



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

# General Track

NAME \_\_\_\_\_

UCF ID \_\_\_\_\_

DATE \_\_\_\_\_

	Biology Major B.S.– General 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
ANT 3550C Primatology			A		3		PCB 3522 Molecular Biology I					3	
BCH 4024 Medical Biochemistry					4		PCB 3703C Human Physiology					4	
BCH 4053 Biochemistry I					3		PCB 4301C Wetland Ecology & Biogeochem.	R	L			4	
BCH 4054 Biochemistry II					3		PCB 4353 Fl Ecology, Natural History & Cons	R				3	
BOT 3015 Principles of Plant Science <sup>2</sup>	R			P	3		PCB 4353L Florida Ecology Lab	R	L			1	
BOT 3802 Ethnobotany <sup>2</sup>	R			P	3		PCB 4932 Population Ecology	R				3	
BOT 3018C Cul Botany Across the Cultures	R	L		P	4		PCB 4402 Disease Ecology & Ecoimmunology	R				3	
BOT 4223C Plant Anatomy	R	L		P	4		PCB 4408 Urban Ecology	R				3	
BOT 4303C Plant Kingdom	R	L		P	4		PCB 4413 Sensory Ecology	R				3	
BOT 4503C Plant Physiology	R	L		P	4		PCB 4514 Epigenetics	R				3	
BOT 4713C Plant Taxonomy	R	L		P	5		PCB 4524 Molecular Biology II					3	
BOT 4850 Medical Botany	R			P	3		PCB 4575 Wildlife Genomics	R				3	
BSC 3052 Conservation Biology	R				3		PCB 4683L Evolutionary Biology Lab	R	L*			1	
BSC 3312 Principles of Marine Biology	R				3		PCB 4723 Animal Physiology	R		A		4	
BSC 3403C Quantitative Biological Methods					4		ZOO 3001 Integrated Principles of Zoology	R		A		3	
BSC 3453C Bio Res. Meth & Exp Design	R				3		ZOO 3454 Ichthyology	R		A		3	
BSC 3945 Learning Assistants in Biology	R				3		ZOO 3713 Comparative Vertebrate Anatomy	R		A		4	
BSC 4310 Service Learning Marine Conserv	R				3		ZOO 3713L Comp Vert Anat Lab	R	L			1	
BSC 4312C Advanced Marine Biology	R	L			4		ZOO 3733C Human Anatomy					4	
BSC 4330 Invasion Biology	R				3		ZOO 4205C Invertebrate Biodiversity	R	L	A		4	
BSC 4445C Genomics Laboratory	R	L			4		ZOO 4272 Ornithology	R		A		3	
BSC 4456C Programming for Biologists	R				3		ZOO 4310C Vertebrate Evolution & Ecology	R	L	A		4	
BSC 4473C Scientific Diving	R				4		ZOO 4405C Sea Turtle Ecology, Conserv Intern	R	L	A		3	
BSC 4821 Biogeography	R				4		ZOO 4462C Herpetology	R	L	A		4	
BSC 4912 Directed Independent Research <sup>1</sup>	R				1-4		ZOO 4480 Mammalogy	R		A		4	
BSC 4941 Biology Internship <sup>1</sup>	R				1-4		ZOO 4480L Mammalogy Lab	R	L			1	
BSC 4927 Sci and Public Engage for Bio Majors	R				3		ZOO 4513 Animal Behavior	R		A		3	
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		ZOO 4756C Comparative Vertebrate Histology	R	L	A		4	
MCB 3020C General Microbiology					5		ZOO 4910L Res in Animal Beh. in a Zoo Env	R	L	A		3	
OCE 3008 Oceanography	R				3								
PAZ 4234 Zoo and Aquarium Management	R				3								
PCB 3044L Principles of Ecology Lab	R	L*			1								
PCB 3063L Genetics Laboratory	R	L*			1								
PCB 3233 Immunology					3								
PCB 3354 Tropical Ecology and Conservation	R				3								
PCB 3355L Tropical Marine Biology	R				2								
PCB 3442 Aquatic Ecology	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: 22**

**Requirements Met:**
   Animal/Zoology Course (A) 
       Plant / Botany Course (P)<sup>2</sup> 
       Lab A (L\*) 
       Lab B (L) 
       10+ Residence     
       Elective Hours (R)

<sup>1</sup> 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