

Microbiology - General Microbiology (B.S.) Sample Curriculum

We have provided this as an example but you will work with your advisor to customize a plan

Freshman						
Fall	BIOL 198 (4) Principles of Biology	CHM 210 (4) Chemistry 1	BIOL 100 (1) Biology First-Year Orientation	BIOL 461 (3) Phage Hunters 1	Free Elective (1)	13 Credits
Spring	BIOL 455 (4) General Microbiology	CHM 230 (4) Chemistry 2	Social Science or Humanity (3)	ENGL 100 (3) Expository Writing 1	BIOL 462 (2) Phage Hunters 2	16 Credits
Sophomore						
Fall	BIOL 450 (4) Modern Genetics	CHM 531 (3) Organic Chemistry 1	COMM 106 (3) Public Speaking	Social Science or Humanity (3)	Free Elective (2)	15 Credits
Spring	CHM 550 (3) Organic Chemistry 2	CHM 532 (2) Organic Chemistry Lab	MATH 220 (4) Calculus 1 <i>Students often take during the summer</i>	Social Science or Humanity (3)	ENGL 200 (3) Expository Writing 1	15 Credits
Junior						
Fall	BIOL 541 (3) Cell Biology	BIOCH 521 (3) General Biochemistry	PHYS 113 (4) General Physics 1	U.S. Multicultural Overlay (3)	Free Elective (2)	15 Credits
Spring	BIOL 520 or 521 (3) Evolution or Evolution of Infectious Diseases	STAT 325 (3) Introduction to Statistics	PHYS 114 (4) General Physics 2	Social Science or Humanity/ International (3)	Free Elective (3)	16 Credits
Senior						
Fall	BIOL 675 (3) Genetics of Microorganisms	BIOL elective (3) with lab	Upper Level Social Science (3)	Social Science or Humanity (3)	Free Elective (3)	15 Credits
Spring	BIOL 687 (3) Microbial Ecology	BIOL elective (3) with lab	Social Science or Humanity (3)	Social Science or Humanity (3)	Free Elective (3)	15 Credits

Notes

All Bachelors Degrees require 120 credits, of which 45 must be upper division courses. Only 60 credits from community colleges may count toward degree.

At least 11 credit hours of upper level biology electives REQUIRED. At least 5 of those credits must be lab-based. Check the degree requirements for details

Recommended electives include:
 BIOL 461 (3) Phage Hunters 1 (Fall)
 BIOL 462 (2) Phage Hunters 2 (Spring)
 BIOL 580 (3) Molecular Biology of Genes and Genomes (Fall)
 BIOL 604 (3) Biology of the Fungi (Fall)
 BIOL 676 (3) Molecular Genetics Lab (Fall)
 BIOL 698 (1-3) Research in Biology
 BIOL 705 (3) Eukaryotic Genetics (Fall)
 BIOL 707 (3) Advanced Cell Biology (Fall)
 BIOL 730 (3) Virology (Spring)
 BIOL 734 (3) Intro to Genomics & Bioinfo. (Spring alt-yr)
 BIOCH 522 (3) General Biochemistry Lab

NOTE: Check official degree reqs for full list of electives.

The following need to be considered in the gen. reqs.:

- Social Sci. courses need to be from 3 different areas.
- One Social Science course must be at 500 level or above, or carry a prerequisite in the same department.
- Philosophy course cannot be a logic class.

Note on Organic Chemistry:

Consult with your advisor on which organic chemistry option you should choose (CHM 531 versus CHM 350)

Key

Biology elective (see course catalog list)	Course offered only in Fall Semester	Course offered only in Spring Semester
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Total Hours: 120