**BIOLOGY | CALS**

The biology major combines the faculty and resources of two UF colleges to prepare undergraduates for careers in the biological sciences, advanced study in professional or graduate schools, productive citizenship and leadership, and lifelong learning. The program is comprehensive and flexible, emphasizing the diverse forms, processes and systems of life. Students in the program complete required and elective courses that promote critical thinking through the investigation and understanding of principles and unifying themes that govern living systems. The biology major offers a broader approach to biology than is available through a major in animal sciences, botany, microbiology, plant science, zoology or other specialized biological sciences.

**About this Program**

- **College**: Agricultural and Life Sciences
- **Degree**: Bachelor of Science
- **Credits for Degree**: 120
- **Specializations**: Applied Biology | Biotechnology | Natural Science | Preprofessional
- **Additional Information**
- **Related Biology Programs**

To graduate with this major, students must complete all university, college, and major requirements.

Biology is the study of the many diverse forms, processes and systems of life. These studies range across all levels of the biological hierarchy, from the simplest to the most complex life forms, across all environments on the earth and across recent and evolutionary time that interconnects ancestors to their descendants.

To understand this vast diversity, the field of biology correspondingly relies on integrative and comparative approaches for the resolution of the general processes, principles and unifying themes that govern living systems. Biology is therefore very interdisciplinary and biologists rely on knowledge from the physical sciences and mathematics, as well as from across the disciplines and subdisciplines of biology for advances and breakthroughs.

The biology major is administered jointly by the College of Agricultural and Life Sciences and the College of Liberal Arts and Sciences.

**Before Graduating Students Must**

- Achieve a passing score for all content subsections of the Major Field Test for Biology. Content subscore areas are molecular biology and genetics, organismal biology, evolution, ecology and population biology.
- Achieve a passing score on the analytical skills assessment indicator of the Major Field Test for Biology.
- Achieve a passing score on the bioethics module quiz in BSC 4936. The content of the module and quiz are reviewed and approved by a faculty committee.
- Achieve a passing score on the scientific literacy paper assignment given in BSC 4936. This paper is graded using a faculty-developed rubric.
- Complete requirements for the baccalaureate degree, as determined by faculty.

**Students in the Major Will Learn to Student Learning Outcomes (SLOs)**

**Content**

1. Identify, describe and explain the basic terminology, concepts, methodologies and theories used within the biological sciences.

**Critical Thinking**

2. Analyze biological information and develop reasoned solutions to problems using the processes and applications of scientific inquiry.
3. Discriminate ethical behavior from unethical behavior in scientific research.

**Communication**

4. Communicate knowledge, ideas and reasoning clearly and effectively in written or oral forms appropriate to the biological sciences.

**Curriculum Map for All Specializations except CALS Biotechnology**

*I = Introduced; R = Reinforced; A = Assessed*

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<thead>
<tr>
<th>Courses</th>
<th>SLO 1</th>
<th>SLO 2</th>
<th>SLO 3</th>
<th>SLO 4</th>
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**Assessment Types**

- Major field test for biology
- Bioethics module
- Scientific literacy paper

**Curriculum Map for CALS Biotechnology**

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