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.
   - 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 Courses 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 2010A - Gen Biology
   - BSC 2010C - Biology I
   - PCB 3023 - Molec Cell Bio
   - PCB 3044 - Ecology
   - PCB 3063 - Genetics
   - PCB 4683 - Evolutionary Biology

   **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.

<table>
<thead>
<tr>
<th>Plant Science Track</th>
<th>Catalog Year: 2018-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5A. Cognate Sciences Core (31-33 hours)</strong></td>
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<tr>
<td>Chemistry Placement Test: CHM2040_, CHM2041_, or CHM2045_</td>
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<tr>
<td>CHM 2045C (or CHM 2040, 2041)</td>
<td>4/3</td>
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<tr>
<td>CHM 2046</td>
<td>3</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>1</td>
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<tr>
<td>CHM 2210 or CHM 2205</td>
<td>3/5</td>
</tr>
<tr>
<td>CHM 2211L or CHM 3120L</td>
<td>3/3</td>
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<tr>
<td>PHY 2053C or PHY 2048C</td>
<td>4</td>
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<tr>
<td>PHY 2054C or PHY 2049C</td>
<td>4</td>
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<tr>
<td><strong>Math Placement Test:</strong> MAT1033C_, MAC1105_, MAC1114_, MAC 1140</td>
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<tr>
<td>MAC 2311 or MAC 2233 or MAC 2253</td>
<td>4</td>
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<tr>
<td><strong>5B. Lab requirement- Two labs</strong></td>
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<tr>
<td>At least one of these labs must come from section A - Core.</td>
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<tr>
<td>A - Core:</td>
<td></td>
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<tr>
<td>• PCB 3044L - Ecology Lab</td>
<td></td>
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<tr>
<td>• PCB 3063L - Genetics Lab</td>
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<tr>
<td>• PCB 4083L - Evolutionary Biology Lab</td>
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<tr>
<td>B - Non-Core: designated with **</td>
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<tr>
<td><strong>6. 22 hours of restricted electives are required, with following stipulations:</strong></td>
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</tr>
<tr>
<td>• Courses must be selected from those listed at the end of this section.</td>
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<tr>
<td>• Include one course exclusively on animals (marked a), and one exclusively on plants (marked p).</td>
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<tr>
<td>• At least 10 of the 22 hours must be courses offered by the Department of Biology (designated with an *).</td>
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<tr>
<td>• Independent Study/Directed Research: May include a maximum of 4hrs towards restricted electives (Completed with Biology Faculty).</td>
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<tr>
<td><strong>5000 level courses may be taken by seniors with prior permission of course advisor. You will be charged graduate level tuition.</strong></td>
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</tbody>
</table>

**Required Elective (3hr)**
- p. BOT 3015* Principles of Plant Science

**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
- BOT 4970H Honors Undergraduate Thesis

**Group B**
- p. BOT 4223C* Plant Anatomy
- p. BOT 4232L* Plant Microtechniques
- p. BOT 4303C* Plant Kingdom
- p. BOT 4503C* Plant Physiology
- p. BOT 4713C* Plant Taxonomy
- p. BOT 4912 Directed Independent Research

**Group C (Other Restricted Electives)**
- p. BOT 3018C* Culinary Botany
- p. BOT 3802* Ethnobotany
- p. BOT 4850* Medical Botany
- BSC 4330* Invasion Biology
- PCB 4462* GIS for Biologists

**Additional Biology Electives: (5 hours)**
- a. ANT 3550C Primatology
- a. BCH 4024 Medical Biochemistry
- a. BCH 4053 Biochemistry I
- a. BCH 4054 Biochemistry II
- p. BOT 3018C* Culinary Botany
- p. BOT 3802* Ethnobotany
- p. BOT 4223C* Plant Anatomy
- p. BOT 4282L* Plant Microtechniques
- p. BOT 4303C* Plant Kingdom
- p. BOT 4503C* Plant Physiology
- p. BOT 4530C* Plant Genomics and Biochemistry
- p. BOT 4633C* Biology of Fungi
- p. BOT 4713C* Plant Taxonomy
- p. BOT 4850* Medical Botany
- BSC 3052* Conservation Biol
- BSC 3312* Primar Marine Biol
- BSC 3453* Bio Rex Meth & Exp Design
- BSC 4312C* Adv Marine Biol
- BSC 4330* Invasion Biology
- BSC 4445C* Genetics Lab
- BSC 4456C* Programming for Bio
- BSC 4821* Biogeography
- BSC 4861L* Urban Ecology
- BSC 4927* Scientific Engagement
- BSC 4932* Scientific Diving
- BSC 525L* Trop Bio Research
- a. ENY 3571C* Honey Bee Bio & Beekeeping
- a. ENY 4004C* General Entomology
- MCB 3020C* Gen Microbiology
- OCE 3008* Oceanography
- a. PAZ 4234* Zoo & Aquarium Mgt
- PCB 3044L* Ecology Lab
- PCB 3063L* Genetics Lab
- PCB 3232* Immunology
- PCB 3343L* Primill Culture
- PCB 3355L* Tropical Marine Bio
- PCB 3442* Aquatic Ecology
- Molec Bio 1
- PCB 3070C* Human Physiology
- PCB 4310C* Wetland Eco & Biogeochern.
- PCB 4316C* Marine Ecology of Florida
- PCB 4335L* FL Ecology Lab
- PCB 4402* Disease Eco & Immunology
- a. PCB 4413* Sensory Lab
- PCB 4462* GIS for Biologists
- PCB 4514* Genetics II
- PCB 4524* Molec Bio 2
- PCB 4575* Wildlife Genomics
- PCB 4678* Evolution in Medicine
- PCB 4683L* Evol. Biol. Lab
- PCB 4684* Population Genetics
- a. PCB 4723* Animal Physiology
- BSC 5316* Marine Conservation
- PCB 5326C* Ecosystems of FL
- PCB 5345C* Marine Ecology of FL
- PCB 5485* Models in Ecology
- a. ZOO 3454* Ichthyology
- a. ZOO 3713C* Comp Vet Anat
- ZOO 3733C Human Anatomy
- a. ZOO 4205C* Bio and Eco Meta Inv
- ZOO 4272* Ornithology
- a. ZOO 4315C* Vert Evo and Eco
- ZOO 4465C* Sea Turtle Internship
- ZOO 4480* Mammalogy
- ZOO 4480L* Mammalogy Lab
- a. ZOO 4513* Animal Behavior
- a. ZOO 462C* Herpetology
- a. ZOO 4630C* Embrrlophy/Develop
- a. ZOO 4753C* Comp Vert Histology
- a. ZOO 4910L* Res Exp in Zoo Env