



## 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

		Credits	Status			Credits	Status
<b>BSC2010C</b>	<b>Biology I (GEP)</b> PR: High school biology	4	_____	<b>CHM2210</b>	<b>Organic Chemistry I</b> PR: CHM 2046	3	_____
<b>BSC2011C</b>	<b>Biology II</b> PR: BSC 2010C	4	_____	<b>CHM2211</b>	<b>Organic Chemistry II</b> PR: CHM 2210	3	_____
<b>CHM2045C</b>	<b>Chemistry Fundamentals I (GEP)</b> PR: CHM 1025 or CPE, and MAC 1105 or MPT	4	_____	<b>CHM2211L</b>	<b>Organic Laboratory Techniques I</b> PR: CHM 2046L and CHM 2210  <i>Also satisfied by CHM2205 followed by CHM3120 and CHM3120L</i>	2	_____
<b>CHM2046</b>	<b>Chemistry Fundamentals II</b> PR: CHM 2045C, and MAC 1105C or MPT	3	_____	<b>Biology Core Requirements: "C" (2.0) or better in each course</b>			
<b>CHM2046L</b>	<b>Chemistry Fundamentals Lab</b> PR or CR: CHM2046	1	_____			Credits	Status
<b>MAC2311C</b>	<b>Calculus with Analytic Geometry I</b> ---OR--- PR: MAC1140C & MAC1114C, or MPT	4	_____	<b>PCB3044*</b>	<b>Principles of Ecology</b> PR: CHM2045, BSC 2010C & BSC2011C	3	_____
<b>MAC2233</b>	<b>Concepts of Calculus</b> PR: MAC 1140C or MPT	3	_____	<b>PCB3063*</b>	<b>Genetics</b> PR: BSC2011C or CHM2046	3	_____
<b>STA2023</b>	<b>Statistical Methods I (GEP)</b> PR: MGF 1106 or any MAC course	3	_____	<b>PCB3023*</b>	<b>Molecular Cell Biology</b> PR: CHM2210 or CHM2205 or CHM3120, and BSC2010C, and PCB3063	3	_____
<b>PHY2053</b>	<b>College Physics I</b> PR: MAC 1114C or higher, or MPT	3	_____	<b>PCB4683*</b>	<b>Evolutionary Biology</b> PR: JR Standing & PCB 3063	4	_____
<b>PHY2053L</b>	<b>College Physics I Lab</b> PR or CR: PHY 2053  <i>Also satisfied by PHY 2053C (4cr, Lab included) Also satisfied by PHY 2048C, or PHY 2048 &amp; Lab (PR: MAC2311C)</i>	1	_____	<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 22</p>			
<b>PHY2054</b>	<b>College Physics II</b> PR: PHY 2053	3	_____	<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) Also satisfied by PHY 2049C, or PHY 2049 &amp; Lab (PR: PHY 2048 &amp; MAC2312)</i>	1	_____	<b>Lab A</b>	PCB3044L Principles of Ecology Lab PCB3063L Genetics Laboratory PCB4683L Evolutionary Biology Lab	1	_____
				<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 _____ 2.0 minimum	Major GPA _____ 2.0 minimum	Exit Exam* <input type="checkbox"/>	



\* 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					UL Restricted Electives (2021-24 Cat Years)									
	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
<b>REQUIRED - Complete 9+ Credits</b>							<b>"C" or better required</b>								
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		L			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	
<b>RESTRICTED - Complete 5+ Credits</b>							<b>Additional From Above, or:</b>								
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 <sup>1</sup>	R				3-4		PCB 4353L	Florida Ecology Lab	R	L			1	
BSC 4941	Biology Internship <sup>1</sup>	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	
<b>NON-TRACK / GENERAL TRACK OPTIONS</b>															
ANT 3550C	Primatology			A		3		PCB 4575	Wildlife Genomics	R				3	
<b>BOT 3015</b>	<b>Principles of Plant Science<sup>2</sup></b>	R			P	3		PCB 4683L	Evolutionary Biology Lab	R	L*			1	
<b>BOT 3802</b>	<b>Ethnobotany<sup>2</sup></b>	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		<b>Only a few elective courses are offered each semester. We suggest performing class search using Department &gt; Biology (to find "R" elective courses)</b>							
BSC 4445C	Genomics Laboratory	R	L			4		<b>Current &amp; IP Total: _____ / 22      Needed: _____</b>							
<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)									

<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**