Two Schools, One Community

Tina Knox, tmknox@illinois.edu
Jessica Fink, funk7@Illinois.edu
How to Apply

- Apply to the College of Liberal Arts & Sciences (LAS)
- Choose Biology as your major

- Priority Admission Deadline November 1
- Regular Application Deadline January 5

- Application information: https://admissions.Illinois.edu/
- Major information: https://biology.Illinois.edu/
Why Illinois?

Michael Kim,
Previous Senior in MCB and Chemistry
College of Liberal Arts & Sciences

Biology at Illinois

View video at https://biology.illinois.edu/biology-menu/student-features
Two schools, One community

School of Molecular & Cellular Biology  |  School of Integrative Biology

Shared first year
- Builds a well-rounded foundation
- Allows time for exploration
These are the typical prerequisites for most pre-health professional programs:

- 2 semesters Intro Biology
  200-level labs
- 2 semesters General Chemistry
  with labs
- 1 semester Organic Chemistry
  with lab
- 1 semester of Calculus/Statistics
- At least 2 semesters of Physics
  with labs

* These are the typical prerequisites for most pre-health professional programs *
# Shared First Year

## Typical First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro Biology (IB 150 or MCB 150), 4 hrs</td>
<td>Intro Biology (IB 150 or MCB 150), 4 hrs</td>
</tr>
<tr>
<td>Begin Chemistry, 3 – 5 hrs</td>
<td>Continue Chemistry, 3 – 5 hrs</td>
</tr>
<tr>
<td>Math or Composition (RHET or Equiv.), 3 – 5 hrs</td>
<td>Math or Composition (RHET or Equiv.), 3 – 5 hrs</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Year Enrichment, LAS 101 or LAS 122, 1 hr</td>
<td>Options: Language, Gen Ed, Elective, 0 – 5 hrs</td>
</tr>
<tr>
<td>Options: Language, Gen Ed, Elective, 0 – 5 hrs</td>
<td></td>
</tr>
<tr>
<td>Total hours: 14 - 16</td>
<td>Total hours: 14 - 16</td>
</tr>
</tbody>
</table>
Suggestions for High School Preparation

• 4 years English, required
• 2 years Social Science required
  • 4 recommended
• 3 to 3.5 years Math required
  • 4 recommended
• 2 years lab sciences required
  • 4 recommended

https://admissions.illinois.edu/Apply/Freshman/requirements
Suggestions for High School Preparation

• **Challenge yourself** with Advanced or AP classes.
• Take as much **biology and chemistry** as you have time for.
• Finish through **4th level of a language** other than English
• **No minimum GPA or Test Scores**
  • Admissions will review your application holistically
  • Competitive scores: 29 ACT, 1321 SAT, 3.63/4.0 GPA
• Essay is important
• Activities and/or work experience show time management
## Second Year, Students Choose Their Major

<table>
<thead>
<tr>
<th>Integrative Biology (IB)</th>
<th>Molecular and Cellular Biology (MCB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry with Lab</td>
<td>Continue Supporting Coursework</td>
</tr>
<tr>
<td>2 Semesters of Physics</td>
<td>Organic Chemistry with Lab 2 – 3 Semesters of Physics</td>
</tr>
<tr>
<td>Biostatistics</td>
<td>Biostatistics or Calculus II</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>IB 202 Physiology with Lab</td>
<td>Core Coursework for Major</td>
</tr>
<tr>
<td>IB 203 Ecology with Lab</td>
<td>MCB 250/251 Molecular Genetics with Lab</td>
</tr>
<tr>
<td>IB 204 Genetics with Lab</td>
<td>MCB 252/253 Cell &amp; Develop. Bio with Lab</td>
</tr>
<tr>
<td>IB 302 Evolution with Lab</td>
<td>MCB 354 Biochemistry</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Advanced Course Examples

<table>
<thead>
<tr>
<th>Integrative Biology</th>
<th>Molecular &amp; Cellular Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Biology</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Ornithology (study of birds)</td>
<td>Introduction to Neuroscience</td>
</tr>
<tr>
<td>Genes and Behavior</td>
<td>Mechanisms of Human Disease</td>
</tr>
<tr>
<td>Animal Behavior</td>
<td>Immunology</td>
</tr>
<tr>
<td>Conservation Biology</td>
<td>Gene Expression and Regulation</td>
</tr>
<tr>
<td>Anatomy</td>
<td>Bacterial Pathogenesis</td>
</tr>
<tr>
<td>Paleoclimatology</td>
<td>Computing in Molecular Biology</td>
</tr>
<tr>
<td>Biological Modeling</td>
<td>Global Biosecurity</td>
</tr>
<tr>
<td>Insect Ecology</td>
<td>Cancer Cell Biology</td>
</tr>
<tr>
<td>Ecology and Human Health</td>
<td>Cell Structure and Dynamics</td>
</tr>
</tbody>
</table>
MCB Study Abroad

Newcastle, England
Pre-Health

Pavia, Italy

Stockholm, Sweden

Vienna, Austria

Learn more at https://mcb.illinois.edu/undergrad/opportunities/study_abroad/
IB Study Abroad

• IB in Vienna (coming soon)
• Coral Reef in Belize

https://sib.illinois.edu/undergraduate/study_abroad
View video at https://go.illinois.edu/majorib
What can you do with a Biology degree?

The sky’s the limit!

- **Traditional Healthcare**
  Traditional healthcare (medicine, nursing, pharmacy) is not limited to being a practitioner. It also includes support roles, education, and clinical research.

- **Research**
  Our alums conduct research in academia, as well as in government institutions, clinical settings, and for publicly- and privately-owned companies.

- **Biotechnology**
  Biotechnology is the application of biological knowledge to develop products, across a variety of disciplines such as agriculture, healthcare, research, and diagnostics.

- **Non-traditional Healthcare (Allied Health)**
  The healthcare field extends far beyond traditional roles, such as analysis, consulting, medical products, and pharmaceuticals.

- **Communication & Outreach**
  Biology alums engage with the public in many ways - through advertising, informal and formal education, and directing programs.

...policy, law, business, sustainability and conservation, and more!

Learn about these and other career options at: [www.biology.illinois.edu/careers](http://www.biology.illinois.edu/careers)
What can you do with a Biology degree?

The sky’s the limit!

Traditional Healthcare
Traditional healthcare (medicine, nursing, pharmacy) is not limited to being a practitioner. It also includes support roles, education, and clinical research.

Research
Our alums conduct research in academia, as well as in government institutions, clinical settings, and for publicly- and privately-owned companies.

Biotechnology
Biotechnology is the application of biological knowledge to develop products, across a variety of disciplines such as agriculture, healthcare, research, and diagnostics.

Non-traditional Healthcare (Allied Health)
The healthcare field extends far beyond traditional roles, such as analysis, consulting, medical products, and pharmaceuticals.

Communication & Outreach
Biology alums engage with the public in many ways - through advertising, informal and formal education, and directing programs.

...policy, law, business, sustainability and conservation, and more!

School of Molecular & Cellular Biology
Learn about these and other career options: www.biology.illinois.edu/careers

School of Integrative Biology
Community of Support

11 Professional Advisors

- First resource on campus
- Guide into appropriate courses
- Assist with career planning
- Recommend co-curricular activities
- Refer to appropriate campus resources

“I felt like I was at home with my family whenever I stepped into the Advising Office, and I know that helped me to succeed in my classes and my research.” Kevin Stehllik, MCB class of 2020
Community of Support

- Dedicated Faculty & Grad Students
- Alumni Mentoring Programs
- Community Spaces, Learning Centers
- Peer Mentoring Programs
- Biology & Pre-health Specific Student Organizations
- Community Engagement
- and more!

“The community was amazing. Everyone was so helpful and willing to teach/mentor” – IB Senior
Research

Over 50% of our undergraduate students have research experience.
Accomplished
Supportive
Friendly
Ask them anything!

leaders@biology.illinois.edu
AP CREDIT FAQ
Suggestions for incoming Biology and Biochemistry students at Illinois

BIOLOGY CREDIT
We strongly suggest you do not use biology credit. How can you choose between IB or MCB if you haven’t experienced both on this campus? You need a strong biology foundation to move on in the curriculum successfully. In addition, many professional programs do not accept AP credit for required courses.

CHEMISTRY CREDIT
AP credit is awarded for the general chemistry lectures, but not the laboratories. If you plan to study MCB, IB, or Biochemistry we strongly recommend you do not use chemistry AP credit and instead receive a strong foundation in CHEM 102 and 104. CHEM 104 especially, spends half of the time preparing you for the next chemistry in the sequence.

PHYSICS CREDIT
Generally speaking, it’s fine to use Physics AP credit but only if you are not planning to apply to a professional program that requires it. Remember that many professional programs do not accept AP credit for required courses.

CALCULUS CREDIT
If you are planning to take Calculus 2 we strongly recommend you have a conversation with your academic advisor before deciding to use your Calculus AP credit. If you are not planning to take higher level math courses, you can use your AP credit for your major requirement.

OTHER CREDIT
It is fine to use other AP credit as long as you are sure that the courses are not requirements for a professional program you are interested in applying to after graduation. In addition, AP credit doesn’t factor into your GPA. Keep in mind that your science and overall GPA numbers are important when applying to professional programs.

For additional information, make sure to talk with your advisor and visit: https://admissions.illinois.edu/apply/freshman/college-credit-ap
Biology and Chemistry:

- Strongly suggest against using AP credit for foundation courses (IB 150, MCB 150, CHEM 102, CHEM 104)
- How can you choose IB or MCB if you haven’t experienced both *on this campus*?
- Need strong foundation to advance in the curriculum successfully
- Many professional programs do not accept AP credit for required courses
Everything Else:

– Generally speaking, it’s fine to use other AP credit, but remember two things:
  • AP credit doesn’t factor into your GPA, and your science and overall GPA numbers are important
  • Many professional programs do not accept AP credit for required courses (like physics)
Two Schools, One Community

Tina Knox, tmknox@illinois.edu
Jessica Fink, funk7@Illinois.edu