INTEGRATIVE BIOLOGY, BSLAS
for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Integrative Biology

department website: http://sib.illinois.edu/
department faculty: School of Integrative Biology Faculty (http://sib.illinois.edu/people/faculty_all/)
advising: SIB advising (http://sib.illinois.edu/undergraduate/advising/)
overview of college admissions & requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: sib@illinois.edu

The Integrative Biology major provides students with a solid preparation in genetics, evolution, anatomy, physiology, ecology, and molecular biology. After completion of the foundational 100- and core 200-300-level courses in IB, students complete the required advanced coursework by taking a variety of IB and other courses or focusing on a limited area of IB. Plans for the student’s combination of advanced courses are developed in consultation with an adviser.

All undergraduates in this field are required to have a strong background in the biological and physical sciences.

Students pursuing a degree in Integrative Biology will be allowed to earn a second degree in the Specialized Curriculum in Biochemistry. Students pursuing a degree in Integrative Biology will not be allowed to double major in Molecular and Cellular Biology.

For students interested in adding licensure to the BSLAS in Integrative Biology, please visit the Biology Teaching page: http://sib.illinois.edu/undergraduate/programs/teaching/

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Distinction for Excellence in Research: To be eligible for graduation with Distinction for excellence in Research a student must:
- Complete 2 or more semesters of IB 390 or IB 490 for 2 credit hours or more each semester.
- Be signed up for IB 490 prior to or during the semester the student is being considered for Distinction.
- Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester.
- Give a poster presentation at the Undergraduate Research Symposium or other approved venue.
- Have a completed distinction evaluation form submitted by their Faculty Research Advisor. Distinction will be determined by the SIB Distinction Committee based on the poster presentation and the Advisor’s evaluation.

High or Highest Distinction for Excellence in Research: To be eligible for graduation with High or Highest Distinction for Excellence in Research a student must:
- Complete 2 or more semesters of IB 390 or IB 490 for 2 credit hours or more each semester.
- Be signed up for IB 490 prior to or during the semester the student is being considered for Distinction.
- Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester.
- Submit a written thesis and give an oral presentation at the Undergraduate Research Symposium or other approved venue.
- Have a completed distinction evaluation form submitted by their Faculty Research Advisor.
- The level of Distinction will be determined by the SIB Distinction Committee based on the written thesis, the oral presentation, and the Advisor’s evaluation.

For additional information visit: http://sib.illinois.edu/undergraduate/distinction (http://sib.illinois.edu/undergraduate/distinction/)

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) requirements including the campus general education language requirement.

Minimum required major and supporting course work: Normally equates to 66-76 hours.

Minimum hours required for graduation: 120 hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Calculus ¹ or MATH 221</td>
<td>4-5</td>
</tr>
<tr>
<td>STAT 212</td>
<td>Biostatistics</td>
<td>3</td>
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<tr>
<td>Select one group of courses:</td>
<td>8-10</td>
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</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 103</td>
<td>General Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 105</td>
<td>General Chemistry Lab II</td>
<td></td>
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<tr>
<td>or</td>
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<tr>
<td>CHEM 202</td>
<td>Accelerated Chemistry I</td>
<td></td>
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<tr>
<td>CHEM 203</td>
<td>Accelerated Chemistry Lab I</td>
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<tr>
<td>CHEM 204</td>
<td>Accelerated Chemistry II</td>
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<tr>
<td>CHEM 205</td>
<td>Accelerated Chemistry Lab II</td>
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<td>Select one group of courses:</td>
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<tr>
<td>CHEM 232</td>
<td>Elementary Organic Chemistry I</td>
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<tr>
<td>&amp; CHEM 233</td>
<td>and Elementary Organic Chem Lab I</td>
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<tr>
<td>CHEM 236</td>
<td>Fundamental Organic Chem I</td>
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<tr>
<td>&amp; CHEM 237</td>
<td>and Structure and Synthesis</td>
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Information listed in this catalog is current as of 05/2021
Select one group of courses: 8-10

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PHYS 101</td>
<td>College Physics: Mech &amp; Heat</td>
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<tr>
<td>&amp; PHYS 102</td>
<td>and College Physics: E&amp;M &amp; Modern</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>University Physics: Mechanics</td>
</tr>
<tr>
<td>&amp; PHYS 212</td>
<td>and University Physics: Elec &amp; Mag</td>
</tr>
<tr>
<td>IB 150</td>
<td>Organismal &amp; Evolutionary Biol</td>
</tr>
<tr>
<td>MCB 150</td>
<td>Molec &amp; Cellular Basis of Life</td>
</tr>
<tr>
<td>IB 202</td>
<td>Physiology</td>
</tr>
<tr>
<td>IB 203</td>
<td>Ecology</td>
</tr>
<tr>
<td>IB 204</td>
<td>Genetics</td>
</tr>
<tr>
<td>IB 302</td>
<td>Evolution</td>
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At least 14 hours of coursework from the Approved List of Advanced Courses ([http://sib.illinois.edu/courses/area/](http://sib.illinois.edu/courses/area/)) for IB majors, including:

- At least one course from two of the following three areas:
  - Area I: Organismal and Evolutionary Biology
  - Area II: Behavior, Ecology, and the Environment
  - Area III: Integrative Anatomy, Physiology, and Molecular Biology
- One advanced course with a laboratory and/or field component.

1. The Biocalculus section of MATH 220 is strongly recommended for IB Majors.
2. IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.
3. IB majors are required to enroll in the 4-hour version of IB 204.