Be a part of the Department of Biology at Hofstra! We have redesigned our entire curriculum to provide new opportunities for both majors (BA and BS programs) and minors. Our programs incorporate interactive learning strategies and are designed to provide a broad exposure to biology. We have rigorous and up-to-date courses to prepare you for the changing world that you will experience after graduation, regardless of whether you plan to go to medical school, graduate school, start working right away—or whatever. Our faculty care about students and about being good teachers. We offer a variety of “real research” opportunities for juniors and seniors in disciplines as diverse as terrapin conservation, bacterial differentiation, molecular biology, functional morphology, and plant cell physiology, to name a few. Interested? Come and talk to a biology faculty member; we will be glad to help you find out how a biology degree will benefit you.

Department of Biology

The Department of Biology currently has thirteen full-time faculty members with teaching and research expertise in a broad range of biological sub-disciplines. Please visit our web page (www.hofstra.edu/Biology) to learn more about each professor's specific interests. The web site also has information on biology student clubs and honor societies, the Hofstra University Marine Lab in Jamaica, West Indies, Long Island Natural History and other useful information. All biology offices and labs are located in the Gittleson Bldg. We have programs for undergraduates and master's degree students. Undergraduates may choose between the B.A. degree (with a few more courses in the humanities and social sciences) or the B.S. degree (with a few more biology courses). All B.S. students complete an independent research project in one of the faculty member's laboratories. Competitive Summer Fellowships are available to allow qualified students to work all summer on their research projects and get paid! Past graduates from our programs have gone on to a variety of professional schools (medical, veterinary, dental, law), graduate schools in biology-related disciplines, education and others, and entered the work force directly by working in academic laboratories, pharmaceutical companies, biotech companies, not-for-profit agencies, government laboratories and field sites etc.

Advisement

Information regarding the undergraduate programs and courses in biology can be found in the Hofstra Bulletin under "Biology." The Bulletin information is also available on-line by clicking on "Catalogue" from the Hofstra University home page (www.hofstra.edu). Each student is governed by the Bulletin with the same date as the student's first semester at Hofstra.

All undergraduate biology majors must declare a major (and whether they are in the BA or BS program) by filling out a form for the Office of Financial and Academic Records and by completing another form for the Department of Biology. Potential majors must speak with a biology advisor about the programs available in our department. After student and advisor discuss the program options, the advisor will sign the departmental change of major form. Bring both the departmental and the university forms to the biology chairperson's office (Room 130 Gittleson Hall). Biology majors must be properly assigned in the University computer system so that the degree audit report (DAR) lists the degree requirements correctly. The departmental form may be obtained from the departmental secretary, Rochelle Williams, in Room 130, Gittleson Hall.

Sophomores who still do not have an upper-class adviser in the Department of Biology should see the departmental secretary in Room 130, Gittleson Hall immediately to be assigned an adviser for biology. Students may request that a specific faculty member be their adviser. Faculty office hours are posted in the corridor of Room 130 Gittleson Hall and on the web. Please note that Faculty office hours change each semester.

Although the University is progressing towards an open registration format that allows students to register for courses without input or approval by an advisor, we strongly suggest that all biology majors visit regularly with their biology adviser to discuss appropriate course sequences and future career plans. If you are planning to minor in biology, see a biology adviser to determine what courses are most appropriate for your specific interests.
Departmental Honors

We encourage students with high GPAs and an interest in research to attempt to graduate with departmental honors. Graduation with Honors in Biology requires a minimum GPA of 3.5 in biology; a cumulative GPA of at least 3.4; completion of no fewer than 60 credits in residence at Hofstra, including at least 15 credits in biology and completion of an undergraduate research project and thesis or essay (BIO 90 and either 91 or 92). Please see Dr. Robert Seagull, Chairperson, 130 Gittleson Hall or a biology faculty member about undergraduate research. BIO 90 must be started no later than the first semester of the senior year.

Pre-health Advisement (Office of University Advisement)

The Office of University Advisement provides academic support services for those students interested in the health professions (medical, dental, etc.) as well as the allied health professions. Such services include selecting an appropriate major, exploring career options, providing information on various schools, assisting in the preparation of applications, and conducting special seminars of particular interest to pre-health profession students. Students are encouraged to make use of these services early and regularly as they progress through their academic programs.

All students interested in pre-health advisement should open personal files in the University Advisement Office by completing the appropriate forms. The pre-health file will eventually include faculty recommendations (and personal recommendations if desired), health profession admission test scores (MCAT, DAT, OAT), and a résumé. Students will be required to submit five letters of recommendation from faculty members -- three from science faculty and two from non-science faculty. It is highly recommended that students build strong rapport with faculty, especially in the sciences. Students interested in health-related graduate professional degrees should maintain at least a 3.0 GPA.

A good way to meet students with similar interests is by joining APHOS (Association of Professional Health-Oriented Students), Alpha Epsilon Delta (premedical honor society) and/or Beta Beta Beta (biology honor society).

As part of the application to schools in the health professions, student candidates meet with the Premedical Advisory Committee, consisting of departmental representatives from the sciences and the pre-health adviser. The committee interviews each candidate, assesses the candidate's credentials, and makes an appropriate recommendation. This recommendation becomes the final component of the student's pre-health file, which is then submitted to the schools designated by the student.

For further information regarding the Pre-health Advisement Program, please see the Pre-health Adviser, Room 101 Memorial Hall, 516-463-4695. The number for the Pre-health Secretary, also in Room 101, is 516-463-6772.

What will you do after you graduate?

If you have questions, please feel free to talk to your professors or advisors about the options that are available. If you think that you would like to stay in school, but are not quite sure what to do or where to go, consider staying at Hofstra for a master's degree in the Department of Biology. We offer M.A. or M.S. programs in Biology and an M.S. program in Human Cytogenetics.

If you would like more information on the graduate programs, please see Dr. Daniel, Director of Graduate Programs for the Department of Biology or visit the grad pages on our web site (www.hofstra.edu/Biology).
## Suggested Courses for the B.A. in Biology

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
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</thead>
</table>
| Freshman | Cell Biology and Genetics (Bio 11)  
Chemistry 3A & 3B  
English 1  
Language #1 | Animal Form and Function (Bio 12)  
Chemistry 4A & 4B  
English 2  
Language #2 |
| Sophomore | Plants, Protists, Fungi and Prokaryotes (Bio 13)  
Organic Chemistry (131A &B)  
Math #1  
Language #3 | Ecology and Evolution (Bio 14)  
Organic Chemistry (132A &B)  
Math #2  
Language #4 |
| Junior | Biology Concentration Courses\(^2,3\)  
Physics 1 or 11 (A&B)  
2 Core Courses | Biology Concentration Courses  
Physics 2 or 12 (A&B)  
2 Core Courses |
| Senior | Biology Concentration Courses  
2 Core Courses  
General Elective | Biology Concentration Courses  
Core Course  
General Electives |

During some semesters, students will need to take more courses than shown on this list because students need 124 credits to graduate (including 36 credits in biology). All students must receive a grade of C- or better in biology courses applied toward the major or minor. Students interested in graduate programs such as physical or occupational therapy must complete additional requirements to qualify for those programs; please read the Hofstra Bulletin and see an advisor for assistance.

\(^1\) Biostatistics (100) may be taken in place of a 2nd math course or as a biology elective, but not both.

\(^2\) Biology Concentrations

**Study Track in Cell and Molecular Biology:** Students choosing this track must take BIO 135, 136, 137 or 139 and at least 6 additional s.h. from the following list of courses: BIO 23, 119, 133, 143, 144, 149A, 162 and 179.

**Study Track in Ecology and Evolution:** Students choosing this track must take BIO 114, 119 and at least 6 additional s.h. from the following list of courses: BIO 24, 100, 109A, 110A, 115, 117, 124, 135, 147, 150 and 181. At least one of the courses takes must include a laboratory.

**Study Track in Marine Biology:** Students choosing this track must take BIO 114, 181, 182 and at least 6 additional s.h. from the following list of courses: BIO 100, 109A, 117, 119, 144, 147, 205*, 207A*, 208* and 270*

\(^*\)see p. 67, GRADUATE COURSES TAKEN BY UNDERGRADUATES

**Study Track in Pre-Medical, Pre-Dental and Pre-Veterinary Studies:** Students choosing this track must take BIO 135, 137 and at least 6 additional s.h. from the following list of courses: BIO 24, 133, 136, 143, 144 and 150.

\(^3\) – Specific concentrations will be printed on diploma and transcripts
# Suggested Courses for the B.S. in Biology

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<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>Freshman</td>
<td><strong>Introductory Cell Biology and Genetics (Bio 11)</strong></td>
<td><strong>Animal Form and Function (Bio 12)</strong></td>
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<tr>
<td></td>
<td>Chemistry 3A &amp; 3B</td>
<td>Chemistry 4A &amp; 4B</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Language #1</td>
<td>Language #2</td>
</tr>
<tr>
<td></td>
<td><strong>Animal Form and Function</strong></td>
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</tr>
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</tr>
<tr>
<td></td>
<td><strong>Organic Chemistry (131A &amp;B)</strong></td>
<td><strong>Math #2</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Math #1</strong></td>
<td><strong>Language #4</strong></td>
</tr>
<tr>
<td>Sophomore</td>
<td><strong>Biology Concentration Courses</strong></td>
<td><strong>Biology Concentration Course</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Physics 1 or 11 (A&amp;B)</strong></td>
<td><strong>Biostatistics (100)</strong></td>
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<td></td>
<td><strong>Core Courses</strong></td>
<td><strong>Physics 2 or 12 (A&amp;B)</strong></td>
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<tr>
<td></td>
<td><strong>Language #3</strong></td>
<td><strong>Core Courses</strong></td>
</tr>
<tr>
<td>Junior</td>
<td><strong>Biology Concentration Courses</strong></td>
<td><strong>Biology Concentration Courses</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Physics 1 or 11 (A&amp;B)</strong></td>
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<td></td>
<td><strong>Core Courses</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Language #3</strong></td>
<td><strong>Core Courses</strong></td>
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<tr>
<td>Senior</td>
<td><strong>Biology Concentration Courses</strong></td>
<td><strong>Biology Concentration Courses</strong></td>
</tr>
<tr>
<td></td>
<td><strong>UG research I (90)</strong></td>
<td><strong>UG research II (91/92)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Core Courses</strong></td>
<td><strong>Core Course</strong></td>
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*see p. 67, GRADUATE COURSES TAKEN BY UNDERGRADUATES

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3. Specific concentrations will be printed on diploma and transcripts

**Biostatistics (100)** is required. It may be taken in place of a 2nd math course or as a biology elective, but not both.