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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2045C</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHM 2046</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>Lab for Organic Chemistry</td>
</tr>
<tr>
<td>CHM 2210</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHM 2211 or CHM 3120</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>PHY 2053C or PHY 2048C</td>
<td>Physics for Biology</td>
</tr>
<tr>
<td>PHY 2049C</td>
<td>Physics for Biology Lab</td>
</tr>
</tbody>
</table>

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: designated with †**

6. 22 hours of restricted electives are required, with the 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 electives offered by the Department of Biology (designated with an *), of 10.

7. Independent Study/Directed Research: May include a maximum of 4hrs towards restricted electives - (Completed with Biology Faculty).

8. 5000 level courses may be taken by seniors with prior permission of advisor.

Additional Biology Electives: (7 hours)

- PCB 3052L - Conservation Biology
- PCB 4530C - Plant Genomics and Biochem
- PCB 4563C - Biology of Fungi
- PCB 4713C - Plant Taxonomy
- BSC 3052 - Conservation Biol
- BSC 4821 - Biogeography
- BSC 4850 - Medical Botany
- BSC 4312C - Adv Marine Biol
- BSC 4330 - Invasion Biology
- BSC 4456C - Programming for Bio
- BSC 444C - Genomics Lab
- BSC 4861L - Urban Ecology
- BSC 4927 - Scientific Engagement
- BSC 4932 - Scientific Driving
- BSC 5285L - Top Bio Research
- BSC 5316 - Marine Conservation
- a. ENY 3571 - Honey Bee Biodiversity
- a. ENY 4000C - General Entomology
- a. MCB 3020C - Gen Microbiology
- a. OCE 3008 - Oceanography
- a. PAK 4234 - Zoo & Aquaculture
- a. PCB 3044L - Ecology Lab
- a. PCB 3063L - Genetics Lab
- a. PCB 3323 - Immunology
- a. PCB 3343L - Plant Tissue Culture
- a. PCB 3354 - Tropical Ecology & Cons.
- a. PCB 3355L - Tropical Marine Bio
- a. PCB 4542 - Aquatic Ecology
- a. PCB 3703C - Human Physiology
- a. PCB 4310C - Wetland Ecol & Biogeochem
- a. PCB 4316C - Marine Ecology of Florida
- a. PCB 4353L - FL Ecology Lab
- a. PCB 4402 - Disease Ecol & Immunology
- a. PCB 4413 - Sensory Ecology
- a. PCB 4462 - GIS for Biologists
- a. PCB 4514 - Genetics II
- a. PCB 3572 - Molc Bio 1
- a. PCB 3573 - Molc Bio 2
- a. PCB 4578 - Wildlife Genomics
- a. PCB 4833L - Ecol. Ecology Lab
- a. PCB 4678 - Evolution in Medicine
- a. PCB 4684* - Population Genetics
- a. PCB 4723* - Animal Physiology
- a. PCB 5262* - Evolution of FL Ecosystems
- a. PCB 5385C - Marine Ecology of FL
- a. PCB 5485* - Models in Ecology
- a. ZOO 3713C - Animal Cell Biol
- a. ZOO 3733C - Human Anatomy
- a. ZOO 4025C - Bio and Eco Meta Inv
- a. ZOO 4571C - Animal Physiology
- a. ZOO 4572C - Evolutionary Biology
- a. ZOO 4603C - Embryology/Develop
- a. ZOO 4753C - Comp Histology

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.