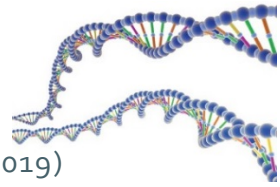
CELL AND MOLECULAR BIOLOGY (2018-2019)



DEPARTMENT OF CELL BIOLOGY, MICROBIOLOGY, AND MOLECULAR BIOLOGY

BioAdvise | SCA 203 | BioAdvise@usf.edu | Ph: (813)974-3250 | Fax: (813)974-2876 | 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 applicable science coursework

MAJOR REQUIREMENTS (25 CREDIT HOURS)

☐ BSC 2010/L: Cellular Processes with lab	No prerequisites; must take lecture and lab together
☐ BSC 2011/L: Biodiversity with lab	No prerequisites; must take lecture and lab together
☐ PCB 3063/L: Genetics and lab	Prerequisites: BSC 2010/L and CHM 2046
☐ PCB 3023/L: Cell Biology and lab	Prerequisites: BSC 2010/L and CHM 2046
☐ MCB 3410: Cell Metabolism	Prerequisites: BSC 2010/L and CHM 2046
☐ PCB 4024: Molecular Biology of the Cell	Prerequisites: PCB 3063, PCB 3023 and MCB 3410
☐ Molecular Option, choose 1:	
☐ PCB 4026: Molecular Biology of the Gene	Prerequisites: PCB 3063, PCB 3023 and MCB 3410
☐ PCB 4109: Cancer Biology	Prerequisites: PCB 3063, PCB 3023 and MCB 3410

CAM ELECTIVE OPTIONS (15 CREDIT HOURS)

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

THIS IS NOT A COMPLETE LIST: Please refer to the Major Electives page for additional 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)

☐ CHM 2045/L: General Chemistry I and lab	Prerequisites: C or better in MAC 1105 or test equivalent
☐ CHM 2046/L: General Chemistry II and lab	Prerequisites: C or better in CHM 2045/L
☐ CHM 2210/L: Organic Chemistry I and lab	Prerequisites: C or better in CHM 2046/L
☐ CHM 2211/L: Organic Chemistry II and lab	Prerequisites: C or better in CHM 2210/L

- ☐ One Physics Sequence:
  - PHY 2053/L AND PHY 2054/L (non-calculus based, recommended for life science/pre-health majors)
  - PHY 2048/L AND PHY 2049/L (calculus based, must take MAC 2311 and 2312 math sequence)
  - PHY 2060+2048L AND PHY 2061+ 2049L (Enriched Physics, must take MAC 2311 and 2312 math sequence)
- ☐ Calculus I: MAC 2241 OR MAC 2311 OR MAC 2281 Prerequisites: C or better in MAC 1147 or test equivalent
- ☐ Calculus II OR Statistics: MAC 2242 OR MAC 2312 OR MAC 2282 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
- ☐ Enhanced General Education – Creative Thinking
- ☐ Enhanced General Education – Human and Cultural Diversity
- ☐ Enhanced General Education – Information and Data Literacy
- ☐ Enhanced General Education – Ethical Reasoning and Civic Engagement
- ☐ Enhanced General Education – High Impact Practice

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. In your Cell and Molecular Biology major courses, you will complete 32 upper-level credits. Based on the number of credits you have already taken, you have _____ upper level credits remaining, outside the major.
- ☐ 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
- ☐ Biology Residency – Student must complete 20 of the last 30 biology credits at USF Tampa
- ☐ FLENT (Foreign Language Entrance Requirement)
- ☐ State Communication – ENC 1101, ENC 1102,and two 'double-dip' courses

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

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

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