

MICROBIOLOGY MAJOR

Transfer Requirements

The following requirements for the major are subject to change without notice. To assure that this information is current, you should consult with an academic counselor, or review articulation agreements via the Internet at <u>WWW.ASSIST.ORG</u> You may also consult the Articulation Officer for specific articulation agreements.

Microbiologists investigate the growth and characteristics of microscopic organisms such as bacteria, yeasts, other fungi, algae, protozoa, viruses, and genetic engineering and research. Some are concerned with the identification and control of communicable diseases, environmental pollutants, and health hazards within the community. They analyze water supplies, food products, and clinical specimens. A bachelor's degree in microbiology is excellent preparation for a career in biotechnology, pharmacology, agriculture and the food industry. It also provides a strong background for students wishing to continue on to professional studies in medicine and other health sciences.

Some work in the veterinary field and others develop, test, and monitor products and processes used in agriculture, industry, sanitation, food, wine and other beverage processing, and drug manufacturing. Some specialize in specific kinds of microorganisms or areas of work.

Specialties: Bacteriologists (Bacteriology Research Scientists), Biochemists (Biological Research Scientists, Cell Biologists (Cell Biology Research Scientists), Genetic Engineers (Geneticists, Genetics Research Scientists), Immunologists (Immunology Research Scientists), Mycologists (Mycology Research Scientists), Parasitologists (Parasitology Research Scientists), virologists (Virology Research Scientists).

UNIVERSITY OF CALIFORNIA, DAVIS (2016-2017) http://microbiology.ucdavis.edu/

Bachelor of Arts Degree in Microbiology: Biology 101 and 102; Chemistry 1A and 1B; Math 190 and 191; Physics 2A and 2B or 3A and 3B; Chemistry 7A and 7B before enrolling at UC Davis. **Bachelor of Science Degree in Microbiology**: Biology 101 and 102; Chemistry 1A and 1B; Math 190 and 191; Physics 2A and 2B or 3A and 3B; Chemistry 7A and 7B

UNIVERSITY OF CALIFORNIA, IRVINE (2016-2017) http://www.ucihs.uci.edu/microbio/

Transfer students interested in this major should apply as biological science majors. Transfer students are advised to complete as many lower-division articulated biology and degree requirements as possible prior to transfer. For information contact the School of Biological Sciences at (949) 824-5318, <u>www.bio.uci.edu</u>. **Bachelor of Science in Microbiology and Immunology**: Biology 101-102; Chemistry 1A-1B, 7A-7B; Math 190; Math 191 or Math 150 or Psychology 9A or Sociology 109; Physics 3A-3B or Physics 1A-1C; Recommended: Biology 103

UNIVERSITY OF CALIFORNIA, LOS ANGELES (2016-2017) www.mimg.ucla.edu

Bachelor of Science Degree in Microbiology, Immunology, and Molecular Genetics:

Biology 101,102, 103; Chemistry 1A, 1B, 7A, 7B; Math 150, 190,191; Physics 3A and 3B **or** Physics 1A-1C-1D *Note: This major is highly selective. Students should complete at a minimum: one year of biology with laboratory, one year of general chemistry with laboratory, one year of calculus and one semester of organic chemistry with laboratory. Completion of a second semester of organic chemistry or one year of calculus-based physics is strongly recommended.

<u>UNIVERSITY OF CALIFORNIA, SAN DIEGO</u> (2016-2017) <u>http://www.biology.ucsd.edu/</u> IMPACTED

Bachelor of Science Degree in Biology: Microbiology: Biology 101, 102; Chemistry 1A **and** 1B; Chemistry 7A and 7B will be accepted if taken at a community college, students must meet upper division graduation requirements at UCSD. Math 190, 191, 150; Physics 3A and 3B or Physics 1A, 1B, 1C, 1D

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS (2016-2017) www.nbs.csudh.edu/

Bachelor of Science in Biology, Microbiology Option: Biology 101, 102; Chemistry 1A, 1B; Math 150 and Math 165 or 190; Physics 2A and 2B or Physics 3A and 3B or Physics 1A, 1B, 1C, 1D

CALIFORNIA STATE UNIVERSITY, LONG BEACH (2016-2017)

IMPACTED: students must complete the entire chemistry sequence, calculus, and the golden four prior to transfer; admission is based on a space available basis and GPA.

http://www.csulb.edu/depts/biology/pages/bsmicr.shtml

Bachelor of Science in Microbiology: Biology 101 or 8 and 11, 102; Chemistry 1A, 1B, 7A, 7B; Math 165 or Math 190; Physics 2A- 2B or 3A-3B or 1A-1B-1C

CALIFORNIA STATE UNIVERSITY, LOS ANGELES (2016-2017)

http://www.calstatela.edu/academic/biol/

Bachelor of Science in Microbiology: Anatomy 32 and Physiology 31 or Anatomy and Physiology 34A and 34B; Biology 101,102; Chemistry 1A, 1B, 7A, 7B; Physics 2A, 2B or 3A; Math 190 (Math 165 pending)

<u>CALIFORNIA STATE UNIVERSITY, NORTHRIDGE</u> (2016-2017) <u>http://www.csun.edu/~hfbio002/</u> Bachelor of Science in Biology, Microbiology Option

Biology 101,102; Chemistry 1A, 1B; Math 150 and Math 190 and 191; Physics 2A, 2B or 3A, 3B

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA (2016-2017)

B.S. Biology: Microbiology: Biology 101, 102; Chemistry 1A, 1B, 7A, 7B (students may petition the chemistry department after transfer for subject credit only); Physics 2A and 2B or 3A and 3B or 1A, 1B, 1C; English 1A and 1C or Philosophy 105 or 106; Math 165 or Math 190; Psychology 5 or 7; Microbiology 33

SAN DIEGO STATE UNIVERSITY (2016-2017) <u>http://www.sci.sdsu.edu/bioadvise/degree.html</u> **Microbiology**: Biology 101, 102; Chemistry 1A, 1B, 7A; Math 190; Physics 2A-2B or 3A-3B. **Microbiology Major with the B.A. Degree in Liberal Arts and Sciences**: The B.A. degree requires the same courses as above and a 3rd course in a Foreign Language.

Recommended Website: <u>www.asm.org</u> — American Society for Microbiology