Requirements for students who were Freshmen* BEFORE Fall 2005

Admission Requirements
An advising appointment and prior departmental approval is required for students to formally transfer into the Biochemistry curriculum. Note: a 2.50 GPA or higher is required. Interested students, who were Freshmen before Fall 2005, should phone 333-7149 to schedule an appointment to discuss the possibility of transferring.

Biochemistry Advisor: Louise Cox, 333-7149

Core Course Requirements
Biochemistry is an advanced, interdisciplinary field that encompasses courses in the biological sciences, physics, and chemistry. Students planning to major in biochemistry take an initial course program similar to the chemistry curriculum or honors biology sequence. Such beginning training assures adequate prerequisites to meet the advanced course work requirements of biochemistry. For more detailed information, pick up a copy of the Biochemistry Undergraduate Curriculum Brochure, available in the Biochemistry Office of Student Affairs, room 420A RAL. Students, who desire a general understanding of the role of biochemistry in biology and medicine, are encouraged to explore the Molecular & Cellular Biology (MCB) major with an emphasis in biochemistry. ([www.life.uiuc.edu/mcb/undergraduate/index.html](http://www.life.uiuc.edu/mcb/undergraduate/index.html))

The core requirements, in addition to the College requirements, are: general chemistry through CHEM 205 or 222/223; organic chemistry through CHEM 436 or 332; mathematics through MATH 242; physics through PHYS 214 or equivalent; one year of physical chemistry (either CHEM 440-B and BIOC 446, or CHEM 442 and 444); MCB 354, BIOC 406 and 455; and two 400-level courses in the biological sciences totaling at least 6 hours. Students are encouraged to involve themselves in undergraduate research. Majors must earn at least a 2.0 GPA in these core courses and in all coursework completed on this campus in order to graduate.

General Education Requirements
Biochemistry majors are required to satisfy the campus-wide General Education requirements: a minimum of six (6) hours each in the Social/Behavioral Sciences, the Humanities/Arts, and Cultural Studies. Two years of a foreign language at the University level (or 4 years in High School) as well as Composition I and Advanced Composition are required.

Curriculum Worksheet

General Chemistry: 202-205 strongly preferred

- 202__ (3), 203__ (1), 204__ (3), 205__ (2)
- or 102__ (3), 103__ (1), 104__ (3), 105__ (1)
- and 222/223__ (3)

Organic Chemistry: 236-436 strongly preferred

- 236__ (4), 237__ (2), and 436__ (3)
- or 232__ (3), 233__ (2), and 332__ (3)

Physical Chemistry: 440B-446 strongly preferred

- CHEM 440-B__ (4) and BIOC 446__ (3)
- or CHEM 442__ (4) and 444__ (4)

Calculus:

- MATH 220__ (5), 230__ (3), and 242__ (3)

Physics:

- 211-214 strongly preferred
  - 211__ (4), 212__ (4), 213__ (2), 214__ (2)
  - or 101__ (5) and 102__ (5)

Biochemistry:

- MCB 354__ (3), BIOC/MCB 406__ (3), and BIOC 455__ (4)
- [MCB 290 and/or BIOC 492 are strongly recommended]

400-level Biological Sciences courses: (see list

- ______________ (3) and ______________ (3) on back)

and Prerequisites: MCB 150__ (4),
- MCB 250/251__ (5), & MCB 252/253__ (5)

General Education: [www.courses.uiuc.edu/gened/](http://www.courses.uiuc.edu/gened/)

- Social/Behavioral Sciences (6 Hours)
- Humanities/Arts (6 Hours)
- Non-Western/U.S. Minority (3 Hours)
- Western/Comparative (3 Hours)

Foreign Language: (4 semesters in College or 4 years in High School)

English Composition 1 (see LAS list)

Advanced Composition

- BIOC 460__ (3) or any other approved course

Electives (to bring total hours to 120 or more)
**Requirements for students who were Freshmen* BEFORE Fall 2005**

List of Approved 400-Level Biological Science Courses

A minimum of 6 hours is required.

<table>
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<tr>
<th>DEPARTMENT</th>
<th>APPROPRIATE COURSES (taken from Fall 2005 Course Catalog)</th>
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<tbody>
<tr>
<td>Biophysics</td>
<td>401, 417, 420, 432, 470</td>
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* - Freshmen are defined as students who were admitted and enrolled for the first time as Freshmen at any collegiate institution (2-year or 4-year) BEFORE Fall 2005.