

# Outline for Biology Major Requirements (B.S.)

Common Program Prerequisites				Biology Laboratories Courses				
			Credits	Grade			Credits	Grade
<b>BSC2010C</b>	<b>Biology I (GEP)</b>	(PR: High school biology)	4		<b>Section A</b>	Complete at least 1 Core Lab from the following:		
(A min. grade of "C" (2.0) is required in BSC2010C subsequent biology courses)					<b>PCB3044L*</b>	<b>Principles of Ecology Lab</b>	1	
<b>BSC2011C</b>	<b>Biology II</b>	(PR: A "C" (2.0) or better in BSC 2010C)	4		(PR/CR: PCB3044)			
(A min. grade of "C" (2.0) is required in BSC2011C subsequent biology courses)					<b>PCB3063L*</b>	<b>Genetics Laboratory</b>	1	
<b>CHM2045C</b>	<b>Chemistry Fundamentals I (GEP)</b>		4		<b>PCB4683L*</b>	<b>Evolutionary Biology Lab</b>	1	
(PR: Chemistry Placement Exam. And C (2.0) or better in MAC 1105)					<b>Section B</b> Complete at least 1 Core/Non-Core: from above or designated below with +			
<b>CHM2046</b>	<b>Chemistry Fundamentals II</b>		3					
(PR: A min. grade of "C" (2.0) is required in CHM2045C and MAC1105C)								
<b>CHM2046L</b>	<b>Chemistry Fundamentals Lab</b>	(PR/CR: CHM2046)	1					
<b>PHY2053</b>	<b>College Physics I</b>	(PR: MAC1105C & MAC1114C)	3		BOT3018C*† Culinary Botany Across the Cultures (P)			
<b>PHY2053L</b>	<b>College Physics I Lab</b>	(PR/CR: PHY2053 w/ a "C" or better)	1		BOT4223C*† Plant Anatomy (P)			
					BOT 4282C*† Plant Microtechniques			
					BOT4303C*† Plant Kingdom (P)			
<b>PHY2054</b>	<b>College Physics II</b>	(PR: PHY2053 w/ a "C" or better)	3		BOT4503C*† Plant Physiology (P)			
<b>PHY2054L</b>	<b>College Physics II Lab</b>	(PR/CR: PHY2054 w/ a "C" or better)	1		BOT4530C*† Plant Genomics and Biochemistry (P)			
					BOT4713C*† Plant Taxonomy (P)			
<b>STA2023</b>	<b>Statistical Methods I (GEP)</b>		3		BSC 4312C*† Adv Marine Biol			
(PR: MGF1106 or any other MAC course)					BSC 4445C*† Genomics Lab			
<b>MAC2233</b>	<b>Concepts of Calculus</b>		3		ENY3571*† Honey Bee Biology and Beekeeping (A)			
(PR: Math Placement Exam or MAC1140C w/ A "C" or better)					ENY4004C*† General Entomology (A)			
					PCB 4301C*† Wetland Eco & Biogeochem.			
					PCB 4353L*† FL Ecology Lab			
					PCB 4315C*† Marine Ecology of Florida			
<b>Core Requirements: Basic Level (8-9 credits)</b>					ZOO 3713L*† Comp Vert Anat Lab			
<b>CHM2210</b>	<b>Organic Chemistry I</b>		3		ZOO 4205C*† Invertebrate Biodiversity			
(PR: A "C" (2.0) or better in CHM 2046)					ZOO4310C*† Vertebrate Evolution & Ecology (A)			
<b>CHM2211</b>	<b>Organic Chemistry II</b>		3		ZOO4405C*† Sea Turtle Conservation Internship (A)			
(PR: A "C" (2.0) or better in CHM 2210)					ZOO4462C*† Herpetology (A)			
<b>CHM2211L</b>	<b>Organic Laboratory Techniques I</b>		2		ZOO 4480L*† Mammalogy Lab			
(PR: A C (2.0) or better in both CHM 2046L and CHM 2210)					ZOO4603C*† Embryology/Development (A)			
<b>(CHM2205 followed by CHM3120 and CHM3120L can also be taken to meet this requirement)</b>					ZOO4756C*† Comparative Vertebrate Histology (A)			
					ZOO4910L*† Res in Animal Beh. in a Zoo Env (A)			

**Biology Major B.S. – General Track**  
**Upper Division Restricted Electives (22 credits)**  
**(Must have a "C" or better in each prerequisite course)**

**RESTRICTED COURSES**

**Complete at least (22 hrs) from the following:**

ANT3550C - Primatology	3	PCB3233 - Immunology	3
BCH4024 - Medical Biochemistry	4	PCB3343L* - Principles of Field Ecology	5
BCH4053 - Biochemistry I	3	PCB3354* - Tropical Ecology and Conservation	3
BCH4054 - Biochemistry II	3	PCB3355L* - Tropical Marine Biology	2
BOT3015* - Principles of Plant Science (P)	3	PCB3442* - Aquatic Ecology	3
BOT3018C*† - Cul Botany Across the Cultures (P)	4	PCB3522 - Molecular Biology I	3
BOT3802* - Ethnobotany (P)	3	PCB3522H - Honors Molecular Biology I	3
BOT4223C*† - Plant Anatomy (P)	4	PCB3703C - Human Physiology	4
BOT 4282C*† - Plant Microtechniques	4	PCB4301C*† - Wetland Ecology & Biogeochemistry	4
BOT4303C*† - Plant Kingdom (P)	4	PCB4315C*† - Marine Ecology of Florida	4
BOT4430C*† - Biology of Fungi (P)	4	PCB4353* - Fl Ecology, Natural History and Conserv	3
BOT4503C*† - Plant Physiology (P)	4	PCB4353L*† - Florida Ecology Lab	1
BOT4530C*† - Plant Genomics and Biochem (P)	4	PCB4402* - Disease Ecology & Ecoimmunology	3
BOT4713C*† - Plant Taxonomy (P)	5	PCB4413* - Sensory Ecology	3
BOT4850* - Medical Botany (P)	3	PCB4462* - GIS for Biologists and Ecologists	3
BOT4922* - Plant Science Capstone	2	PCB4514* - Epigenetics	3
BOT 4970H - Honors Undergrad. Thesis		PCB4524 - Molecular Biology II	4
BSC3052* - Conservation Biology	3	PCB4575* - Wildlife Genomics	3
BSC3312* - Principles of Marine Biology	3	PCB4678* - Evolution and Medicine	3
BSC3453C* - Bio Res. Meth & Exp Design	3	PCB4683L* - Evolutionary Biology Lab	1
BSC 4310* - Service Learning Marine Conserv	3	PCB4684* - Population Genetics	3
BSC4312C*† - Advanced Marine Biology	4	PCB4723* - Animal Physiology (A)	4
BSC4330* - Invasion Biology	3	PCB5435C* - Marine Ecology of Florida	4
BSC4445C*† - Genomics Laboratory	4	ZOO3454* - Ichthyology (A)	3
BSC4456C* - Programming for Biologists	3	ZOO3713* - Comparative Vertebrate Anatomy (A)	4
BSC4473C* - Scientific Diving	4	ZOO 3713L*† - Comp Vert Anat Lab	1
BSC4821* - Biogeography	4	ZOO3733C - Human Anatomy	4
BSC4861L* - Urban Ecological Field Studies	3	ZOO4205C*† - Invertebrate Biodiversity (A)	4
BSC4910C* - Group Effort Applied Research in Bio	4	ZOO4272* - Ornithology (A)	3
BSC4927* - Sci and Public Engage for Bio Majors	3	ZOO4310C*† - Vertebrate Evolution & Ecology (A)	4
ENY3571*† - Honey Bee Biology and Beekeeping (A)	3	ZOO4405C*† - Sea Turtle Ecology, Conserv Intern (A)	3
ENY4004C*† - General Entomology (A)	4	ZOO4462C*† - Herpetology (A)	4
MCB3020C - General Microbiology	5	ZOO4480* - Mammalogy (A)	4
OCE3008* - Oceanography	3	ZOO4480L*† - Mammalogy Lab	1
PAZ4234* - Zoo and Aquarium Management	3	ZOO4513* - Animal Behavior (A)	3
PCB3044L* - Principles of Ecology Laboratory	1	ZOO4603C*† - Embryology/Development (A)	5
PCB3063L* - Genetics Laboratory	1	ZOO4756C*† - Comparative Vertebrate Histology (A)	4
		ZOO4910L*† - Res in Animal Beh. in a Zoo Env (A)	3
		ZOO3930 - Intro to Zoology (A)	3

All Biology Major Students must complete at least one course dealing exclusively with Zoology (A) and one course dealing exclusively with Botany (P)

\* Classes taught in the UCF Biology Department

† Each track must complete one of the following laboratories

Offered

(All Biology Students **MUST** complete the Biology Exam Exit after completing the Biology Core Courses.)  
(The Exam **MUST** be taken and passed by the deadline date Posted on the Testing Website within your Graduating Semester)