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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>CHM 2045C</td>
<td>or CHM 2046</td>
<td></td>
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<tr>
<td>CHM 2046L</td>
<td>or CHM 2046</td>
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<tr>
<td>CHM 2210</td>
<td>or CHM 2205</td>
<td>3/5</td>
</tr>
<tr>
<td>CHM 2211L</td>
<td>or CHM 3120</td>
<td>3/3</td>
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<tr>
<td>CHM 2211L</td>
<td>or CHM 2210</td>
<td>2/1</td>
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<tr>
<td>PHYS 2053C</td>
<td>or PHYS 2048</td>
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<tr>
<td>PHYS 2048C</td>
<td>or PHYS 2048</td>
<td>4</td>
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</tbody>
</table>

5B. Lab requirement: Two labs

At least one of these labs must come from section A, Core.

- A - Core:
  - PCB 3044L - Lab
  - PCB 3043L - Lab
  - PCB 4821 - Biogeography
  - PCB 4691 - Evolutionary Biology Lab

- B - Non-Core: designated with a.

6. 22 hours of restricted electives are required, with following stipulations:

- 22 hours of RE GPA
- 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 *).
- Independent Study/Directed Research: May include a maximum of 4hrs towards restricted electives.
- 5000 level courses may be taken by students with prior permission of course instructor.
- You will be charged graduate level tuition.

Required Electives (choose two of the following courses) (6-8hr)

- BSC 3052 - Conservation Biol
- PCB 4684 - Population Genetics
- BSC 4821 - Biogeography
- a. ZOO 3410C - Vert Evo and Eco
- a. ZOO 4513 - Animal Behavior

Restricted Electives (choose from following) (7-9 hrs)

- p. BOT 4303C - Plant Kingdom
- p. BOT 4503C - Plant Physiology
- p. BOT 4731C - Plant Taxonomy
- BSC 3052 - Conservation Biol
- BSC 4821 - Biogeography
- BSC 4861L - Evolutionary Biology
- OCE 3008 - Oceanography
- PCB 3343L - Princ Field Ecology
- PCB 3354 - Tropical Ecology & Cons.
- PCB 3355L - Tropical Marine Bio
- PCB 3442 - Aquatic Ecology
- PCB 4301C - Wetland Eco & Biogeochem.
- PCB 4316C - Marine Ecology of Florida
- PCB 4402 - Evolution in Medicine
- a. PCB 4411L - Sensory Ecology
- a. PCB 4662 - GIS for Biologists
- a. PCB 4514 - Genetics II
- a. PCB 4524 - Molec Bio 2
- a. PCB 4757 - Wildlife Genetics
- a. PCB 4768 - Evolution in Medicine
- a. PCB 4863L - Evol. Lab
- a. PCB 4864 - Population Genetics
- a. PCB 5326C - Ecosystems of FI
- a. ZOO 3713C - Comp Vert Anatom
- a. ZOO 4205C - Bio and Eco Meta Inv
- a. ZOO 4310C - Vert Evo and Eco
- a. ZOO 4513 - Animal Behavior

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: 22 hours of regularly scheduled upper division courses must be taken in the UCF Biology Department.

5. Biology core courses (21 hours)

- BSC 2049 - Biology 4
- BSC 2011C Biology 2
- PCB 3023 - Molec Cell Bio
- PCB 3044 - Ecology
- PCB 3065 - Genetics
- PCB 4863 - 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.