

## Curriculum for the B.S. degree in Chemistry with a Concentration in Pre-Pharmacy

### Introductory Chemistry Courses

#### (9 credits)

CHY 105 (1 cr) Majoring in Chemistry  
CHY 121 (3 cr)/CHY 123 (1 cr) General Chemistry  
I with lab  
CHY 122 (3 cr)/CHY 124 (1 cr) General Chemistry  
II with lab

### Foundation Chemistry Course Work

#### (22 credits)

CHY 251 (3cr)/CHY 253 (2 cr) Organic Chemistry  
I with lab  
CHY 252 (3 cr)/CHY 254 (2 cr) Organic Chemistry  
II with lab  
CHY 261 (3 cr) Intro to Inorganic Chemistry  
CHY 298 (1 cr) Intro to Research/Chemistry  
Profession  
CHY 342 (5 cr) Principles of Quantitative Analysis  
CHY 471 (3 cr) Physical Chemistry I

### In Depth Chemistry Courses

#### (18-19 credits)

CHY 393 (3 cr) Undergrad Seminar in Chemistry  
CHY 491 (3 cr) Advanced Integrated Lab I  
CHY 492 (3 cr) Advanced Integrated Lab II  
CHY 498 (3 cr) Undergraduate Research

Plus **two** chemistry electives chosen from:

CHY 423 (3 cr) Introductory Polymer Chemistry  
CHY 431 (3 cr) Structure and Mechanism in  
Biological Chemistry  
CHY 443 (3 cr) Instrumental Analysis  
CHY 461 (3 cr) Advanced Inorganic Chemistry  
CHY 462 (3 cr) Organometallic Chemistry  
CHY 472 (3 cr) Physical Chemistry II  
CHY 475 (3 cr) Physical Chemistry III  
CHY 477 (3 cr) Nanoscience  
CHY 483 (3 cr) Introductory Wood Chemistry  
CHY 499 (3 cr) Undergraduate Thesis

(500 level courses may be taken with permission)

### Cognate Courses

#### (16 credits)

PHY 111 or PHY 121 (4 cr) Physics I  
PHY 112 or PHY 122 (4 cr) Physics II  
MAT 126 (4 cr) Calculus I  
MAT 127 (4 cr) Calculus II



### Concentration in Pre-Pharmacy:

#### (33 credits)

BIO 100 (4 cr) Basic Biology with lab  
BIO 200 (4 cr) Biology of Organisms with lab  
BMB 300 (3 cr)/BMB 305 (2 cr) General  
Microbiology with lab  
BIO 208 (4 cr) Anatomy and Physiology with lab or  
BIO 335 (4 cr) Human Anatomy with lab  
BIO 377 (3 cr)/BIO 378 (2 cr) Medical Physiology  
with lab  
BMB 322 (3 cr)/BMB 323 (2 cr) Biochemistry with  
lab  
STS 232 (3 cr) Principals of Statistical Inference  
PSY 100 (3 cr) General Psychology

**Electives: 22 credits** (used to fulfill the remainder of the general education/Honors and specific pharmacy school requirements as necessary).

### Recommended Electives:

CMJ 103 (3 cr) Public Speaking  
ENG XXX (3 cr) English Elective  
NUR 303 (3) Pathophysiology  
SOC 101 (3 cr) Introduction to Sociology  
ECO 120 or 121 (3 cr) Principles of Microeconomics  
or Principles of Macroeconomics  
POS XXX or HTY XXX (3 cr) Political Science or  
History Elective  
PSY 3XX or SOC 3XX (3 cr) Psychology or Sociology  
Elective  
Humanities or Social Science Elective (3 cr)

**Total Credits = 120**

**Students who wish to earn the ACS certified B.S. degree must meet the corresponding degree requirements.**