

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

Foundational Chemistry Course Work

(22 credits)

CHY 242 (5 cr) Principles of Quantitative Analysis
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 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 450 (3 cr) Introduction to Molecular
Modeling
CHY 453 (4 cr) Intermediate Organic Chemistry
with lab
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.