BACHELOR OF SCIENCE IN BIOLOGY - GENERAL

The undergraduate curriculum for the Bachelor of Science in Biology degree is designed to prepare students for employment in academia, government, or industry; for graduate studies in the biological sciences or science teaching; or for admission to medical, dental, or veterinary schools. The theme of the curriculum is systems biology, employing a systems approach in solving biological problems. All students participate in research through undergraduate research courses. The School also offers the International Plan, Business Option, a minor in biology, and several certificates.

Biology Undergraduate Programs (http://www.biology.gatech.edu/undergraduate-program)

Wellness
APPH 1040 Scientific Foundations of Health 2
or APPH 10 The Science of Physical Activity and Health
Core A - Essential Skills
ENGL 1101 English Composition I 3
ENGL 1102 English Composition II 3
MATH 1552 Integral Calculus 4
Core B - Institutional Options
Select one of the following:
CS 1301 Introduction to Computing 3
CS 1315 Introduction to Media Computation
CS 1371 Computing for Engineers
Core C - Humanities
Any HUM (http://www.catalog.gatech.edu/academics/undergraduate/core-curriculum/core-area-c) 6
Core D - Science, Math, & Technology
PHYS 2211 Introductory Physics I 4
PHYS 2212 Introductory Physics II 4
MATH 1551 Differential Calculus 2
MATH 1553 Introduction to Linear Algebra 2
Core E - Social Sciences
Select one of the following:
HIST 2111 The United States to 1877 3
HIST 2112 The United States since 1877
INTA 1200 American Government in Comparative Perspective
POL 1101 Government of the United States
PUBP 3000 American Constitutional Issues 9
Any SS (http://www.catalog.gatech.edu/academics/undergraduate/core-curriculum/core-area-e)
Core F - Courses Related to Major
BIOL 1510 Biological Principles 4
CHEM 1211K Chemical Principles I 4
CHEM 1212K Chemical Principles II 4
CHEM 2311 Organic Chemistry I 3
CHEM 2312 Organic Chemistry II 3
or CHEM 23 Organic and Bioorganic Chemistry
Major Requirements
BIOL 1520 Introduction to Organismal Biology 4
or BIOL 152 Honors Introduction to Organismal Biology
BIOL 2335 General Ecology 3
or BIOL 233 Honors Ecology
BIOL 3450 Cell and Molecular Biology 3
BIOL 2344 Genetics 3
or BIOL 234 Honors Genetics

International Plan

Georgia Tech’s International Plan, through the Office of International Education (www.oie.gatech.edu/), involves two study abroad experiences and coursework in global studies. The plan offers a challenging and coherent academic program for students to develop global competence within the context of a Biology degree. The requirements include: language proficiency equivalent to two years of college coursework (twelve hrs), one course in international relations (three hrs), global economy (three hrs), focused study of a region (three hrs), an integrative course synthesizing the international experience (three hrs), and two semesters (minimum of 26 weeks).
in residence abroad. Georgia Tech biology courses are taught in Australia/New Zealand (www.oie.gatech.edu/sa/programs/) and Spain (www.oie.gatech.edu/sa/programs/) as part of the Study Abroad program. In addition, many biology courses are available through Georgia Tech partner universities abroad (www.oie.gatech.edu/sa/programs/). Some of these universities teach biology courses in English, such as Hong Kong University, Tokyo Technological University, University of Victoria (New Zealand), National University of Singapore, University of Strathclyde (Scotland), and Bilkent University (Turkey). Successful completion of this plan earns students an international designation on their Georgia Tech degree.

Research Option

This Research Option enables students to complete nine credit hours of supervised research with a Biology faculty member over multiple semesters. With faculty guidance, students write a brief proposal, perform independent, original research, and write a thesis about their work. The thesis is evaluated by two Biology Faculty members. The first six credit hours of the research option are taken as BIOL 2699/BIOL 4699 (research for credit) or BIOL 2698/BIOL 4698 (research for pay). Students then take either BIOL 4690 or BIOL 4910 in their final semester and two, one credit-hour writing courses, LMC 4701 and LMC 4702. These writing courses can be counted as Biology electives for Research Option students. Note that LMC 4701 should be taken in the semester prior to enrolling in BIOL 4910/BIOL 4690. The student's research is presented in BIOL 4460.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Select one of the following research options:</td>
<td>6</td>
<td></td>
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<tr>
<td>BIOL 2699/4699</td>
<td>Undergraduate Research</td>
<td></td>
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<tr>
<td>BIOL 2698/4698</td>
<td>Undergraduate Research Assistantship</td>
<td></td>
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<td>In the final semester of study, select the following courses:</td>
<td>11</td>
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<tr>
<td>BIOL 4690</td>
<td>Independent Research Project</td>
<td>3</td>
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<tr>
<td>or BIOL 4910 &amp; Undergraduate Research Thesis</td>
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<tr>
<td>LMC 4701</td>
<td>Undergraduate Research Proposal Writing</td>
<td>2</td>
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<tr>
<td>&amp; LMC 4702</td>
<td>and Undergraduate Research Thesis Writing</td>
<td>1</td>
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1 These writing courses can be counted as Biology electives for Research Option students. Note that LMC 4701 should be taken in the semester prior to enrolling in BIOL 4910/BIOL 4690.

Successful completion of this option earns students a "Research Option in Biology" designation on their Georgia Tech transcripts.