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
     ENC 1101 - Composition I
     ENC 1102 - Composition II
   - SPC 1603C - Fundamentals of Technical Presentations
   - Cultural & Historical Foundations
     - Mathematical Foundations
     - MAC 2311C - Calculus with Analytic Geometry I
     - 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
     - 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.

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

<table>
<thead>
<tr>
<th>Chemistry Placement Test: CHM2040, CHM2041, or CHM2045</th>
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<tbody>
<tr>
<td>CHM 2045C (or CHM 2040_2041)</td>
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<tr>
<td>CHM 2046</td>
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<tr>
<td>CHM 2046L</td>
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<td>CHM 2210</td>
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<td>CHM 2211 or CHM 3120</td>
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<td>CHM 2211L</td>
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<td>PHY 2053C</td>
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<td>PHY 2054C</td>
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Math Placement Test: MAT1033C, MAC1105, MAC1114, MAC 1140

MAC 2311 or MAC 2233 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 4083L - Evolutionary Biology lab

B - Non-Core: Designated with *

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

- Courses must be selected from those listed below.
- Include one course 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/Direct 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 Elective (3hr)
p. BOT 3015* Principles of Plant Science 3

Restricted Electives (choose at least one course from Group A and two from Group B) Remaining credits can be from any group (14 hrs)

**Group A**
- BOT 4922* Plant Science Capstone 2
- BOT 4941* Arboretum Garden Internship 3
- BSC 4941* Arboretum Project Internship 3
- BOT 4970H Honors Undergraduate Thesis 3

**Group B**
p. BOT 4530C* Plant Genomics and Biochemistry 4
p. BOT 4233C* Plant Anatomy 4
p. BOT 4530C* Plant Kingdom 4
p. BOT 4530C* Plant Physiology 4
p. BOT 4713C* Plant Taxonomy 4
p. BOT 4912 Directed Independent Research 4
p. BOT 4282L* Plant Microtechniques 2
p. BSC 3453* Bio Res. Meth. & Exp Design 3

**Group C (Other Restricted Electives)**
p. BOT 3802* Ethnobotany 3
p. BOT 3018C* Culinary Botany 3
p. BOT 4633C* Biology of Fungi 4
p. BOT 4850* Medical Botany 4
p. PCB 4932* GIS for Biologists 3
p. PCB 4330* Invasive Biology 3
p. enY 3571* Honey Bee Biosc & Keeping 3
p. PCB 3354* Marine Ecology of Florida 4
p. PCB 4861L* Urban Ecology… 3
p. PCB 4910* Biology Education Research 3
p. PCB 4927* Scientific Engagement 3
p. PCB 4932* Scientific Diving 3
p. PCB 525L* Trohp Bio Research 3
p. enY 4004C* General Entomology 4
p. MCB 3020C Gen Microbiology 5
p. OCE 3008* Oceanography 3
p. PAZ 4234* Zoo & Aquarium Mgt 3
p. PCB 3044L* Ecology Lab 1
p. PCB 3063L* Genetics Lab 1
p. PCB 3233 Immunology 3
p. PCB 3343L* Princ Field Ecology 5
p. PCB 3354* Tropical Ecology & Cons. 3
p. PCB 3355L* Tropical Marine Bio 2
p. PCB 3442* Aquatic Ecology 3
p. PCB 3705C Human Physiology 3
p. PCB 4301C* Wetland Eco & Biogeochm. 4
p. PCB 4316C* Marine Ecology of Florida 4
p. PCB 4351* FL Natural History 3
p. PCB 4353L* FL Natural History Lab 3
p. PCB 4402* Disease Eco & Immunology 3
p. PCB 4415* Sensory Ecology 3
p. PCB 4514* Genetics 2 3
p. PCB 3522 Molec Bio 1
p. PCB 4524 Molec Bio 2
p. PCB 4575* Wildlife Genetics 3
p. PCB 4683L* Evol. Biol Lab 1
p. PCB 4678* Evolution in Medicine 3
p. PCB 4684* Population Genetics 3
p. PCB 4723* Animal Physiology 4
p. PCB 4932* GIS for Biologists 3
p. BSC 5316 Marine Conservation 4
p. PCB 5326C Ecosystems of FL 5
p. PCB 5345C* Marine Ecology of FL 5
p. PCB 5485* Models in Ecology 5
p. a. ZOO 3713C* Comp Vert Anat 5
p. a. ZOO 3733C Human Anatomy 4
p. a. ZOO 4205C* Bio and Eco Meta Inv 5
p. a. ZOO 4310C* Vert Evo & Eco 4
p. a. ZOO 4405C* Sea Turtle Internship 3
p. a. ZOO 4480* Mammalogy 4
p. a. ZOO 4480L* Mammalogy Lab 3
p. a. ZOO 4513* Animal Behavior 3
p. a. ZOO 4462C* Herpetology 4
p. a. ZOO 4605C* Embryology/Develop 5
p. a. ZOO 4753C* Comp Vert Histology 3
p. a. ZOO 4928* Ichthyology 3
p. a. ZOO 4272* Ornithology 3
p. a. ZOO 4910L* Res Exp in Zoo Env 3

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Additional Biology Electives: (5 hours)
a. ANT 3550C Primatology 3
b. BCH 4053 Biochemistry 3
c. BCH 4054 Biochemistry 2 3
d. BOT 3018C* Culinary Botany 3
e. BOT 3802* Ethnobotany 3
f. BOT 4233C* Plant Anatomy 4
g. BOT 4305C* Plant Kingdom 4
h. BOT 4282L* Plant Microtechniques 2
i. BOT 4653C* Biology of Fungi 3
j. BOT 4505C* Plant Physiology 3
k. BOT 4713C* Plant Taxonomy 5
l. BSC 3052* Conservation Biol 3
m. BSC 4445C* Genomics Lab 3
n. BSC 4821* Biogeography 4
o. BOT 4850* Medicinal Botany 3
p. BSC 3312* Princ Marine Biol
q. BSC 3453* Bio Res. Meth & Exp Design 3
r. BSC 4312C* Adv Marine Biol 4
s. BSC 4330* Invasion Biology 3

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Adviser____________________ Date _______________