



Biology Roadmap 2021-2024



All prerequisite courses require a "C" (2.0) or better

MPT = Appropriate Score on Math Placement Test CPE = Appropriate Score on Chem Placement Exam.

Common Program Prerequisites - "C" (2.0) or better in each course

| | | Credits | Status | | | Credits | Status |
|---|---|---------|--------|---|---|--------------------|--|
| BSC2010C | Biology I (GEP) PR: High school biology | 4 | _____ | CHM2210 | Organic Chemistry I PR: CHM 2046 | 3 | _____ |
| BSC2011C | Biology II PR: BSC 2010C | 4 | _____ | CHM2211 | Organic Chemistry II PR: CHM 2210 | 3 | _____ |
| CHM2045C | Chemistry Fundamentals I (GEP) PR: CHM 1025 or CPE, and MAC 1105 or MPT | 4 | _____ | CHM2211L | Organic Laboratory Techniques I PR: CHM 2046L and CHM 2210 | 2 | _____ |
| CHM2046 | Chemistry Fundamentals II PR: CHM 2045C, and MAC 1105C or MPT | 3 | _____ | <i>Also satisfied by CHM2205 followed by CHM3120 and CHM3120L</i> | | | |
| CHM2046L | Chemistry Fundamentals Lab PR or CR: CHM2046 | 1 | _____ | Biology Core Requirements: "C" (2.0) or better in each course | | | |
| MAC2311C | Calculus with Analytic Geometry I PR: MAC1140C & MAC1114C, or MPT | 4 | _____ | PCB3044* | Principles of Ecology PR: CHM2045, BSC 2010C & BSC2011C | 3 | _____ |
| ---OR--- | | | | PCB3063* | Genetics PR: BSC2011C or CHM2046 | 3 | _____ |
| MAC2233 | Concepts of Calculus PR: MAC 1140C or MPT | 3 | _____ | PCB3023* | Molecular Cell Biology PR: CHM2210 or CHM2205 or CHM3120, and BSC2010C, and PCB3063 | 3 | _____ |
| STA2023 | Statistical Methods I (GEP) PR: MGF 1106 or any MAC course | 3 | _____ | PCB4683* | Evolutionary Biology PR: JR Standing & PCB 3063 | 4 | _____ |
| PHY2053 | College Physics I PR: MAC 1114C or higher, or MPT | 3 | _____ | <p><i>Were all four of the above courses taken at UCF?</i></p> <p>YES <input type="checkbox"/> nothing further needed</p> <p>NO <input type="checkbox"/> check overall UL residency: ____ of 22</p> | | | |
| PHY2053L | College Physics I Lab PR or CR: PHY 2053 <i>Also satisfied by PHY 2053C (4cr, Lab included)</i> <i>Also satisfied by PHY 2048C, or PHY 2048 & Lab (PR: MAC2311C)</i> | 1 | _____ | Upper Level Lab Requirements | | | |
| PHY2054 | College Physics II PR: PHY 2053 | 3 | _____ | Lab A | PCB3044L Principles of Ecology Lab | 1 | _____ |
| PHY2054L | College Physics II Lab PR or CR: PHY 2054 <i>Also satisfied by PHY 2054C (4cr, Lab included)</i> <i>Also satisfied by PHY 2049C, or PHY 2049 & Lab (PR: PHY 2048 & MAC2312)</i> | 1 | _____ | <i>Choose one</i> | PCB3063L Genetics Laboratory | | |
| | | | | | PCB4683L Evolutionary Biology Lab | | |
| | | | | Lab B | <i>A second Lab A course, or other lab elective (see second page)</i> | | |
| Upper Level Electives | | | | | | | |
| 22 Credit Hours of Electives - See Second Page | | | | | | | |
| Other Requirements | | | | | | | |
| UCF GPA _____ | | | | | | Major GPA _____ | |
| <i>2.0 minimum</i> | | | | | | <i>2.0 minimum</i> | |
| | | | | | | | Exit Exam* <input type="checkbox"/> |



* The Biology Exit Exam covers the following core courses: Biology I, Biology II, Genetics, Ecology, Molecular Cell Biology, and Evolutionary Biology.

TRACK

NAME

UCF ID

DATE

|  | | Biology Major B.S.– Ecology Evolutionary and Conservation | | | | | UL Restricted Electives (2021-24 Cat Years) | | | | |  | | | | |
|--|--|---|---|------------|---|-----------|---|--|----------------------------------|----------------------|----|---|---|----|--------|--|
| | | KEY: R = Elective Residency (Taught by UCF Biology Dept) L = Lab Option A = Animal/Zoology Option P = Plant/Botany Option | | | | | | | | | | | | | | |
| Course Detail | | R | L | A | P | Cr | Status | Course Detail | | R | L | A | P | Cr | Status | |
| REQUIRED - Complete 6+ Credits | | "C" or better required | | | | | | | | | | | | | | |
| BSC 3052 | Conservation Biology | R | | | | 3 | | BOT 4503C | Plant Physiology | R | L | | P | 4 | | |
| BSC 4821 | Biogeography | R | | | | 4 | | BOT 4850 | Medical Botany | R | | | P | 3 | | |
| PCB 4932 | Population Ecology | R | | | | 3 | | BSC 3312 | Principles of Marine Biology | R | | | | 3 | | |
| ZOO 4310C | Vertebrate Evolution & Ecology | R | L | A | | 4 | | BSC 3403C | Quantitative Biological Methods | | | | | | | |
| ZOO 4513 | Animal Behavior | R | | A | | 3 | | BSC 4310 | Service Learning Marine Conserv | R | | | | 3 | | |
| RESTRICTED - Complete 7+ Credits | | Additional From Above, or: | | | | | | | | | | | | | | |
| BOT 4223C | Plant Anatomy | R | L | | P | 4 | | BSC 4445C | Genomics Laboratory | R | L | | | 4 | | |
| BOT 4303C | Plant Kingdom | R | L | | P | 4 | | BSC 4456C | Programming for Biologists | R | | | | 3 | | |
| BOT 4713C | Plant Taxonomy | R | L | | P | 5 | | BSC 4473C | Scientific Diving | R | | | | 4 | | |
| BSC 3453C | Bio Res. Meth & Exp Design | R | | | | 3 | | ENY 4004C | General Entomology | R | L | A | | 4 | | |
| BSC 4330 | Invasion Biology | R | | | | 3 | | ENY 4455C | Social Insect Behavior | R | L | A | | 4 | | |
| BSC 4927 | Sci and Public Engage for Bio Majors | R | | | | 3 | | MCB 3020C | General Microbiology | | L | | | 5 | | |
| OCE 3008 | Oceanography | R | | | | 3 | | PAZ 4234 | Zoo and Aquarium Management | R | | | | 3 | | |
| PCB 3354 | Tropical Ecology and Conservation | R | | | | 3 | | PCB 3044L | Principles of Ecology Lab | R | L* | | | 1 | | |
| PCB 3442 | Aquatic Ecology | R | | | | 3 | | PCB 3063L | Genetics Laboratory | R | L* | | | 1 | | |
| PCB 4301C | Wetland Ecology & Biogeochemistry | R | L | | | 4 | | PCB 3233 | Immunology | | | | | 3 | | |
| PCB 4353 | Fl Ecology, Natural History & Cons | R | | | | 3 | | PCB 3522 | Molecular Biology I | | | | | 3 | | |
| PCB 4402 | Disease Ecology & Ecoimmunology | R | | | | 3 | | PCB 3703C | Human Physiology | | | | | 4 | | |
| PCB 4408 | Urban Ecology | R | | | | 3 | | PCB 4353L | Florida Ecology Lab | R | L | | | 1 | | |
| PCB 4413 | Sensory Ecology | R | | | | 3 | | PCB 4514 | Epigenetics | R | | | | 3 | | |
| PCB 4575 | Wildlife Genomics | R | | | | 3 | | PCB 4524 | Molecular Biology II | | | | | 3 | | |
| ZOO 3454 | Ichthyology | R | | A | | 3 | | PCB 4683L | Evolutionary Biology Lab | R | L* | | | 1 | | |
| ZOO 3713 | Comparative Vertebrate Anatomy | R | | A | | 4 | | PCB 4723 | Animal Physiology | R | | A | | 4 | | |
| ZOO 4205C | Invertebrate Biodiversity | R | L | A | | 4 | | ZOO 3001 | Integrated Principles of Zoology | R | | A | | 3 | | |
| ZOO 4272 | Ornithology | R | | A | | 3 | | ZOO 4480L | Mammalogy Lab | R | L | | | 1 | | |
| ZOO 4405C | Sea Turtle Ecology, Conserv Intern | R | L | A | | 3 | | ZOO 4603C | Embryology/Development | R | L | A | | 5 | | |
| ZOO 4462C | Herpetology | R | L | A | | 4 | | ZOO 4756C | Comparative Vertebrate Histology | R | L | A | | 4 | | |
| ZOO 4480 | Mammalogy | R | | A | | 4 | | ZOO 4910L | Res in Animal Beh. in a Zoo Env | R | L | A | | 3 | | |
| NON-TRACK / GENERAL TRACK OPTIONS | | | | | | | | ZOO 3713L | Comp Vert Anat Lab | R | L | | | 1 | | |
| ANT 3550C | Primatology | | | A | | 3 | | ZOO 3733C | Human Anatomy | | | | | 4 | | |
| BCH 4024 | Medical Biochemistry | | | | | 4 | | <p>Only a few elective courses are offered each semester. We suggest performing class search using Department > Biology (to find "R" elective courses)</p> | | | | | | | | |
| BCH 4053 | Biochemistry I | | | | | 3 | | | | | | | | | | |
| BCH 4054 | Biochemistry II | | | | | 3 | | | | | | | | | | |
| BOT 3015 | Principles of Plant Science² | R | | | P | 3 | | Current & IP Total: _____ / 22 | | Needed: _____ | | | | | | |
| BOT 3802 | Ethnobotany² | R | | | P | 3 | | | | | | | | | | |
| BOT 3018C | Cul Botany Across the Cultures | R | L | | P | 4 | | | | | | | | | | |
| Requirements Met: | Animal/Zoology Course (A) | Plant / Botany Course (P) ² | | Lab A (L*) | | Lab B (L) | | 10+ Residence Elective Hours (R) | | | | | | | | |

¹ You may only earn a MAXIMUM OF 4 CREDIT HOURS from internship, research and independent study (collectively) towards your Biology electives.

NAME

UCF ID

DATE

NOTES

PROJECTED SCHEDULE

Semester

Semester

Semester

Semester

Semester

Semester

If planning through graduation, you *may* need to include upper-level "free electives" to meet the university requirement of 42 upper level credit hours. Best practice is to focus on major courses as free electives can be taken your final semester if needed.

UL Credits remaining out of 42:

UL Credits remaining in major:

Room for Free Electives?

Yes

No