

Name _____
UCFID _____

Road Map- Ecology, Evolutionary and Conservation Biology
Catalog Year: Summer 2020 – Spring 2021

Advisor _____ Date _____

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
- ❖ 48 hours 3xxx-4xxx level – 35 Biology requires = 13 hours left (to be satisfied with free electives or minor) _____ of 13

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

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	Primateology	_____	3
	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 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
a.	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

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