1. State General Education Core
- Communication Foundation: ENC 110  
- Mathematical Foundation: MAC1105C, MAC2311C, MGF1106, MGF1107, STA2023  
- Science Foundation: CHM 2045C, BSC 2010C

2. General Education Program (36 Hours)
[See COSAS for assistance with GEP planning]
- Communication Foundations  
- Cultural & Historical Foundations  
- Mathematical Foundations  
- Social Foundations  
- Science Foundations  
- State General Education Core

3. University Requirements
- 9 hours of summer enrollment (total) in academic career.
- At least 2.0 required: UCF GPA Major GPA
- 48 hours 3xxx-4xxx level – 35 Biology requires 13 hours (to be satisfied with free electives or minor)
- A minimum of 2.0 in all UCF offered Core Classes and Required Electives is required for graduation.
- Exit Exam- to be completed upon completion of Biology core courses
- 13 hours of non-Biology courses completed in the UF Core Biology Department.

4. Major Requirements
- A minimum of 2.0 in all UCF offered Core Classes and Required Electives is required for graduation.
- At least 10 of the 22 hours must be courses offered by the Department of Biology.
- Independent Study/Directed Research: May include a maximum of 8hrs towards restricted electives.
- All 5000 level courses must be taken with prior permission of course instructor. You will be charged graduate level tuition.

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 3065 Genetics 3  
- PCB 4863 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.

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

5B. Lab requirement- Two labs

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

Required Electives (choose one of the following courses) (3 hr)

RestRICTed Electives (12 hrs)

Additional Biology Electives (7 hours)

Name ____________________________ UCFID ________________

3. University Requirements

1. State General Education Core

2. General Education Program (36 Hours)

3. University Requirements

4. Major Requirements

5. Biology core courses (21 hours)

Marine & Aquatic Biology Track
Catalog Year: 2016-2019

- Communication Foundation: ENC 110  
- Mathematical Foundation: MAC1105C, MAC2311C, MGF1106, MGF1107, STA2023  
- Science Foundation: CHM 2045C, BSC 2010C

2. General Education Program (36 Hours)
[See COSAS for assistance with GEP planning]
- Communication Foundations  
- Cultural & Historical Foundations  
- Mathematical Foundations  
- Social Foundations  
- Science Foundations  
- State General Education Core

3. University Requirements
- 9 hours of summer enrollment (total) in academic career. of 9
- At least 2.0 required: UCF GPA Major GPA
- 48 hours 3xxx-4xxx level – 35 Biology requires 13 hours (to be satisfied with free electives or minor) of 13

4. Major Requirements
- A minimum of 2.0 in all UCF offered Core Classes and Required Electives is required for graduation.
- A minimum of 2.0 in all UCF offered Core Classes and Required Electives is required for graduation.
- At least 10 of the 22 hours must be courses offered by the Department of Biology.
- Independent Study/Directed Research: May include a maximum of 8hrs towards restricted electives.
- All 5000 level courses must be taken with prior permission of course instructor. You will be charged graduate level tuition.

Required Electives (choose one of the following courses) (3 hr)

BSC 3312* Principles of Marine Biology 3

RestRICTed Electives (12 hrs)

BSC 4312C+ Adv Marine Biol 4  
BSC 4821* Biogeography 4  
OCE 3006* Oceanography 4  
PCB 3044L Ecology Lab 1  
PCB 3355L Tropical Marine Bio 2  
PCB 3442+ Aquatic Ecology 3  
PCB 4315C+ Marine Ecology of Florida 4  
PCB 4723* Animal Physiology 4  
PCB 4924* Zoek Aquarium Mgt 3  
ZOO 3721C+ Comp Vert Anat 5  
ZOO 4205C+ Invertebrate Biodiversity 4  
ZOO 4310C+ Vert Evo and Eco 4  
ZOO 4456C* Sea Turtle Internship 3  
ZOO 4480* Mammalogy 4  
ZOO 4480L+ Mammalogy Lab 1  
ZOO 4513* Animal Behavior 3  
ZOO 4546+ Ichthyology 3  
ZOO 4910L+ Res Exp in Zoo Env 3  

Additional Biology Electives (7 hours)

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 4233C+ Plant Anatomy 4  
p. BOT 4303C+ Plant Kingdom 4  
p. BOT 4828C+ Plant Microtechniques 4  
p. BOT 4430C+ Biology of Fungi 4  
p. BOT 4979H Honors Undergrad Thesis 3  
p. BOT 4979* Plant Science Capstone 2  
p. BOT 4503C+ Plant Physiology 4  
p. BOT 4530C+ Plant Genomics and Biochem 4  
p. BOT 4713C+ Plant Taxonomy 5  
BSC 3052* Conservation Biol 3  
BSC 4821* Biogeography 4  
p. BOT 4850* Medical Botany 3  
BSC 3312* Princ Marine Biol 3  
BSC 3453* Bio Res. Meth & Exp Design 3  
BSC 4312C+ Adv Marine Biol 4  
BSC 4330* Invasion Biology 3  
BSC 4456* Programming for Bio 4  
BSC 4473* Genetics Lab 4  
BSC 4473C* Scientific Diving 4  
BSC 4861L Urban Ecology… 3  
BSC 4927* Scientific Engagement 3  
BSC 5254L* Trop Bio Research 4  
BSC 5316* Marine Conservation 4  
a. ENY 3571* Honey Bee Biod Bkeeping 3  
a. ENY 4000C* General Entomology* 4  
MCB 3020C Gen Microbiology 5  
OCE 3008* Oceanography 3  
a. PAZ 4234* Zool Aquar Mgmt 3  
PCB 3044L Ecology Lab 1  
PCB 3063L* Genetics Lab 1  
PCB 3233 Immunology 1  
PCB 3343L Princ Field Ecology 3  
PCB 3354* Tropic Ecology & Cons. 3  
PCB 3355L* Tropical Marine Sct 3  
PCB 3442* Aquatic Ecology 3  
PCB 3703C Human Physiology 4  
PCB 4301C+ Wetland Eco & Biochem 3  
PCB 4315C+ Marine Ecology of Florida 3  
PCB 4353* FL Eco., Nat Hist & Cons. 3  
PCB 4353L* FL Ecology Lab 1  
PCB 4406* Disease Eco & Immunology 3  
a. PCB 4413* Sensory Ecology 3  
a. PCB 4514* Genetics II 3  
a. PCB 3522 Molec Bio 1  
a. PCB 4462* GIS for Biologists 3  
a. PCB 4524* Molec Bio 2  
a. PCB 4575* Wildlife Genomics 3  
a. PCB 4683L+ Evol. Biology Lab 1  
a. PCB 4678* Evolution in Medicine 3  
a. PCB 4863L+ Population Genetics 3  
a. PCB 4723* Animal Physiology 4  
a. PCB 5326C* Ecosystems of FL 4  
a. PCB 5435C* Marine Ecology of FL 4  
a. PCB 5485* Models in Ecology 3  
a. ZOO 3713C+ Comp Vert Anat 5  
a. ZOO 3733C Human Anatomy 4  
a. ZOO 4205C+ Invertebrate Biodiversity 4  
a. ZOO 4310C+ Vert Evo and Eco 4  
a. ZOO 4405C+ Sea Turtle Internship 3  
a. ZOO 4480* Mammalogy 4  
a. ZOO 4480L+ Mammalogy Lab 1  
a. ZOO 4513* Animal Behavior 3  
a. ZOO 4642C+ Herpetology 4  
a. ZOO 4653C+ Embryology/Develop 5  
a. ZOO 4756C+ Comp Vert Histology 4  
a. ZOO 4827F Ichthyology 3  
a. ZOO 4910L+ Res Exp in Zoo Env 3  

Advisor __________________________ Date ____________