



Biology Roadmap 2024-2025



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	_____	<i>Were all four of the above courses taken at UCF?</i> YES <input type="checkbox"/> nothing further needed NO <input type="checkbox"/> check overall UL residency: _____ of 23			
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		
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	1	_____
					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 _____		Exit Exam* <input type="checkbox"/>
				<i>2.0 minimum</i>	<i>2.0 minimum</i>		

* 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 Track		Upper Division Restricted Electives (22 hrs)											
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 AT LEAST 1						"C" or better required							
BSC 3052	Conservation Biology	R			3		BOT 3018C	Cul Botany Across the Cultures	R	L		P	4
ZOO 4513	Animal Behavior	R		A	3		BOT 4503C	Plant Physiology	R	L		P	4
RESTRICTED - COMPLETE AT LEAST 4						Additional From Above, or:							
BOT 4223C	Plant Anatomy	R	L		P	4	BOT 4850	Medical Botany	R			P	3
BOT 4303C	Plant Kingdom	R	L		P	4	BSC 3312	Principles of Marine Biology	R				3
BOT 4713C	Plant Taxonomy	R	L		P	5	BSC 3403C	Quantitative Biological Methods					
BSC 3453C	Bio Res. Meth & Exp Design	R				3	BSC 4310	Service Learning Marine Conserv	R				3
BSC 4330	Invasion Biology	R				3	BSC 4312C	Advanced Marine Biology	R	L			4
BSC 4821	Biogeography	R				4	BSC 4445C	Genomics Laboratory	R	L			4
BSC 4927	Sci and Public Engage for Bio Majors	R				3	BSC 4456C	Programming for Biologists	R				3
OCE 3008	Oceanography	R				3	BSC 4473C	Scientific Diving	R				4
PCB 3354	Tropical Ecology and Conservation	R				3	ENY 4004C	General Entomology	R	L		A	4
PCB 3442	Aquatic Ecology	R				3	ENY 4455C	Social Insect Behavior	R	L		A	4
PCB 4301C	Wetland Ecology & Biogeochemistry	R	L			4	MCB 3020C	General Microbiology		L			5
PCB 4353	Fl Ecology, Natural History & Cons	R				3	PAZ 4234	Zoo and Aquarium Management	R				3
PCB 4402	Disease Ecology & Ecoimmunology	R				3	PCB 3044L	Principles of Ecology Lab	R	L*			1
PCB 4408	Urban Ecology	R				3	PCB 3063L	Genetics Laboratory	R	L*			1
PCB 4413	Sensory Ecology	R				3	PCB 3233	Immunology					3
PCB 4575	Wildlife Genomics	R				3	PCB 3522	Molecular Biology I					3
PCB 4932	Population Ecology	R				3	PCB 3703C	Human Physiology					4
ZOO 3454	Ichthyology	R		A		3	PCB 4353L	Florida Ecology Lab	R	L			1
ZOO 3713	Comparative Vertebrate Anatomy	R		A		4	PCB 4514	Epigenetics	R				3
ZOO 4205C	Invertebrate Biodiversity	R	L	A		4	PCB 4524	Molecular Biology II					3
ZOO 4272	Ornithology	R		A		3	PCB 4683L	Evolutionary Biology Lab	R	L*			1
ZOO 4310C	Vertebrate Evolution & Ecology	R	L	A		4	PCB 4723	Animal Physiology	R			A	4
ZOO 4405C	Sea Turtle Ecology, Conserv Intern	R	L	A		3	ZOO 3001	Integrated Principles of Zoology	R			A	3
ZOO 4462C	Herpetology	R	L	A		4	ZOO 4480L	Mammalogy Lab	R	L			1
ZOO 4480	Mammalogy	R		A		4	ZOO 4513	Animal Behavior	R			A	3
NON-TRACK / GENERAL TRACK OPTIONS													
ANT 3550C	Primatology			A		3	ZOO 4603C	Embryology/Development	R	L		A	5
ANT 4516	Human Biological Diversity					3	ZOO 4756C	Comparative Vertebrate Histology	R	L		A	4
BCH 4024	Medical Biochemistry					4	ZOO 4910L	Res in Animal Beh. in a Zoo Env	R	L		A	3
BCH 4053	Biochemistry I					3	ZOO 3713L	Comp Vert Anat Lab	R	L			1
BCH 4054	Biochemistry II					3	ZOO 3733C	Human Anatomy					4
BOT 3015	Principles of Plant Science ²	R				P	3	Only a few elective courses are offered each semester. We suggest performing class search using Department > Biology (to find "R" elective courses)					
BOT 3802	Ethnobotany ²	R				P	3	Current & IP Total: _____ / 22 Needed: _____					
Requirements Met:	Animal/Zoology Course (A)	Plant / Botany Course (P) ²		Lab A (L*)	Lab B (L)	10+ Residence Elective Hours (R)	<i>in addition to 13cr of Core</i>						

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

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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