### 1. General Education Program (36 Hours)

#### [See COSAS for assistance with GEP planning]
- Communication Foundations
  - ENC 1101 - Composition I
  - ENC 1102 - Composition II
- Cultural & Historical Foundations
  - MAC 2311C - Calculus with Analytic Geometry I
- Mathematical Foundations
  - MAC 2233 or MAC 2253
- Science Foundations
  - ENC 1105 - Biology I Credit Hours: 4
  - CHM 2045C - Chemistry Fundamentals I

#### Sequence Checklist:
- Math Placement Test: MAC1105, MAC1140, MAC 1114, or CHM2045
- Chemistry Placement Test: CHM2040, CHM2041, or CHM2045

#### Math Placement Test:
- Pre-2016
  - BSC 2010C: Gen Biology
  - BSC 2011C: Biology 2
  - PCB 3023: Molec Cell Bio
  - PCB 3044: Ecology
  - PCB 3063: Genetics
  - PCB 4683: Evolutionary Biology
- Pre-2016
  - CHM 2045C (or CHM 2040)
  - CHM 2046
  - CHM 2046L
  - CHM 2210
  - CHM 2211
  - PHY 2053C
  - PHY 2054C
  - MAC 2311I or MAC 2223 and MAC 2253
- Pre-2020
  - STA 2023

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  - PHY 2054C
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### II. Departmental Residency Requirement: 22
- 22 hours of regularly scheduled upper division courses must be taken in the UCF Biology Department.

### III. 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 is required for graduation.
- Exit Exam: to be completed upon completion of Biology core courses

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

### 3. 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) from the following:
- At least 10 of the 22 hours must be courses offered by the Department of Biology (designated with an *).
- Independent Study/Directed Research: May include a maximum of 3 hours 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.

#### Form and Function
- BCH 4024: Medical Biochemistry
- BCH 4053: Biochemistry 1
- BCH 4054: Biochemistry 2
- BOT 4223L: Plant Microtechniques
- BOT 4235C: Plant Anatomy
- BOT 4305C: Plant Physiology
- BSC 4445C: Genomics and Biochem
- PCB 3063L: Genetics Lab
- PCB 3703C: Human Physiology
- PCB 3823: Immunology
- PCB 4514*: Genetics 2
- PCB 4522: Molec. Bio 1
- PCB 4524: Mol. Bio 2
- PCB 4678*: Evolution in Medicine
- PCB 4683L*: Biol. Lab
- PCB 4684: Population Genetics
- a PCB 4723: Animal Physiology
- a ZOO 3410: Comp Vert Anat
- a ZOO 3423: Human Anatomy
- a ZOO 4603C: Embryology/Develop
- a ZOO 4756C: Comp Vert Histology

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### Environmental
- p. BOT 3015*: Principles of Plant Science
- p. BOT 3018C*: Culinary Botany
- p. BOT 3802*: Ethnobotany
- p. BOT 4622*: Plant Science Capstone
- p. BOT 4850*: Medical Botany
- p. BOT 4970H: Honors Undergrad. Thesis
- p. BSC 3043*: GIS for Biologists
- p. BSC 3052*: Conservation Biol
- p. BSC 3312*: Prin Marine Biol
- p. BSC 4312C: Adv Marine Biol
- p. PCB 4330*: Invasion Biology
- p. BSC 3453*: Bio Res. Meth & Exp Design
- p. BSC 4456*: Programming for Bio
- p. BSC 4861*: Urban Ecology
- p. BSC 4927*: Scientific Engagement
- p. BSC 5258L*: Trop Bio Research
- p. BSC 4821*: Biogeography
- p. BSC 5316*: Marine Conservation
- a. ENY 3571*: Honey Bee Bio & Beekeeping
- a. OCE 3008*: Oceanography
- a. PAZ 4234*: Zoo & Aquarium Mgt
- a. PCB 3044L: Ecology Lab
- a. PCB 3343L*: Prin Field Ecology
- a. PCB 3355C*: Tropical Marine Bio
- a. PCB 3442*: Aquatic Ecology
- a. PCB 4301C*: Wetland Eco & Biogeochem
- a. PCB 4316C*: Marine Ecology of Florida
- a. PCB 4535*: FL Natural History
- a. PCB 4535L*: FL Natural History Lab
- a. PCB 4415*: Sensory Ecology
- a. PCB 4420*: Disease Eco & Immunology
- a. PCB 4575*: Wildlife Genomics
- a. PCB 5526*: Ecosystems of FL
- a. PCB 5453C*: Marine Ecology of FL
- a. PCB 5485*: Models in Ecology
- a. ZOO 4405C: Sea Turtle Internship
- a. ZOO 4513*: Animal Behavior
- a. ZOO 4910L*: Res Exp in Zoo Env

### Systematic
- a. ANT 3550C: Primatology
- a. BOT 4434C*: Mycology
- p. BOT 4713C*: Plant Taxonomy
- a. ENY 4004*: General Entomology
- a. MCB 3020C: Gen Microbiology
- a. ZOO 4205*: Bio and Eco Meta Inv
- a. ZOO 4310C*: Vert Evo and Eco
- a. ZOO 4480*: Mammalogy
- a. ZOO 4480L*: Mammalogy
- a. ZOO 4462C*: Herpetology
- a. ZOO 3454*: Ichthyology
- a. ZOO 3930*: Ornithology