



## 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

Course	Description	Credits	Status	Course	Description	Credits	Status
BSC2010C	<b>Biology I (GEP)</b> PR: High school biology	4	_____	CHM2210	<b>Organic Chemistry I</b> PR: CHM 2046	3	_____
BSC2011C	<b>Biology II</b> PR: BSC 2010C	4	_____	CHM2211	<b>Organic Chemistry II</b> PR: CHM 2210	3	_____
CHM2045C	<b>Chemistry Fundamentals I (GEP)</b> PR: CHM 1025 or CPE, and MAC 1105 or MPT	4	_____	CHM2211L	<b>Organic Laboratory Techniques I</b> PR: CHM 2046L and CHM 2210	2	_____
CHM2046	<b>Chemistry Fundamentals II</b> PR: CHM 2045C, and MAC 1105C or MPT	3	_____	<i>Also satisfied by CHM2205 followed by CHM3120 and CHM3120L</i>			
CHM2046L	<b>Chemistry Fundamentals Lab</b> PR or CR: CHM2046	1	_____	<b>Biology Core Requirements: "C" (2.0) or better in each course</b>			
MAC2311C	<b>Calculus with Analytic Geometry I</b> PR: MAC1140C & MAC1114C, or MPT	4	_____	PCB3044*	<b>Principles of Ecology</b> PR: CHM2045, BSC 2010C & BSC2011C	3	_____
---OR---				PCB3063*	<b>Genetics</b> PR: BSC2011C or CHM2046	3	_____
MAC2233	<b>Concepts of Calculus</b> PR: MAC 1140C or MPT	3	_____	PCB3023*	<b>Molecular Cell Biology</b> PR: CHM2210 or CHM2205 or CHM3120, and BSC2010C, and PCB3063	3	_____
STA2023	<b>Statistical Methods I (GEP)</b> PR: MGF 1106 or any MAC course	3	_____	PCB4683*	<b>Evolutionary Biology</b> PR: JR Standing & PCB 3063	4	_____
PHY2053	<b>College Physics I</b> 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	<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	_____	<b>Upper Level Lab Requirements</b>			
PHY2054	<b>College Physics II</b> PR: PHY 2053	3	_____	<b>Lab A</b>	PCB3044L Principles of Ecology Lab	1	_____
PHY2054L	<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	_____	<i>Choose one</i>	PCB3063L Genetics Laboratory		
					PCB4683L Evolutionary Biology Lab		
				<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 _____	<b>Exit Exam*</b> <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.– 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	Primateology			A		3		PCB 3442	Aquatic Ecology	R				3	
ANT 4516	Human Biological Diversity					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	
<b>BOT 3015</b>	<b>Principles of Plant Science<sup>2</sup></b>	R			P	3		PCB 4353L	Florida Ecology Lab	R	L			1	
<b>BOT 3802</b>	<b>Ethnobotany<sup>2</sup></b>	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		L			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		<i>Only a few elective courses are offered each semester. We suggest performing class search using Department &gt; Biology (to find "R" elective courses)</i>							
PCB 3063L	Genetics Laboratory	R	L*			1									
PCB 3233	Immunology					3		<b>Current &amp; IP Total: _____ / 22      Needed: _____</b>							
PCB 3354	Tropical Ecology and Conservation	R				3									
PCB 3355L	Tropical Marine Biology	R				2									
<b>Requirements Met:</b>	Animal/Zoology Course (A)	Plant / Botany Course (P) <sup>2</sup>		Lab A (L*) Lab B (L)		10+ Residence Elective Hours (R)		<i>in addition to 13cr of Core</i>							

<sup>1</sup> 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**