CHEMISTRY/BIOCHEMISTRY

Pre-professional School- transfer to Pharmacy School after 2- 3 years.

Major: Chemistry/Biochemistry
Option: Pre-Pharmacy

A student interested in pre-pharmacy studies can satisfy the entrance requirements of most pharmacy schools with a major in chemistry, using the minimum requirements for the bachelor of arts or bachelor of science degree, supplemented with the requirements in biology as set by the pharmacy school of choice. Because several satisfactory academic plans exist, pre-pharmacy students are urged to seek the early advice of the departmental adviser.

Pre-professional Program Requirements

Pre-Pharmacy- 91 credits minimum recommended in a Program similar to the first two years of the Biochemistry degree option. See the adviser for further details.

Required Courses: 91 credits

First Year: 40 credits

BIOL 171 Biology I (4)
BIOL 172 Biology II (4)
BIOL 173 Biology III (4)
BIOL 270 Biological Investigation (3)
CHEM 151 General Chemistry (5)
CHEM 152 General Chemistry (5)
CHEM 153 General Chemistry (5)
ENGL 101 College Composition: Exposition and Argumentation (5)
ENGL 201 College Composition: Analysis, Research, and Documentation (5)

Second Year: 32 credits

BIOL 301 Microbiology (5)
CHEM 351 Organic Chemistry (4)
CHEM 352 Organic Chemistry (4)
CHEM 353 Organic Chemistry (3)
CHEM 372 Organic Chemistry Lab I (3)
CHEM 373 Organic Chemistry Lab II (3)
MATH 161 Calculus I (5)
MATH 380 Elementary Probability and Statistics (5)

Other Suggested Courses: 19 credits

CMST 200 Introduction to Speech Communications (4)
CSCD 210 Programming Principles I (5)
or CSCD 198 Introduction to Programming (5)
ECON 100 General Education Economics (5)
PSYC 100 General Psychology (5)

Recommended Courses for Optional Third Year:

BIOL 232 Human Anatomy & Physiology (5)
BIOL 233 Human Anatomy & Physiology (5)
BIOL 234 Human Anatomy & Physiology (5) or
CHEM 332 Human Neural, Musc. & Skel. Systems (5)
CHEM 333 Human Cardiopul. and Renal Systems (5)
CHEM 334 Human Regulatory & Visceral Systems (4)
BIOL 302 Botany (5)
BIOL 310 Fundamentals of Genetics (5)
BIOL 335 Elementary Medical Microbiology (5)
BIOL 420 Epidemiology (5)
BIOL 421 Medical Bacteriology (5)

BIOL 432 Virology (5)
BIOL 435 Biology of Cancer (5)
BIOL 452 Parasitology (5)
CHEM 350 Principles of Pharmacology (2)
CHEM 357 Neuropharmacology (2)
CHEM 480 Biochemistry (5)
CHEM 481 Intermediary Metabolism (5)
CHEM 483 Biochemistry Lab (2)
NOTICE: This program requires a strong preparation in high school mathematics, chemistry and physics. GECR = General Education Core Requirement. Courses are planned to be offered in the quarters shown, but scheduling is not guaranteed.

### FIRST YEAR

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<th>Course</th>
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<td>CHEM 151,152,153</td>
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Total Credits: 14 17 14 45

### SECOND YEAR

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<td>CHEM 351,352,353</td>
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<td>CHEM 372,373</td>
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<td>MATH 161,380</td>
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Total Credits: 14 17 16 47

### Application to transfer to a pharmacy school

### THIRD YEAR (optional) variable credits

Select from: BIOL 232,233,234,302,332,333,334,335,410,420,421,432,435,452,490

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Total Credits: 12 12 12 36

Revised 10/26/09