

Name _____
UCFID _____

Road Map- Ecology, Evolutionary and Conservation Biology
Catalog Year: Summer 2021 and On

Advisor	Date	
BCH 4024	Medical Biochemistry	4
BCH 4053	Biochemistry 1	3
BCH 4054	Biochemistry 2	3
p. BOT 3015*	Principles of Plant Science	3
p. BOT 3018C*†	Culinary Botany	4
p. BOT 3802*	Ethnobotany	3
p. BOT 4223C*†	Plant Anatomy	4
BOT 4282C*†	Plant Microtechniques	4
p. BOT 4303C*†	Plant Kingdom	4
p. BOT 4430C*†	Biology of Fungi	4
p. BOT 4503C*†	Plant Physiology	4
p. BOT 4530C*†	Plant Genomics and Biochemistry	4
p. BOT 4713C*†	Plant Taxonomy	5
p. BOT 4850*	Medical Botany	3
BOT 4922*	Plant Science Capstone	2
BOT 4970H	Honors Undergrad. Thesis	3
BSC 3052*	Conservation Biol	3
BSC 3453*	Bio Res. Meth & Exp Design	3
BSC 4821*	Biogeography	4
BSC 3312*	Princ Marine Biol	3
BSC 4312C*†	Adv Marine Biol	4
BSC 4330*	Invasion Biology	3
BSC 4456C*	Programming for Bio	3
BSC 4445C*†	Genomics Lab	4
BSC 4473C*	Scientific Diving	4
BSC 4861L*	Urban Ecology...	3
BSC 4910C*	Group Effort Applied Resear	4
BSC 4927*	Scientific Engagement	3
BSC 4932*	Service Learning Marine Conserv	3
BSC 5258L*	Trop Bio Research	3
BSC 5316C*	Marine Conservation	4
a. ENY 3571*†	Honey Bee Bio & Beekeeping	3
a. ENY 4004C*†	General Entomology	4
MCB 3020C	Gen Microbiology	5
OCE 3008*	Oceanography	3
a. PAZ 4234*	Zoo & Aquarium Mgt	3
PCB 3044L*	Ecology Lab	1
PCB 3063L*	Genetics Lab	1
PCB 3233	Immunology	3
PCB 3343L*	Princ Field Ecology	5
PCB 3354*	Tropic Ecology & Cons.	3
PCB 3355L*	Tropical Marine Bio	2
PCB 3442*	Aquatic Ecology	3
PCB 3522	Molec Bio I	3
PCB 3703C	Human Physiology	4
PCB 4301C*†	Wetland Eco & Biogeochem.	4
PCB 4315C*†	Marine Ecology of Florida	3
PCB 4353*	Fl Eco., Nat. Hist. & Cons.	3
PCB 4353L*†	FL Ecology Lab	1
PCB 4402*	Disease Eco & Immunology	3
a. PCB 4413*	Sensory Ecology	3
PCB 4462*	GIS for Biologists	3
PCB 4514*	Genetics II	3
PCB 4524	Molec Bio 2	3
PCB 4575*	Wildlife Genomics	3
PCB 4678*	Evolution in Medicine	3
PCB 4683L*	Evol. Biology Lab	1
PCB 4684*	Population Genetics	3
a. PCB 4723*	Animal Physiology	4
PCB 5326C*	Ecosystems of Fl	5
PCB 5435C*	Marine Ecology of Fl	4
PCB 5485*	Models in Ecology	3
a. ZOO 3454*	Ichthyology	3
a. ZOO 3713C*†	Comp Vert Anat	5
ZOO 3733C	Human Anatomy	4
a. ZOO 4205C*†	Invertebrate Biodiversity	4
a. ZOO 4272*	Ornithology	3
a. ZOO 4310C*†	Vert Evo and Eco	4
a. ZOO 4405C*†	Sea Turtle Internship	3
a. ZOO 4462C*†	Herpetology	4
a. ZOO 4480*	Mammalogy	4
ZOO 4480L*†	Mammalogy Lab	1
a. ZOO 4513*	Animal Behavior	3
a. ZOO 4603C*†	Embryology/Develop	5
a. ZOO 4756C*†	Comp Vert Histology	4
a. ZOO 4910L*†	Res Exp in Zoo Env	3

5A. Cognate Sciences Core (31-33 hours)

Chemistry Placement Test: CHM 1025 Intro to Chemistry	2	
CHM 2045C Chemistry Fundamentals I	4	
CHM 2046 Chemistry Fundamentals II	3	
CHM 2046L Chemistry Fundamentals Lab	1	
CHM 2210	CHM 2205	3/5
CHM 2211 or	CHM 3120	3/3
CHM 2211L	CHM 3120L	2/1

PHY 2053C (or +L) or PHY 2048C (or +L)	4/3+1
PHY 2054C (or +L) or PHY 2049C (or +L)	4/3+1
Math Placement Test: MAT1033C, MAC1105, MAC1114, MAC 1140	
MAC 2311 or MAC 2233 or MAC 2253 Calculus	4
STA 2023 Statistical Methods I	3

5B. Lab requirement- Two labs

At least one of these labs must come from section A - Core.

A - Core:

•PCB 3044L - Ecology lab	
•PCB 3063L - Genetics lab	
•PCB 4683L - Evolutionary Biology Lab	

B - Non-Core: designated with †

6. 22 hours of restricted electives are required, with following stipulations:

- ❖ _____ of 22 hours RE GPA
- ❖ Courses must be selected from those listed below.
- ❖ Include one course exclusively on animals (marked a) __, and one exclusively on plants (marked p) _____.
- ❖ At least 10 of the 22 hours must be courses offered by the Department of Biology (designated with an *), ____ of 10
- ❖ Independent Study/Directed Research: May include a maximum of 4hrs towards restricted electives- (Completed with Biology Faculty)
- ❖ 5000 level courses may be taken by seniors with prior permission of course instructor. You will be charged graduate level tuition.

Required Electives (choose two of the following courses) (6-8hr)

BSC 3052*	Conservation Biol	3
PCB 4684*	Population Genetics	3
BSC 4821*	Biogeography	4
a. ZOO 4310C*†	Vert Evo and Eco	4
a. ZOO 4513*	Animal Behavior	3

Restricted Electives (choose from following) (7-9 hrs)

****Classes that satisfy the Required Electives cannot duplicate towards this section. Any Required Electives taken in excess of two will count here.****

p. BOT 4303C*†	Plant Kingdom	4
p. BOT 4503C*†	Plant Physiology	4
p. BOT 4713C*†	Plant Taxonomy	5
BSC 3052*	Conservation Biol	3
BSC 3453*	Bio Res. Meth & Exp Desi.	3
BSC 4330*	Invasion Biology	3
BSC 4821*	Biogeography	4
BSC 4861L*	Urban Ecology	3
OCE 3008*	Oceanography	3
PCB 3044L*	Ecology Lab	1
PCB 3343L*	Princ Field Ecology	5
PCB 3354*	Tropic Ecology & Cons.	3
PCB 3355L*	Tropical Marine Bio	2
PCB 3442*	Aquatic Ecology	3
PCB 4301C*†	Wetland Eco & Biogeochem	4
PCB 4315C*†	Marine Ecology of Florida	4
PCB 4353*	FL Eco, Nat. Hist. & Cons	3
PCB 4353L*†	FL Natural History Lab	1
PCB 4402*	Disease Eco & Immunology	3
a. PCB 4413*	Sensory Ecology	3
PCB 4462*	GIS for Biologists	3
PCB 4575*	Wildlife Genomics	3
PCB 4678*	Evolution in Medicine	3
PCB 4683L*	Evol. Biology Lab	1
PCB 4684*	Population Genetics	3
PCB 5326C*	Ecosystems of Fl	5
a. ZOO 3713C*†	Comp Vert Anat	5
a. ZOO 4205C*†	Invertebrate Biodiversity	4
a. ZOO 4310C*†	Vert Evo and Eco	4
a. ZOO 4513*	Animal Behavior	3

Additional Biology Electives: (5-9 hours)

a. ANT 3550C	Primatology	3
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1. State General Education Core

- Communication Foundation: ENC 110
- Cultural Foundation: HUM2020, MUL2010, THE2000, PHI2010
- Mathematical Foundation: MAC1105C, MAC2311C, MGF1106, MGF1107, STA2023
- Social Foundation: ECO2013, POS2041, AMH2020, PSY2012, SYG2000, ANT2000
- Science Foundation: CHM 2045C, BSC 2010C

2. General Education Program (36 Hours)

[See COSAS for assistance with GEP planning]

- Communication Foundations
- ENC 1101 - Composition I
- ENC 1102 - Composition II
- SPC 1603C - Fundamentals of Technical Presentations
- Cultural & Historical Foundations
- Mathematical Foundations
- Mathematics
- MAC 2311C - Calculus with Analytic Geometry I
- Statistics
- STA 2023 - Statistical Methods I
- Social Foundations
- Science Foundations
- BSC 2010C - Biology I
- CHM 2045C - Chemistry Fundamentals I

3. University Requirements

- ❖ 9 hours of summer enrollment (total) in academic career. _____ of 9
- ❖ At least 2.0 needed: _____ UCF GPA _____ Major GPA
- ❖ 42 hours 3xxx-4xxx level – 35 Biology requires = 7 hours left (to be satisfied with free electives or minor) _____ of 7

4. Major Requirements

- ❖ A minimum of 2.0 in all UCF courses taken in common program prerequisites, Biology core, and upper division restricted electives.
- ❖ A minimum of a C (2.0) in all Biology offered Core Classes and Required Electives is required for graduation.
- ❖ Exit Exam- to be completed upon completion of Biology core courses
- ❖ Departmental Residency Requirement: _____ of 22
 - o 22 hours of regularly scheduled upper division courses must be taken in the UCF Biology Department.

5. Biology core courses (21 hours)

BSC 2010C Gen Biology	4
BSC 2011C Biology 2	4
PCB 3023 Molec Cell Bio	3
PCB 3044 Ecology	3
PCB 3063 Genetics	3
PCB 4683 Evolutionary Biology	4

Note: If all requirements are satisfied on the road map, your major is satisfied. Please consult with COSAS for a final graduation check on all university requirements