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)**
   - Communications Foundations
     - 1. ENC 1101
     - 2. ENC 1102
     - 3. SPC 1603, SPC 1608, COM 1000
   - Cultural & Historic Foundations
     - 4. EUH 2000 or AMH 2010 or HUM 2210 or WOH2012
     - 5. ARH 2050, ARH 2051, MUL 2010, PHI 2010
     - 6. One additional course from Group 4 or 5
   - Social Foundations
     - 7. MAC 2311
     - 8. STA 2023
   - Science Foundations
     - 10. AMH 2020 or ECO2013 or ECO 2023 or POS 2041
     - 11. CHM 2045C
     - 12. BSC 2010C

3. **University Requirements**
   - 9 hours of summer enrollment (total) in academic career.
   - At least 2.0 needed: UCF GPA Major GPA
   - 48 hours 3xxx-4xxx level – 35 Biology requires = 13 hours left

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 Bio General
   - BSC 2011C Biology 2
   - PCB 3023 Molec Cell Bio
   - PCB 3044 Ecology
   - PCB 3063 Genetics
   - PCB 4583 Evolutionary Biology

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**Road Map- Ecology, Evolutionary and Conservation Biology**

**Catalog Year: 2016-2017**

5A. **Cognate Sciences Core (31-33 hours)**
   - CHM 2045C or CHM 2040__2041___
   - CHM 2046
   - CHM 2046L
   - CHM 2210
   - CHM 2211 or CHM 2205
   - CHM 2211L or CHM 2205L
   - PHY 2053C or PHY 2048 & L
   - PHY 2049 & L

   **Math Placement Test:** MAC1105, MAC1114, MAC 1140
   - STA 2023

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: designed 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 an *), __ of 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 Electives (choose two of the following four courses) (6-8hr)**
   - BSC 3052* Conservation Biol
   - BSC 4821* Biogeography
   - PCB 4684* Evolutionary and Conservation Biology
   - a ZOO 4310C* Urban Ecology
   - Vert Eco and Eco

**Restricted Electives (choose one from following) (7-9 hrs)**
   - p. BOT 4303* Plant Kingdom
   - BSC 4310* Invasion Biology
   - BSC 4821* Biogeography
   - BSC 3052* Conservation Biol
   - BSC 4861L* Urban Ecology
   - PCB 3341L* Princ Field Ecology
   - PCB 3044L* Ecology Lab
   - PCB 3355L* Tropical Marine Bio
   - PCB 3442* Ecological Genetics
   - PCB 3445* Evolutionary Anthropology
   - a ZOO 3713C* Animal Behavior
   - a ZOO 4310C* Urban Ecology
   - a ZOO 4451* Animal Behavior

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**Additional Biology Electives:**

- a. ANT 3550 Primatology
- BCH 4053 Biochemistry
- BCH 4054 Biochemistry
- p. BOT 3015 Principles of Plant Science
- p. BOT 3018C** Culinary Botany
- p. BOT 3802* Ethnobotany
- p. BOT 4223C** Plant Anatomy
- p. BOT 4303C** Plant Kingdom
- p. BOT 4282L** Plant Microtechniques
- p. BOT 4922* Plant Science Capstone
- p. BOT 4434C* Gen Mycology
- p. BOT 4503** Plant Physiology
- p. BOT 4713C** Plant Taxonomy
- BSC 3052* Conservation Biol
- BSC 4821* Biogeography
- p. BOT 4853** Medicinal Botany
- BSC 3312* Princ Marine Biol
- BSC 4312C** Adv Marine Biol
- BSC 4330* Invasion Biology
- BSC 4445C* Genetics Lab
- BSC 4453* Bio Res. Meth & Exp Design
- BSC 4861L* Urban Ecology
- BSC 5258L* Trop Bio Research
- a. ENY 3571* Honey Bee Book Bkeeping
- a. ENY 4004C** General Entomology
- MCB 3020C Gen Microbiology
- OCE 3008* Oceanography
- p. ZOO 4234* Zoo Aquarium Mgt
- PCB 3044L* Ecology Lab
- PCB 3056L* Genetics Lab
- PCB 3233* Immunology
- PCB 3343L* Princ Field Ecology
- PCB 3354* Tropic Eco & Cons.
- PCB 3355L* Tropical Marine Biol
- PCB 3447* Aquatic Ecology
- PCB 3730C Human Biology
- PCB 4301C* Wildlife Eco and Biogeochem.
- PCB 4353* Intro to Wildlife
- PCB 4402* Disease Eco & Immunology
- PCB 4663L* Evol. Biol. Lab
- PCB 4678* Evolution in Medicine
- PCB 4684* Population Genetics
- PCB 4772* Animal Physiology
- PCB 5316C* Marine Conservation
- PCB 5326C* Ecosystems of Fl
- PCB 5435C* Marine Biology
- PCB 5465* Models in Ecology
- a. ZOO 3713C* Animal Behavior
- a. ZOO 3713C* Human Anatomy
- a. ZOO 4205C** Bio and Eco Meta Inv
- a. ZOO 4310C* Urban Ecology
- a. ZOO 4451* Animal Behavior
- a. ZOO 4480* Mammalogy
- a. ZOO 4480L* Mammalogy
- a. ZOO 4513* Animal Behavior
- a. ZOO 4462C* Herpetology
- a. ZOO 4630C* Embryology/Develop
- a. ZOO 4756C* Comp Vert Histology
- a. ZOO 3454* Ichthyology
- a. ZOO 3xxx* Ornithology
- a. ZOO 4910L* Resp Exp in Zoo Env

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