

MEDICINAL CHEMISTRY, BS

Example Plan of Study

Finish in Four Plan of Study

The plan below is an example of how students can successfully complete degree requirements in four years. This suggested class schedule plan may be used as a guide and can be adjusted based on individual needs. Students are required to meet with an academic advisor prior to enrollment each semester to plan their class schedule, and students are ultimately responsible for completing all degree requirements.

Course	Title	Hours
Freshman		
Fall		
CHEM 1314	Chemistry I (LN)	4
MATH 2144	Calculus I (Q)	4
General Education and College courses		6
Hours		14
Spring		
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN)	4
CHEM 1515	Chemistry II (LN)	5
General Education courses		6
Students who wish to continue with Calculus II should plan to take MATH 2153		
Hours		15
Sophomore		
Fall		
CHEM 3053	Organic Chemistry I	3
MICR 2123	Introduction to Microbiology	3
MICR 2132	Introduction to Microbiology Laboratory	2
PHYS 1114 or PHYS 2014	College Physics I (LN) or University Physics I (LN)	4
General Education courses		3
Hours		15
Spring		
CHEM 3153	Organic Chemistry II	3
CHEM 3112	Organic Chemistry Laboratory	2
MICR 3033	Cell and Molecular Biology (recommended elective)	3
PHYS 1214 or PHYS 2014	College Physics II (LN) or University Physics I (LN)	4
General Education, College/Departmental, and Elective courses		3
Hours		15
Junior		
Fall		
BIOL 3023 or ANSI 3423	General Genetics or Animal Genetics	3
BIOL 3204 or BIOL 1604 or PBIO 1404	Physiology or Animal Biology or Plant Biology (LN)	4
CHEM 2113	Principles of Analytical Chemistry	3
CHEM 2122	Quantitative Analysis Laboratory	2
College and Elective courses		3
Hours		15
Spring		
BIOC 3653 or MICR 3223	Survey of Biochemistry or Advanced Microbiology	3
CHEM 3413	Physical Chemistry Applications	3
Select one of the following		5
CHEM 4023 & CHEM 4022	Modern Methods of Chemical Analysis and Modern Methods of Chemical Analysis Laboratory	

CHEM 3553 & CHEM 3532	Physical Chemistry II and Physical Chemistry Laboratory	
CHEM 4023 & CHEM 4022 and CHEM 3553 & CHEM 3532 offered every other spring semester		
College and Elective courses		3
Hours		14
Senior		
Fall		
CHEM 4313 or CHEM 4322 or BIOL 4253	Medicinal Organic Chemistry or Advanced Organic Chemistry Laboratory or Pharmacology	3
CHEM 4313 and CHEM 4322 offered every other fall semester		
CHEM 4990	Undergraduate Research in Chemistry	1
STAT 3023/2013/4013	Statistical Reasoning for Medical Applications (Q)	3
College and Elective courses		9
Hours		16
Spring		
CHEM 4123	Biomolecular Chemistry and Function (offered every other spring semester)	3
CHEM 3363 or CHEM 3353	Bioinorganic Chemistry or Descriptive Inorganic Chemistry	3
CHEM 3363 and CHEM 3353 offered every other spring semester		
CHEM 4990	Undergraduate Research in Chemistry	1
Major and Elective courses		9
Hours		16
Total Hours		120