1. State General Education Core
   - Communication Foundation: ENC 110
   - Mathematical Foundation: MAC1105C, MAC2311C, MGF1106, MGF1107, STA2023
   - Science Foundation: CHEM 2045B, 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
   - Mathematics Foundations
     - MAC 2311C - Calculus with Analytic Geometry I
     - STA 2023 - Statistical Methods I
   Science Foundations
   - BSC 2010C - Biology I
   - BSC 2045C - Chemistry Fundamentals I

3. University Requirements
   - 9 hours of summer enrollment (total) in academic career. (minimum of 9)
   - At least 2.0 needed: UCF GPA _Major GPA
   - 48 hours xxx-xxx level - 35 Biology requires = 13 hours left (to be satisfied with free electives or minor) (minimum 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
     - 22 hours of regularly scheduled upper division courses must be taken in the UCF Biology Department.

5. Biology core courses (21 hours)
   BSC 2064 Anatomy & Biology 4
   BSC 2011C Biology 2 4
   PCB 3023 Molec Cell Bio 3 4
   PCB 3044 Ecology 3 4
   PCB 3063 Genetics 3 4
   PCB 4683 Evolutionary Biology 4 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.

**Marine & Aquatic Biology Track**
**Catalog Year: 2020-2021**

5A. Cognate Sciences Core (31-33 hours)
   - CHM 2045C (or CHM 2400__2041__) 4/3
   - CHM 2046 3
   - CHM 2040L 1
   - CHM 2210 CHM 2205 3/5
   - CHM 2211 or CHM 3120 3/3
   - CHM 2211L CHM 3120L 2/1
   - PHY 2053C or PHY 2048C 4
   - PHY 2054C PHY 2048C 4

Math Placement Test: MAT1033C__, MAC1105__, MAC1114__, MAC 1140__, MAC 2311 or MAC 2223 or MAC 2253 4
   STA 2023 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:
      - 22 hours 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 must be courses offered by the Department of Biology (designated with an *), 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 the course instructor. You will be charged graduate level tuition.

   Required Electives (choose one of the following courses) (3hrs)
   - BSC 3312 Principles of Marine Biology 3
   - OCE 3008 Oceanography 3
   - PCB 3442 Aquatic Ecology 3

   Restricted Electives (12 hrs)
   - BSC 4312C+ Adv Marine Biol 4
   - BSC 4932* Scientific Diving 4
   - OCE 3008* Oceanography 3
   - PCB 3355L* Tropical Marine Bio 2
   - PCB 3442* Aquatic Ecology 4
   - PCB 4310C* Wetland Ecol & Biogeochm 4
   - PCB 4316C+ Marine Ecology of Florida 4
   - PCB 4312+ Adv Marine Biol 4
   - PCB 4316+ Marine Ecology of Florida 4
   - PCB 4335L FL Ecol., Nat Hist & Cons. 3
   - PCB 4353 Oceanography 4
   - PCB 4355L FL Natural History Lab 4
   - PCB 4359+ Marine Ecology of Florida 3
   - PCB 4435+ Marine Ecology of Florida 3
   - PCB 4436+ FL Ecol., Nat Hist & Cons. 3
   - PCB 4439 FL Natural History Lab 3
   - PCB 4440+ Marine Ecology of Florida 3
   - PCB 4441+ Sensory Ecology 3
   - PCB 4514+ Genetics II 3
   - PCB 4522 Molec Bio I 3
   - PCB 4524 Molec Bio 2 3
   - PCB 4575 Wildlife Genomics 3
   - PCB 4683L Evol Biology Lab 1
   - PCB 4678* Evolution in Medicine 3
   - PCB 4684* Population Genetics 3
   - PCB 4723* Animal Physiology 3
   - PCB 4592* GIS for Biologists 3
   - PCB 4526* Ecosystems of FL 3
   - PCB 1539 Marine Ecology of FL 3
   - PCB 5485* Models in Ecology 3

   a. ZOO 3713+ Human Anatomy 5
   a. ZOO 3733+ Human Anatomy 5
   a. ZOO 4205+ Bio and Eco Meta Inv 4
   a. ZOO 4310C+ Adv Marine Biology 3
   a. ZOO 4405C+ Word Evo & Eco Meta Inv 4
   a. ZOO 4480+ Marine Macrofauna 4
   a. ZOO 4480L+ Marine Macrofauna 4
   a. ZOO 4513* Animal Behavior 3
   a. ZOO 4603C** Embryology/Develop 5
   a. ZOO 4753C** Comp Vert Histology 4
   a. ZOO 4354* Ichthyology 3
   a. ZOO 4272* Ornithology 3
   a. ZOO 4910L+ Res Exp in Zoo Env 3

Additional Biology Electives: (7 hours)
- AN 3506C Primatology 3
- BCH 4024 Medical Biochemistry 4

Advisor_ Date_