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
     - BSC 2010C - Biology I
     - BSC 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 2045C Biology Gen 4
   - BSC 2011C Biology II 2
   - 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.

### Biology Sciences Core (31-33 hours)

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

#### Chemistry Placement Test: CHM 1025

| CHM 2045C | 4 |
| CHM 2046 | 3 |
| CHM 2046L | 1 |
| CHM 2210 | 3/5 |
| CHM 2211 or CHM 3120 | 3/3 |
| CHM 2211L or 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, MAC1105C, MAC1114C, MAC 1140C

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 4683L - 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 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 *). 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 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 492* | Plant Science Capstone 2 |
| BOT 494* | Arboretum Garden Internship 3 |
| BOT 4970H | Honors Undergraduate Thesis 3 |
| BSC 4941* | Arboretum Project Internship 3 |

**Group B**

| p. BOT 4223C* | Plant Anatomy 4 |
| p. BOT 4282L* | Plant Microtechniques 2 |
| p. BOT 4303C* | Plant Kingdom 4 |
| p. BOT 4530C* | Plant Physiology 4 |
| p. BOT 4530C* | Plant Genomics and Biochemistry 4 |
| p. BOT 4713C* | Plant Taxonomy 5 |
| BOT 4912 | Directed Independent Research 4 |
| BSC 4353* | Bio Res. Meth & Exp Design 3 |

**Group C (Other Restricted Electives)**

| p. BOT 3018C* | Culinary Botany 3 |
| p. BOT 3802* | Ethnobotany 3 |
| p. BOT 4430C* | Biology of Fungi 4 |
| p. BOT 4850* | Medical Botany 4 |
| BSC 4330* | Invasion Biology 3 |
| a. ENY 3571* | Honey Bee Bio & Beekeeping 3 |
| PCB 3354* | Tropic Ecology & Cons. 3 |
| PCB 4462* | GIS for Biologists 3 |

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Additional Biology Electives (5 hours)

- a. ANT 3505C Primatology 3
- BCH 4024 Medical Biochemistry 4
- BCH 4053 Biochemistry 2 3
- BCH 4054 Biochemistry 2 3
- p. BOT 3018C* Culinary Botany 3
- p. BOT 3802* Ethnobotany 3
- p. BOT 4223C* Plant Anatomy 4
- p. BOT 4282L* Plant Microtechniques 2
- p. BOT 4303C* Plant Kingdom 4
- p. BOT 4530C* Plant Physiology 4
- p. BOT 4430C* Biology of Fungi 4
- p. BOT 4713C* Plant Taxonomy 5
- p. BOT 4850* Medicinal Botany 4
- BSC 3302* Conservation Biol 3
- BSC 3312* Prm Marine Biol 3
- BSC 3453* Bio Res. Meth & Exp Design 3
- BSC 4120C* Aquatic Ecol 4
- BSC 4330* Invasion Biology 3
- BSC 4455C* Genetics Lab 4
- BSC 4465C* Programming for Bio 3
- p. BOT 4850* Medical Botany 4
- BSC 4475C* Scientific Diving 4
- BSC 4821* Biogeography 4
- BSC 4861L* Urban Ecology 3
- BSC 4927* Scientific Engagement 3
- BSC 5258L* Troph Bio Research 4
- a. ENY 3571* Honey Bee Bio & Beekeeping 3
- a. ENY 4004C* General Entomology 4
- MCB 3020C Gen Molec Biol 5
- OCE 3008* Oceanography 3
- a. PAZ 4234* Zook & Aquarium Mgt 3
- PCB 3044L Ecology 3
- PCB 3063L Genetics Lab 1
- PCB 3233 Immunology 3
- PCB 3343* Princ Field Ecology 3
- PCB 3354* Tropic Ecology & Cons. 3
- PCB 3355L* Tropical Marine Bio 2
- PCB 3442* Aquatic Ecology 3
- PCB 3532* Molec Bio 1
- PCB 3703C Human Physiology 4
- PCB 4301L* Wetland Ecol & Biogeochem. 4
- PCB 4319C* Marine Ecology of Florida 3
- PCB 4533* FL. Ecol., Nat. Hist. & Cons. 3
- PCB 4533L* FL Natural History Lab 1
- PCB 4402* Disease Ecol & Immunology 3
- a. PCB 4413* Sensory Biology 3
- PCB 4462* GIS for Biologists 3
- PCB 4514* Genomics & Genetics II 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
- a. PCB 4728* Animal Physiology 4
- BSC 5316* Marine Conservation 4
- BSC 5326C* Ecosystems of FL 5
- BSC 5435C* Marine Ecology of FL 4
- BSC 5485* Models in Ecol. 3
- a. ZOO 3454* Ichthyology 3
- a. ZOO 3713C* Comp Vert Anat 5
- ZOO 3733C Human Anatomy 4
- ZOO 4205C* Invertebrate Divers 3
- a. ZOO 4272* Ornithology 3
- a. ZOO 4310C* Vert Ecol & Ecol. 3
- ZOO 4405C* Sea Turtle Internship 3
- a. ZOO 4462C* Herpetology 4
- a. ZOO 4480* Mammalogy 3
- 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

Advisor________________________ Date ________________