UCF Degree Programs

Biology - Preprofessional Concentration (B.S.)
College of Sciences
Department of Biology, Biology, Room: 301
http://www.cos.ucf.edu/biology
Email: biology@ucf.edu
Phone: 407-823-2141

The Biology major offers excellent preparation for professional school. The curriculum is broadly based and provides a well-rounded education that is appealing to admission committees and valuable for careers in medicine, dentistry, optometry, pharmacy and veterinary medicine. This curriculum suggests choices within the Biology major that may be more relevant to preprofessional majors.

Admission Requirements
- None

Degree Requirements
- Students who change degree programs and select this major must adopt the most current catalog.
- No credit by exam (TSD, Military credit) may be used for the major.
- Co-op or internship credit cannot be used in this major.
- Departmental Residency Requirement consists of at least 22 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Biology Department.
- Students seeking a double major must satisfy the requirements for both majors and must take no fewer than 40 semester hours of upper division restricted elective course work appropriate to the combined areas of specialization in the two majors.
- Biology majors must earn a “C” (2.0) or better in all Core courses with a BSC or PCB prefix in order to satisfy the requirement.
- All prerequisites of courses taught within the College of Sciences will be enforced.
- Courses designated in 2 (Common Program Prerequisites) and 3 (Core Requirements) are usually completed in the first 60 hours.
- No more than 4 hours of Independent Study, Directed Research, or the following similar types of credit, may be applied toward major requirements:
  - BSC 4422L Biology Laboratory Techniques 1 hr
  - BSC 4937 Instructional Experiences in Undergraduate Biology 2 hrs
- Upon reaching junior standing (60 hours), Biology majors are expected to have completed the following courses. These classes are prerequisites for advanced science classes and students entering without these classes will be unable to register for most of the advanced courses.

1. UCF General Education Program (GEP) (39 hrs)
   - Note: Certain courses must be selected in the GEP for this major, bringing the total GEP hours to more than 36.

   A: Communication Foundations (9 hrs)
   - Required ENC 1101 Composition I 3 hrs
   - Required ENC 1102 Composition II 3 hrs
   - Preferred SPC 1603C Fundamentals of Technical Presentations 3 hrs

   B: Cultural & Historical Foundations (9 hrs)
1 Fulfills Zoology requirement. Offered in Biology department.

2 Fulfills Zoology requirement. Offered in Biology department.

3 hrs

Complete a minimum of one lecture course from this group.

1 BOT 3602 Ethnobotany or 3 hrs
1 BOT 4505 Medicinal Botany 3 hrs

1 Fulfills Botany requirement. Offered in Biology department.

Systematic Complete a minimum of one lecture course from this group.

4 hrs

Complete a minimum of one lecture course from this group.

1 ZOO 4265C Biology and Ecology of Vertebrates or 4 hrs
1 ZOO 4310C Vertebrate Evolution & Ecology 4 hrs

1 Fulfills Zoology requirement. Offered in Biology department.

5. Restricted Electives (22 hrs)
The following is a suggested subset of the Biology Restricted Electives which may be more appropriate for many professional schools.

- Student must complete at least one course dealing exclusively with zoology and one course dealing exclusively with botany.
- At least three credit hours from each group must be completed.
- At least 10 hours of the Upper Division Restricted electives must be taken within the UCF Biology Department.
- Transferred courses must be at a 3000 level or higher, and be evaluated by the undergraduate program coordinator, in order to count as an Upper Division Restricted Elective.
- Consult a departmental advisor and be cognizant of the professional school’s requirements. For complete listing, see Biology B.S. degree program.

Form/Function Complete a minimum of one lecture course from this group.

- Because of the large number of courses taught in other departments, students must ensure they complete the required hours to be taken within the UCF Biology Department.

Environmental

Complete a minimum of one lecture course from this group.

1 BOT 3602 Ethnobotany or 3 hrs
1 BOT 4505 Medicinal Botany 3 hrs

1 Fulfills Botany requirement. Offered in Biology department.
Advising Notes
- Students are urged to contact their departmental advisor before registering for courses.
- It is the student’s responsibility to ensure they have satisfied course prerequisites before registering for a class.
- Students are strongly encouraged to work with the Office of Pre-Health and Pre-Law Advising (Ferrell Commons, Bldg 7G, Room 215C; 407-823-3033).
- An analysis of the success and failure of students on recent MCAT examinations has led the department to suggest that a student should have completed all of the Biology core courses (sections 3 and 4) and the following courses prior to taking the MCAT exam:
  - MCB 3023C General Microbiology 5 hrs
  - PCB 4524 Molecular Biology II 3 hrs

Transfer Notes
- Lower division courses do not substitute for upper division courses.
- Courses transferred from private and out-of-state schools must be evaluated by the undergraduate program coordinator for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for Transfer Courses
- The following substitutions are acceptable for common program prerequisites if taken as part of the AA course work:
  - BSC 2010C: May substitute the Honors version BSC X040C. Although the CPP is satisfied by PCB X011C, it will not satisfy prerequisites for subsequent Biology courses.
  - BSC 2011C: May substitute the Honors version BSC X041C or both ZOO X010C and BOT X010C.
  - CHM 2045C: may use CHM X040 plus CHM X041.
  - Physics: although the CPP is satisfied by Organic Chemistry, both subjects are required by the degree program and both must be taken.
  - Statistics: although a number of math and statistics course will satisfy the CPP, this statistics course is required in the program.

Plan of Study
- This is one of numerous possible plans of study. See program description for all requirements. Consult a departmental advisor for alternate, new or more appropriate selections.
- Prior to enrolling in Chemistry, take Chemistry Placement Test at: http://knightsource.sdes.ucf.edu/placement
- Prior to enrolling in Math, take Math Placement Test at: http://utc.sdes.ucf.edu/math/
- Although all classes are listed as being taken during the academic year, you may be required to complete 9 hours of them during the Summer. Consult with an advisor to determine if you are exempt.

Freshman Year - Fall 15 hrs
- BSC 2010C Biology I 4 hrs
- CHM 2045C Chemistry Fundamentals I 4 hrs
- ENC 1101 Composition I 3 hrs
- Math course, depending on placement score 4 hrs

Freshman Year - Spring 15 hrs
- BSC 2011C Biology II 4 hrs
- CHM 2046 Chemistry Fundamentals II 3 hrs
- CHM 2046L Chemistry Fundamentals Laboratory 1 hr
- Math course 4 hrs
- ENC 1102 Composition II 3 hrs

Sophomore Year - Fall 16 hrs
- CHM 2210 Organic Chemistry I 3 hrs
- PCB 3044 Principles of Ecology 3 hrs
- MAC 2311C Calculus with Analytic Geometry I 4 hrs
- STA 2023 Statistical Methods I 3 hrs
- GEP 3 hrs

Sophomore Year - Spring 15 hrs
- CHM 2211 Organic Chemistry II 3 hrs
- CHM 2211L Organic Laboratory Techniques I 2 hrs
- May be taken in a later term if seats are not available.
  - PCB 3063 Genetics 3 hrs
  - MAC 2312 Calculus with Analytic Geometry II 4 hrs
  - GEP 3 hrs

Junior Year - Fall 16 hrs
- PHY 2048C Physics for Engineers & Scientists I 4 hrs
- PCB 3023 Molecular Cell Biology 3 hrs
- Restricted Elective 3 hrs
- GEP 3 hrs

Junior Year - Spring 14 hrs
- PHY 2049C Physics for Engineers and Scientists II 4 hrs
- PCB 4683 Evolutionary Biology 4 hrs
- Restricted Elective 3 hrs
- GEP 3 hrs

Senior Year - Fall 15 hrs
- Restricted Elective 4 hrs
- Restricted Elective 4 hrs
- GEP 3 hrs
- Free Elective 2 hrs

Senior Year - Spring 14 hrs
- Restricted Elective 4 hrs
- Restricted Elective 3 hrs
- Free Elective 4 hrs
- Free Elective 3 hrs

Program Academic Learning Compacts
- Program Academic Learning Compacts (student learning outcomes) for undergraduate programs are located at: http://www.o eas.ucf.edu/academiclearningcompacts.html

Equipment Fees
- Part-Time Student: $24.85 per term
- Full-Time Student: $49.70 per term