General Track **NAME** _____ **UCF ID** _____ **DATE** _____

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	
BSC2011C	**Biology II** PR: BSC 2010C	4	
CHM2045C	**Chemistry Fundamentals I (GEP)** PR: CHM 1025 or CPE, and MAC 1105 or MPT	4	
CHM2046	**Chemistry Fundamentals II** PR: CHM 2045C, and MAC 1105C or MPT	3	
CHM2046L	**Chemistry Fundamentals Lab** PR or CR: CHM2046	1	
MAC2311C	**Calculus with Analytic Geometry I** PR: MAC1140C & MAC1114C, or MPT	4	
---OR---			
MAC2233	**Concepts of Calculus** PR: MAC 1140C or MPT	3	
STA2023	**Statistical Methods I (GEP)** PR: MGF 1106 or any MAC course	3	
PHY2053	**College Physics I** PR: MAC 1114C or higher, or MPT	3	
PHY2053L	**College Physics I Lab** PR or CR: PHY 2053 *Also satisfied by PHY 2053C (4cr, Lab included)* *Also satisfied by PHY 2048C, or PHY 2048 & Lab (PR: MAC2311C)*	1	
PHY2054	**College Physics II** PR: PHY 2053	3	
PHY2054L	**College Physics II Lab** PR or CR: PHY 2054 *Also satisfied by PHY 2054C (4cr, Lab included)* *Also satisfied by PHY 2049C, or PHY 2049 & Lab (PR: PHY 2048 & MAC2312)*	1	

		Credits	Status
CHM2210	**Organic Chemistry I** PR: CHM 2046	3	
CHM2211	**Organic Chemistry II** PR: CHM 2210	3	
CHM2211L	**Organic Laboratory Techniques I** PR: CHM 2046L and CHM 2210	2	

Also satisfied by CHM2205 ☐ *followed by CHM3120* ☐ *and CHM3120L* ☐

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

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

Were all four of the above courses taken at UCF? YES ◯ nothing further needed NO ◯ *check overall UL residency:* ____ *of 23*

Upper Level Lab Requirements

			Credits	Status
Lab A *Choose one*	PCB3044L	Principles of Ecology Lab ◯	1	
	PCB3063L	Genetics Laboratory ◯		
	PCB4683L	Evolutionary Biology Lab ◯		
Lab B	*A second Lab A course, or other lab elective (see second page)*			

Upper Level Electives

22 Credit Hours of Electives - See Second Page

Other Requirements

UCF GPA _____ *2.0 minimum* Major GPA _____ *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.*

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
ANT 3550C	Primatology			A		3	
ANT 4516	Human Biological Diversity					3	
BCH 4024	Medical Biochemistry					4	
BCH 4053	Biochemistry I					3	
BCH 4054	Biochemistry II					3	
BOT 3015	**Principles of Plant Science** [2]	R			**P**	3	
BOT 3802	**Ethnobotany** [2]	R			**P**	3	
BOT 3018C	Cul Botany Across the Cultures	R	L		P	4	
BOT 4223C	Plant Anatomy	R	L		P	4	
BOT 4303C	Plant Kingdom	R	L		P	4	
BOT 4503C	Plant Physiology	R	L		P	4	
BOT 4713C	Plant Taxonomy	R	L		P	5	
BOT 4850	Medical Botany	R			P	3	
BSC 3052	Conservation Biology	R				3	
BSC 3312	Principles of Marine Biology	R				3	
BSC 3403C	Quantitative Biological Methods					4	
BSC 3453C	Bio Res. Meth & Exp Design	R				3	
BSC 3945	Learning Assistants in Biology	R				3	
BSC 4310	Service Learning Marine Conserv	R				3	
BSC 4312C	Advanced Marine Biology	R	L			4	
BSC 4330	Invasion Biology	R				3	
BSC 4445C	Genomics Laboratory	R	L			4	
BSC 4456C	Programming for Biologists	R				3	
BSC 4473C	Scientific Diving	R				4	
BSC 4821	Biogeography	R				4	
BSC 4912	Directed Independent Research [1]	R				1-4	
BSC 4941	Biology Internship [1]	R				1-4	
BSC 4927	Sci and Public Engage for Bio Majors	R				3	
ENY 4004C	General Entomology	R	L	A		4	
ENY 4455C	Social Insect Behavior	R	L	A		4	
MCB 3020C	General Microbiology		L			5	
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	

Course Detail		R	L	A	P	Cr	Status
PCB 3442	Aquatic Ecology	R				3	
PCB 3522	Molecular Biology I					3	
PCB 3703C	Human Physiology					4	
PCB 4301C	Wetland Ecology & Biogeochem.	R	L			4	
PCB 4353	Fl Ecology, Natural History & Cons	R				3	
PCB 4353L	Florida Ecology Lab	R	L			1	
PCB 4932	Population Ecology	R				3	
PCB 4402	Disease Ecology & Ecoimmunology	R				3	
PCB 4408	Urban Ecology	R				3	
PCB 4413	Sensory Ecology	R				3	
PCB 4514	Epigenetics	R				3	
PCB 4524	Molecular Biology II					3	
PCB 4575	Wildlife Genomics	R				3	
PCB 4683L	Evolutionary Biology Lab	R	L*			1	
PCB 4723	Animal Physiology	R		A		4	
ZOO 3001	Integrated Principles of Zoology	R		A		3	
ZOO 3454	Ichthyology	R		A		3	
ZOO 3713	Comparative Vertebrate Anatomy	R		A		4	
ZOO 3713L	Comp Vert Anat Lab	R	L			1	
ZOO 3733C	Human Anatomy					4	
ZOO 4205C	Invertebrate Biodiversity	R	L	A		4	
ZOO 4272	Ornithology	R		A		3	
ZOO 4310C	Vertebrate Evolution & Ecology	R	L	A		4	
ZOO 4405C	Sea Turtle Ecology, Conserv Intern	R	L	A		3	
ZOO 4462C	Herpetology	R	L	A		4	
ZOO 4480	Mammalogy	R		A		4	
ZOO 4480L	Mammalogy Lab	R	L			1	
ZOO 4513	Animal Behavior	R		A		3	
ZOO 4603C	Embryology/Development	R	L	A		5	
ZOO 4756C	Comparative Vertebrate Histology	R	L	A		4	
ZOO 4910L	Res in Animal Beh. in a Zoo Env	R	L	A		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)[2] ☐ Lab A (L*) ☐ Lab B (L) ☐ 10+ Residence Elective Hours (R) ☐☐☐☐☐ *in addition to 13cr of Core*

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

General Track

NAME **UCF ID** **DATE**

NOTES

General Education Program:

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

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**