CREDIT HOURS)

- |  |  |
|--|--|
| <input type="checkbox"/> BSC 2010/L: Cellular Processes with lab | No prerequisites; must take lecture and lab together |
| <input type="checkbox"/> BSC 2011/L: Biodiversity with lab       | No prerequisites; must take lecture and lab together |
| <input type="checkbox"/> PCB 3063/L: Genetics and lab            | Prerequisites: BSC 2010/L and CHM 2046               |
| <input type="checkbox"/> PCB 3023/L: Cell Biology and lab        | Prerequisites: BSC 2010/L and CHM 2046               |
| <input type="checkbox"/> MCB 3410: Cell Metabolism               | Prerequisites: BSC 2010/L and CHM 2046               |
| <input type="checkbox"/> PCB 4024: Molecular Biology of the Cell | Prerequisites: PCB 3063, PCB 3023 and MCB 3410       |
| <input type="checkbox"/> Choose one of the Following             |  |
| <input type="checkbox"/> PCB 4026: Molecular Biology of the Gene | Prerequisites: PCB 3063, PCB 3023 and MCB 3410       |
| <input type="checkbox"/> PCB 4109: Cancer Biology                | Prerequisites: PCB 3063, PCB 3023 and MCB 3410       |

## MAJOR ELECTIVES OPTIONS (15 CREDIT HOURS)

- |   |  |
|---|--|
| <input type="checkbox"/> BCH 3053: Biochemistry                           | <input type="checkbox"/> PCB 4671: Molecular Evolution                 |
| <input type="checkbox"/> BSC 4434: Bioinformatics                         | <input type="checkbox"/> PCB 3043/L: Ecology and lab                   |
| <input type="checkbox"/> BSC 4905: Independent Study (max 1 credit)       | <input type="checkbox"/> PCB 3712/13L: General Physiology and lab      |
| <input type="checkbox"/> BSC 4910: Undergraduate Research (max 4 credits) | <input type="checkbox"/> PCB 4234: Principles of Immunology            |
| <input type="checkbox"/> BSC 4933: Readings in Cell and Molecular Biology | <input type="checkbox"/> PCB 4522C: Experimental Genetics and Cell Bio |
| <input type="checkbox"/> BSC 4935: Seminar in Cell and Molecular Biology  | <input type="checkbox"/> PCB 4663: Human Genetics                      |
| <input type="checkbox"/> MCB 3020/L: Microbiology with lab                | <input type="checkbox"/> PCB 4744: Biomedical Physiology               |
| <input type="checkbox"/> MCB 4503: Virology                               | <input type="checkbox"/> ZOO 4753: Human Histology & Histopathology    |
| <input type="checkbox"/> MCB 4933: Cellular Microbiology                  | <input type="checkbox"/> ZOO 4694: Developmental Biology               |

**THIS IS NOT A COMPLETE LIST: Please refer to the permit page for additional elective options and prerequisites**  
Most advanced biology courses are not offered every semester; there are no set offerings for summer

## SUPPORTING SCIENCE (32-34 CREDIT HOURS)

- |   |   |
|---|---|
| <input type="checkbox"/> CHM 2045/L: General Chemistry I and lab  | Prerequisites: C or better in MAC 1105 or test equivalent |
| <input type="checkbox"/> CHM 2046/L: General Chemistry II and lab   | Prerequisites: C or better in CHM 2045/L                  |
| <input type="checkbox"/> CHM 2210/L: Organic Chemistry I and lab  | Prerequisites: C or better in CHM 2046/L                  |
| <input type="checkbox"/> CHM 2211/L: Organic Chemistry II and lab   | Prerequisites: C or better in CHM 2210/L                  |
| <input type="checkbox"/> One Physics Sequence:  |   |
| <input type="checkbox"/> PHY 2053/L AND PHY 2054/L (non-calculus based, recommended for life science/pre-health majors) |   |
| <input type="checkbox"/> PHY 2048/L AND PHY 2049/L (calculus based, must take MAC 2311 and 2312 math sequence)          |   |
| <input type="checkbox"/> Calculus I: MAC 2241 OR MAC 2311 OR MAC 2281   | Prerequisites: C or better in MAC 1147 or test equivalent |
| <input type="checkbox"/> Calculus II OR Statistics: MAC 2242 OR MAC 2312 OR STA 2023                                    |   |

## ADDITIONAL DEGREE REQUIREMENTS

- ENC 1101
- ENC 1102
- Core Social Science: AMH 2020, ANT 2000, ECO 2013, POS 2041, PSY 2012 OR SYG 2000
- Core Humanities: ARH 2000, HUM 1020, LIT 2000, PHI 2010 OR THE 2000
- FKL- Social and Behavioral Science
- FKL- Human and Cultural Diversity
- FKL- Fine Arts
- FKL- Humanities
- Two of the above course must also fulfill Human Historical Context and Processes (ENC 1101 AND \_\_\_\_\_ )
- FKL- Capstone (Junior/Senior upper level requirements)
- FKL- Writing Intensive (Junior/Senior upper level requirements)

## OTHER UNIVERSITY REQUIREMENTS

- 120 Hours – A Bachelor's Degree requires a minimum of 120 credit hours
- Upper-level requirement – All students are required to take at least 42 credits at the 3000+ level. Between your Cell and Molecular Biology major courses and the exit courses you will complete 38 upper level credits. Based on the number of credits you have already taken, you have \_\_\_\_\_ upper level credits remaining, outside the major and exit courses.
- Summer Rule – All students who enter USF with fewer than 60 credits are required to take at least 9 credits of coursework in the summer at a State University System (SUS) 4-year University. You have \_\_\_\_\_ summer credits remaining to complete.
- GPA Requirement – Students must earn an overall 2.0 GPA and USF 2.0 GPA
- USF Residency – Student must complete 30 of the last 60 credits in USF Tampa coursework
- FLENT (Foreign Language Entrance Requirement)
- Gordon Rule Communication – ENC 1101, ENC 1102, Writing Intensive and one 'double-dip' course

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. www.ugs.usf.edu/catalog.htm](http://www.ugs.usf.edu/catalog.htm)

## GET INVOLVED!

- ✓ Undergraduate Research- Work one-on-one with faculty beginning your junior year with the possibility of being published!
- ✓ Lab experience through a wide array of coursework
- ✓ USF Cell, Molecular and Microbiology Club
- ✓ Pre-Health Profession Clubs
- ✓ **USF Health Byrd Alzheimer's Institute** allows students to volunteer in the research labs
- ✓ **Moffitt Cancer Center** offers internships in various research areas
- ✓ **Centers for Disease Control and Prevention (CDC)** offers paid summer internships in Atlanta

Please refer to the BioAdvise involvement website for links to the above opportunities:

<http://biology.usf.edu/bioadvise/involvement/clubs.aspx>



"BioAdvise at USF" on Facebook for new opportunities within the Biology Field!