



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 <i>Also satisfied by CHM2205 followed by CHM3120 and CHM3120L</i>	2	_____
CHM2046	Chemistry Fundamentals II PR: CHM 2045C, and MAC 1105C or MPT	3	_____	Biology Core Requirements: "C" (2.0) or better in each course			
CHM2046L	Chemistry Fundamentals Lab PR or CR: CHM2046	1	_____	PCB3044*	Principles of Ecology PR: CHM2045, BSC 2010C & BSC2011C	3	_____
MAC2311C	Calculus with Analytic Geometry I ---OR--- PR: MAC1140C & MAC1114C, or MPT	4	_____	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 23</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 PCB3063L Genetics Laboratory PCB4683L Evolutionary Biology 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	_____	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"/>	
				2.0 minimum	2.0 minimum		



* 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. – Pre-Health 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 - MUST COMPLETE		"C" or better required														
BCH 4024	Medical Biochemistry					4		BSC 4445C	Genomics Laboratory	R	L			4		
BCH 4053	Biochemistry I					3		BSC 4456C	Programming for Biologists	R				3		
--OR--																
MCB 3020C	General Microbiology		L			5		BSC 4473C	Scientific Diving	R				4		
PCB 4723	Animal Physiology	R		A		4		BSC 4821	Biogeography	R				4		
ZOO 3713	Comparative Vertebrate Anatomy	R		A		4		ENY 4004C	General Entomology	R	L	A		4		
ZOO 4603C	Embryology/Development	R	L	A		5		ENY 4455C	Social Insect Behavior	R	L	A		4		
RESTRICTED - COMPLETE AT LEAST 3		Additional From Above, or:														
BCH 4054	Biochemistry II					3		OCE 3008	Oceanography	R				3		
BOT 4850	Medical Botany	R			P	3		PAZ 4234	Zoo and Aquarium Management	R				3		
BSC 4927	Sci and Public Engage for Bio Majors	R				3		PCB 3044L	Principles of Ecology Lab	R	L*			1		
PCB 3233	Immunology					3		PCB 3063L	Genetics Laboratory	R	L*			1		
PCB 3522	Molecular Biology I					3		PCB 3354	Tropical Ecology and Conservation	R				3		
PCB 3703C	Human Physiology					4		PCB 3355L	Tropical Marine Biology	R				2		
PCB 4514	Epigenetics	R				3		PCB 3442	Aquatic Ecology	R				3		
PCB 4524	Molecular Biology II					3		PCB 4301C	Wetland Ecology & Biogeochem.	R	L			4		
BSC 4912	Directed Independent Research ¹	R				3-4		PCB 4353	Fl Ecology, Natural History & Cons	R				3		
BSC 4941	Biology Internship ¹	R				3-4		PCB 4353L	Florida Ecology Lab	R	L			1		
ZOO 3733C	Human Anatomy					4		PCB 4932	Population Ecology	R				3		
ZOO 4513	Animal Behavior	R		A		3		PCB 4402	Disease Ecology & Ecoimmunology	R				3		
ZOO 4756C	Comparative Vertebrate Histology	R	L	A		4		PCB 4408	Urban Ecology	R				3		
NON-TRACK / GENERAL TRACK OPTIONS																
ANT 3550C	Primateology			A		3		PCB 4413	Sensory Ecology	R				3		
ANT 4516	Human Biological Diversity					3		PCB 4575	Wildlife Genomics	R				3		
BOT 3015	Principles of Plant Science²	R			P	3		PCB 4683L	Evolutionary Biology Lab	R	L*			1		
BOT 3802	Ethnobotany²	R			P	3		ZOO 3001	Integrated Principles of Zoology	R		A		3		
BOT 3018C	Cul Botany Across the Cultures	R	L		P	4		ZOO 3454	Ichthyology	R		A		3		
BOT 4223C	Plant Anatomy	R	L		P	4		ZOO 3713L	Comp Vert Anat Lab	R	L			1		
BOT 4303C	Plant Kingdom	R	L		P	4		ZOO 4205C	Invertebrate Biodiversity	R	L	A		4		
BOT 4503C	Plant Physiology	R	L		P	4		ZOO 4272	Ornithology	R		A		3		
BOT 4713C	Plant Taxonomy	R	L		P	5		ZOO 4310C	Vertebrate Evolution & Ecology	R	L	A		4		
BSC 3052	Conservation Biology	R				3		ZOO 4405C	Sea Turtle Ecology, Conserv Intern	R	L	A		3		
BSC 3312	Principles of Marine Biology	R				3		ZOO 4462C	Herpetology	R	L	A		4		
BSC 3403C	Quantitative Biological Methods					4		ZOO 4480	Mammalogy	R		A		4		
BSC 3453C	Bio Res. Meth & Exp Design	R				3		ZOO 4480L	Mammalogy Lab	R	L			1		
BSC 4312C	Advanced Marine Biology	R	L			4		ZOO 4910L	Res in Animal Beh. in a Zoo Env	R	L	A		3		
BSC 4330	Invasion Biology	R				3		Only a few elective courses are offered each semester. We suggest performing class search using Department > Biology (to find "R" elective courses)								
		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.

NAME

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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