

MICROBIOLOGY/CELL AND MOLECULAR BIOLOGY: PRE-MEDICAL/PRE-DENTAL, 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		
BIOL 1113 & BIOL 1111 or BIOL 1114	Introductory Biology (N) or Introductory Biology (LN)	4
MATH 1813	Preparation for Calculus (Q)	3
MICR 1211	First Year Microbiology Laboratory Experience	1
General Education courses		7
Hours		15
Spring		
MATH 2144 or STAT 2013	Calculus I (Q) or Elementary Statistics (Q)	4
MICR 2123 & MICR 2132	Introduction to Microbiology and Introduction to Microbiology Laboratory	5
CHEM 1314	Chemistry I (LN)	4
General Education courses		3
Hours		16
Sophomore		
Fall		
MICR 3033	Cell and Molecular Biology	3
CHEM 1515	Chemistry II (LN)	5
General Education courses		6
Hours		14
Spring		
MICR 4233	Advanced Cell and Molecular Biology (Spring only)	3
CHEM 3053	Organic Chemistry I	3
PHYS 1114	College Physics I (LN)	4
General Education and Elective courses		6
Hours		16
Junior		
Fall		
CHEM 3153	Organic Chemistry II	3
CHEM 3112	Organic Chemistry Laboratory	2
PHYS 1214	College Physics II (LN)	4
General Education and Elective courses		6
Hours		15
Spring		
BIOC 3653 or BIOC 3713	Survey of Biochemistry or Biochemistry I	3
BIOL 3204	Physiology	4
BIOL 3023 or ANSI 3423	General Genetics or Animal Genetics	3
MICR 4001 or UNIV 3511	Professional Transitions in Microbiology and Cell and Molecular Biology or Health Profession School Preparation	1

General Education and Elective courses		3
Hours		14
Senior		
Fall		
MICR 4012	Molecular Microbiology Laboratory I (Fall only)	2
MICR 3223	Advanced Microbiology	3
MICR 4253 or MICR 3143 or MICR 3553 or MICR 4023 or MICR 4053 or MICR 4123 or MICR 4203 or MICR 4263 or MICR 4423 or MICR 4543	Concepts in Medical Genetics ^{1,2} or Medical Mycology or Foundations of Cancer or Microbiomes in Human Health and the Environment or Pathogenic Microbiology or Virology or Bioinformatics or Microbial Genetics: from Genes to Genomes or Antibiotics and Antibiotic Resistance or Microbial Genomics and Bioinformatics	3
Major, College, and Elective courses or BIOC 3813		7
Hours		15
Spring		
MICR 4112	Molecular Microbiology Capstone (Spring only)	2
BIOL 1604 or BIOL 3214	Animal Biology or Human Anatomy	4
MICR 4263 or MICR 3143 or MICR 3553 or MICR 4023 or MICR 4053 or MICR 4123 or MICR 4203 or MICR 4253 or MICR 4423 or MICR 4543	Microbial Genetics: from Genes to Genomes ^{1,2} or Medical Mycology or Foundations of Cancer or Microbiomes in Human Health and the Environment or Pathogenic Microbiology or Virology or Bioinformatics or Concepts in Medical Genetics or Antibiotics and Antibiotic Resistance or Microbial Genomics and Bioinformatics	3
Major, General Education or Elective courses		6
Hours		15
Total Hours		120

1

The following courses are offered only in Fall semesters: MICR 3143 (of odd years), MICR 4023, MICR 4123, MICR 4203, MICR 4253, MICR 4423.

2

The following courses are offered only in Spring semesters: MICR 4053, MICR 4263, MICR 4543.