

Microbiology - Medical 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	Social Science or Humanity (3)	BIOL 461 (3) Phage Hunters 1	15 Credits
Spring	BIOL 455 (4) General Microbiology	CHM 230 (4) Chemistry 2	STAT 325 (3) Introduction to Statistics	COMM 106 (3) Public Speaking	Free Elective (1)	15 Credits
Sophomore						
Fall	BIOL 450 (4) Modern Genetics	CHM 531 (3) Organic Chemistry 1	MATH 220 (4) Calculus 1 <small>Students often take during the summer</small>	ENGL 100 (3) Expository Writing 1		14 Credits
Spring	CHM 550 (3) Organic Chemistry 2	CHM 532 (2) Organic Chemistry Lab	PHYS 113 (4) General Physics 1	ENGL 200 (3) Expository Writing 2	Social Science or Humanity (3)	15 Credits
Junior						
Fall	BIOL 441 (4) Human Body 1	BIOCH 521 (3) General Biochemistry	PHYS 114 (4) General Physics 2	U.S. Multicultural Overlay (3)	Free Elective (2)	16 Credits
Spring	BIOL 442 (4) Human Body 2 <small>(free elective)</small>	BIOL 541 (3) Cell Biology	PHILO 365 (3) Medical Ethics	Social Science or Humanity/ International (3)	DAS 315 (1) Creating a Competitive Application	14 Credits
					<i>Prepare for professional school exam (MCAT, PCAT, DAT, OAT etc.)</i>	
Senior						
Fall	BIOL 530 or 675 (3) Patho Micro or Genetics of Micro	BIOL elective w/lab (3)	Upper Level Social Science (3)	Social Science or Humanity (3)	Free Elective (3)	15 Credits
Spring	BIOL 670 (4) Immunology	BIOL 545 or 730 (3) Human Parasitology or Virology	Social Science or Humanity (3)	Social Science or Humanity (3)	Free Elective (3)	16 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 10 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 410 (2) Biology of the Cancer Cell (Fall)
- BIOL 441 (4) Human Body A & P 1
- BIOL 443 (2) Applied Anatomy of Cadavers
- BIOL 461 (3) Phage Hunters 1 (Fall)
- BIOL 530 (3) Pathogenic Microbiology (Fall)
- BIOL 545 (3) Human Parasitology (Spring)
- BIOL 609 (3) Cell & Molecular Biology Human Disease (Fall)
- BIOL 698 (1-3) Research in Biology
- BIOL 730 (3) Virology (Spring)
- BIOCH 522 (3) General Biochemistry Lab

NOTE: Check official degree reqs for complete list of biology 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 <small>(see course catalog list)</small>	Course offered only in Fall Semester	Course offered only in Spring Semester
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Total Hours: 120