

B.S. DEGREE REQUIREMENTS FOR MEDICINAL CHEMISTRY TRACK

Each student's course of study should include the following:

1.) Chemistry Core Courses (at least 37 credits)

- CHE 106: General Chemistry Lecture I (3)
 - CHE 116: General Chemistry Lecture II (3)
- OR**
- CHE 109: General Chemistry Lecture I (Honors & Majors) (3)
 - CHE 119: General Chemistry Lecture II (Honors & Majors) (3)

- CHE 107: General Chemistry Lab I (1)
 - CHE 117: General Chemistry Lab II (1)
- OR**
- CHE 129: General Chemistry Lab I (Honors & Majors) (1)
 - CHE 139: General Chemistry Lab II (Honors & Majors) (1)

- CHE 275: Organic Chemistry Lecture I (3)
- CHE 276: Organic Chemistry Laboratory I (2)
- CHE 325: Organic Chemistry Lecture II (3)
- CHE 326: Organic Chemistry Laboratory II (2)
- CHE 335: Chemical and Biochemical Analysis w/ Lab (4)
- CHE 412: Metals in Medicine (3)
- CHE 414: Introduction to Medicinal Chemistry (3)
- CHE 427: Organic Chemistry of Biological Molecules (3)
- CHE 450: Introduction to Chemical Research (1-4)
(at least 3 credits)
- CHE 474: Structural & Physical Biochemistry (3)

2.) At least 7 credits in Biology:

- BIO 121 General Biology I (4)
- BIO 305 Integrative Biology Laboratory (3)

Note: BIO 305 requires BIO 326 or BIO 327 as a prerequisite. This prerequisite must be completed before enrolling in BIO 305, the classes cannot be taken concurrently.

3.) At least 3 credits in elective courses selected from:

- CHE 346: Physical Chemistry (3)
- CHE 356: Physical Chemistry II (3)
- CHE 411: Inorganic Chemistry (3)
- CHE 425: Crystallography (3)
- CHE 477: Proteins & Nucleic Acids Lab (3)
- CHE 546: Molecular Spectroscopy & Structure (1)
- CHE 575: Organic Spectroscopy (3)
- BCM 475: Biochemistry I (3)
- BCM 476: Biochemistry II (3)
- BCM 484: Biomolecular Modeling (3)
- BEN 433: Drug Delivery (3)
- BIO 409: General Microbiology (4)
- BIO422: Bioinformatics for Life Scientists (3)
- BIO 447: Basic Immunology (3)
- BIO 462: Molecular Genetics (3)
- BIO 463: Molecular Biotechnology (4)
- BIO 464: Applied Biotechnology (4)
- BIO 465: Molecular Biology Laboratory (3)
- BIO 501: Biology of Cancer (3)
- FSC 453: Forensic Toxicology (3)

4.) Required Math and Physics Courses

- MAT 285 Life Sciences Calculus I (3) or
MAT 295: Calculus I (4)
- MAT 286 Life Sciences Calculus II (3) or
MAT 296: Calculus II (2-4)
- PHY 211: General Physics Lecture I (3)
- PHY 212: General Physics Lecture II (3)
- PHY 221: General Physics Laboratory I (1)
- PHY 222: General Physics Laboratory II (1)

If taken in an appropriate area of research, additional credit in CHE 450 beyond the 3 credits required in (1) above may be substituted for up to 4 laboratory credits with the department's approval.

Students who receive a score of 5 on the AP chemistry exam will receive credit for CHE 106/116 and CHE 107/117 (8 credits)*

*Pre-medical students should consult with Health

Professions Advising before accepting AP chemistry credit.

Last updated: September 17, 2015