### 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
- Social Foundations
  - SPC 1603C
- Mathematical Foundations
  - MAC 2311C - Calculus with Analytic Geometry I
- Cultural & Historical Foundations
  - Mathematics
  - Science Foundations
    - BSC 2010C - Biology I
    - CHM 2045C - Chemistry Fundamentals I

### 3. University Requirements
- 9 hours of summer enrollment (total) in academic career.
- 9 hours
- 2.0 needed: _______UCF GPA ______ Major GPA
- 48 hours 3xxx-4xxx level - 35 Biology required = 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 201 Anatomy 2 3
- 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)
- CHM 2045C (or CHM 2040_2041) 4
- CHM 2046
- CHM 2046L
- CHM 2210 CHM 2205 3/5
- CHM 2211 or CHM 3120 3/3
- CHM 2211L or CHM 3120L 2/1
- PHY 2053C or PHY 2048C 4
- PHY 2054C or PHY 2049C 4

### 5B. Lab requirement- Two labs
At least one of these labs must come from section A - Core.

- **A - Core:**
  - PCB 304LL - Ecology lab
  - PCB 306LL - Genetics lab
  - PCB 468LL - Evolutionary Biology Lab

- **B - Non-Core: designated with †**

6. 22 hours of restricted electives are required, with following stipulations:
- **RE GPA**
- **Courses must be selected from those listed below.**
- Include one course exclusively on animals (marked p), and one exclusively on plants (marked m).
- At least 10 of the 22 hours must be courses offered by the Department of Biology (designated with *), of 10
- Independent Study/Directed Research: May include a maximum of 4hrs
- At least one of these labs must come from section B

### Required Electives Choose two from the following (9-10hr)

- **BCH 4405**
- **OR BCH 4024 Medical Biochemistry**
- **PCB 4514**
- **Animal Physiology**
- **PCB 4723**
- **Animal Physiology**
- **p. BOT 4850**
- **Medical Botany**
- **MCB 3020 Gen Microbiology**
- **PCB 3233 Immunology**
- **PCB 3522 Molec Bio I**
- **PCB 3703C Human Physiology**
- **PCB 4514**
- **Genetics 2**
- **PCB 3523 Molec Bio II**
- **PCB 4524 Molec Bio 2**
- **PCB 4575 Wildlife Genetics**
- **PCB 4683L Evol. Biology Lab**
- **PCB 4678 Evolution in Medicine**
- **PCB 4684 Population Genetics**
- **PCB 4723**
- **Animal Physiology**
- **PCB 4932**
- **GIS for Biologists**
- **PCB 5326S Marine Ecology of Fl**
- **PCB 5435C Marine Ecology of Fl**
- **PCB 5485 Models in Ecology**
- **p. ZOO 3713C**
- **Comp Vert Anat**
- **p. ZOO 3733C**
- **Human Anatomy**
- **p. ZOO 4205C**
- **Bio and Eco Meta Inv**
- **p. ZOO 4513**
- **Animal Behavior**
- **p. ZOO 4603C**
- **Embryology/Development**
- **p. ZOO 4753C**
- **Comp Vert Histology**

### Restricted Electives (choose from following) (5-6 hrs)

- **BCH 4024 Medical Biochemistry**
- **BCH 4053 Biochemistry 1**
- **BCH 4054 Biochemistry 2**
- **p. BOT 3015 Principles of Plant Science**
- **p. BOT 3016C Culinary Botany**
- **p. BOT 3801 Ethnobotany**
- **p. BOT 4232C Plant Anatomy**
- **p. BOT 4282L Plant Microtechniques**
- **p. BOT 4303C Plant Capacity**
- **p. BOT 4503C Plant Physiology**
- **p. BOT 4503C Plant Genomics and Biochem**
- **p. BOT 4653C Biology of Fungi**
- **p. BOT 4713C Plant Taxonomy**
- **p. BOT 4850 Medical Botany**
- **p. BOT 4970B Honors Undergrad Thesis**
- **p. BOT 4922 Plant Science Capstone**
- **BSC 3062 Conservation Biol**
- **BSC 3312 Princ Marine Biol**
- **BSC 4312C Adv Marine Biol**
- **BSC 3453 Bio Res. Meth & Exp Design**
- **BSC 4456C Programming for Bio**
- **BSC 4445C Genomics Lab**
- **BSC 4821 Biogeography**
- **BSC 4330 Inversion Biology**
- **BSC 4861L Urban Ecology**
- **BSC 4927 Scientific Engagement**
- **BSC 4932 Scientific Divining**
- **BSC 5285L Topo Bio Research**
- **BSC 5316C Marine Conservation**
- **a. ENY 3571 Honey Bee Bk/bd Keep**
- **a. ENY 4000C General Entomology**
- **a. MCB 3020C Gen Microbiology**
- **a. OCE 3008 Oceanography**
- **a. PZ 4234 Zoo Aquaculture Mgt**
- **PCB 304LL Ecology Lab**
- **PCB 306LL Genetics Lab**
- **PCB 3233 Immunology**
- **PCB 3343L Princ Field Ecology**
- **PCB 3354T Tropic Eco & Cons.**
- **PCB 3355L Tropical Marine Bio**
- **PCB 3442 Aquatic Ecology**
- **PCB 3703C Human Physiology**
- **PCB 4301C Wetland Eco & Biochem.**
- **PCB 4316C Marine Ecology of Florida**
- **PCB 4333 FL Eco, Nat. Hist, & Cons.**
- **PCB 4335L FL Natural History Lab**
- **PCB 4462C Disease Eco & Immunology**
- **a. PCB 4413 Sensory Ecology**
- **a. PCB 4514**
- **Genetics 2**
- **a. PCB 3523 Molec Bio I**
- **a. PCB 4524 Molec Bio 2**
- **a. PCB 4575 Wildlife Genetics**
- **a. PCB 4683 Evol. Biology Lab**
- **a. PCB 4678 Evolution in Medicine**
- **a. PCB 4684 Population Genetics**
- **a. PCB 4723**
- **Animal Physiology**
- **a. PCB 4932**
- **GIS for Biologists**
- **a. PCB 5326S Marine Ecology of Fl**
- **a. PCB 5435C Marine Ecology of Fl**
- **a. PCB 5485 Models in Ecology**
- **a. ZOO 3713C Comp Vert Anat**
- **a. ZOO 3733C Human Anatomy**
- **a. ZOO 4205C Bio and Eco Meta Inv**
- **a. ZOO 4310C Vert Evo and Eco**
- **a. ZOO 4405C Sea Turtle Internship**
- **a. ZOO 4480M Mammalogy**
- **a. ZOO 4480L Mammalogy Lab**
- **a. ZOO 4513 Animal Behavior**
- **a. ZOO 4603C Embryology/Development**
- **a. ZOO 4753C Comp Vert Histology**
- **a. ZOO 4854 Ichthyology**
- **a. ZOO 4927 Embryology**
- **a. ZOO 4910L Res Exp in Zoo Env**

### Additional Biology Electives: (6-8 hours)
- **a. ANT 3550C Primateology**

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**Pre- Professional Biology Track**

**Catalog Year: 2020-2021**