



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
BSC2010C	Biology I (GEP) PR: High school biology	4	<input type="checkbox"/>
BSC2011C	Biology II PR: BSC 2010C	4	<input type="checkbox"/>
CHM2045C	Chemistry Fundamentals I (GEP) PR: CHM 1025 or CPE, and MAC 1105 or MPT	4	<input type="checkbox"/>
CHM2046	Chemistry Fundamentals II PR: CHM 2045C, and MAC 1105C or MPT	3	<input type="checkbox"/>
CHM2046L	Chemistry Fundamentals Lab PR or CR: CHM2046	1	<input type="checkbox"/>
MAC2311C	Calculus with Analytic Geometry I PR: MAC1140C & MAC1114C, or MPT	4	<input type="radio"/>
---OR---			
MAC2233	Concepts of Calculus PR: MAC 1140C or MPT	3	<input type="radio"/>
STA2023	Statistical Methods I (GEP) PR: MGF 1106 or any MAC course	3	<input type="checkbox"/>
PHY2053	College Physics I PR: MAC 1114C or higher, or MPT	3	<input type="checkbox"/>
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	<input type="checkbox"/>
PHY2054	College Physics II PR: PHY 2053	3	<input type="checkbox"/>
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	<input type="checkbox"/>

		Credits	Status
CHM2210	Organic Chemistry I PR: CHM 2046	3	<input type="checkbox"/>
CHM2211	Organic Chemistry II PR: CHM 2210	3	<input type="checkbox"/>
CHM2211L	Organic Laboratory Techniques I PR: CHM 2046L and CHM 2210 <i>Also satisfied by CHM2205 <input type="checkbox"/> followed by CHM3120 <input type="checkbox"/> and CHM3120L <input type="checkbox"/></i>	2	<input type="checkbox"/>

Biology Core Requirements: "C" (2.0) or better in each course

		Credits	Status
PCB3044*	Principles of Ecology PR: CHM2045, BSC 2010C & BSC2011C	3	<input type="checkbox"/>
PCB3063*	Genetics PR: BSC2011C or CHM2046	3	<input type="checkbox"/>
PCB3023*	Molecular Cell Biology PR: CHM2210 or CHM2205 or CHM3120, and BSC2010C, and PCB3063	3	<input type="checkbox"/>
PCB4683*	Evolutionary Biology PR: JR Standing & PCB 3063	4	<input type="checkbox"/>

Were all four of the above courses taken at UCF?

YES nothing further needed
 NO check overall UL residency: ____ of 22

Upper Level Lab Requirements

Lab A	PCB3044L	Principles of Ecology Lab	<input type="radio"/>	
<i>Choose one</i>	PCB3063L	Genetics Laboratory	<input type="radio"/>	1 <input type="checkbox"/>
	PCB4683L	Evolutionary Biology Lab	<input type="radio"/>	
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 _____
 2.0 minimum 2.0 minimum

Exit Exam*



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

Pre-Health 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 - COMPLETE AT LEAST 2							"C" or better required									
BCH 4024	Medical Biochemistry					4		BSC 4456C	Programming for Biologists	R				3		
BCH 4053	Biochemistry I					3		BSC 4473C	Scientific Diving	R				4		
MCB 3020C	General Microbiology					5		BSC 4821	Biogeography	R				4		
PCB 4723	Animal Physiology	R		A		4		ENY 4004C	General Entomology	R	L	A		4		
ZOO 3713	Comparative Vertebrate Anatomy	R		A		4		ENY 4455C	Social Insect Behavior	R	L	A		4		
ZOO 4603C	Embryology/Development	R	L	A		5		OCE 3008	Oceanography	R				3		
RESTRICTED - COMPLETE AT LEAST 3							Additional From Above, or:									
BCH 4054	Biochemistry II					3		PAZ 4234	Zoo and Aquarium Management	R				3		
BOT 4850	Medical Botany	R			P	3		PCB 3044L	Principles of Ecology Lab	R	L*			1		
BSC 4927	Sci and Public Engage for Bio Majors	R				3		PCB 3063L	Genetics Laboratory	R	L*			1		
PCB 3233	Immunology					3		PCB 3354	Tropical Ecology and Conservation	R				3		
PCB 3522	Molecular Biology I					3		PCB 3355L	Tropical Marine Biology	R				2		
PCB 3703C	Human Physiology					4		PCB 3442	Aquatic Ecology	R				3		
PCB 4514	Epigenetics	R				3		PCB 4301C	Wetland Ecology & Biogeochem.	R	L			4		
PCB 4524	Molecular Biology II					3		PCB 4353	Fl Ecology, Natural History & Cons	R				3		
BSC 4912	Directed Independent Research ¹	R				3-4		PCB 4353L	Florida Ecology Lab	R	L			1		
BSC 4941	Biology Internship ¹	R				3-4		PCB 4932	Population Ecology	R				3		
ZOO 3733C	Human Anatomy					4		PCB 4402	Disease Ecology & Ecoimmunology	R				3		
ZOO 4513	Animal Behavior	R		A		3		PCB 4408	Urban Ecology	R				3		
ZOO 4756C	Comparative Vertebrate Histology	R	L	A		4		PCB 4413	Sensory Ecology	R				3		
COMPLETE REMAINING REQUIREMENTS							Additional From Above, or:									
ANT 3550C	Primatology			A		3		PCB 4575	Wildlife Genomics	R				3		
BOT 3015	Principles of Plant Science ²	R			P	3		PCB 4683L	Evolutionary Biology Lab	R	L*			1		
BOT 3802	Ethnobotany ²	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)								
BSC 4445C	Genomics Laboratory	R	L			4										
Requirements Met:		Animal/Zoology Course (A) <input type="checkbox"/>					Plant / Botany Course (P) ² <input type="checkbox"/>					Lab A (L*) <input type="checkbox"/>				
		10+ Residence <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					Lab B (L) <input type="checkbox"/>					Elective Hours (R) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
Current & IP Total: _____ / 22 Needed: <u>22</u>																

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

NOTES

General Education Program

Your GEPs are _____ (complete or not complete).

Most students have room two "free electives". Also called "unrestricted electives", these are upper level courses (3000+) of your choice that can be taken from outside the Biology department. You may wish to choose courses you find fun or interesting to incorporate during semesters when you are taking rigorous courses. If you'd like a list of ideas for free electives, ask your advisor.

About the Biology Exit Exam: <https://academicsuccess.ucf.edu/utc/biology/>

PROJECTED SCHEDULE

Semester

Semester

Semester

Semester

Semester

Semester