Degree Requirements for Microbiology Majors (2012 and later)

NOTE: Beginning with the 2012-2013 Undergraduate Catalog, the BS degree in Microbiology requires a total of at least 24 credits in upper division (numbered 300+) microbiology courses.

The following contains information on the courses required to fulfill a degree in Biology at New Mexico State. A minimum of 128 credits must be taken, 48 at the 300 level or above. Below you will find a listing of courses that must be taken to fulfill departmental requirements as well as College of Arts and Sciences requirements. You must earn a C or better in all departmentally required classes.

**BIOLOGY DEPARTMENTAL REQUIREMENTS**

**Biology courses (at least 24cr., upper division Microbiology [Genetics does not count toward this]):**

- BIOL 111G & L  Natural History of Life and Lab
- BIOL 211G & L  Cellular & Organismal Biology and Lab
- BIOL 305  Principles of Genetics
- BIOL 311  General Microbiology
- BIOL 311L  General Microbiology Lab
- BIOL 451  Physiology of Microorganisms
- BIOL 474  Immunology
- BIOL 478  Molecular Biology of Microorganisms
- BIOL 479  Medical Microbiology
- BIOL 479L  Medical Microbiology Laboratory

- Additional upper division Microbiology Elective (to reach 24 Microbiology credits)

  May include:  
  - BIOL 412  Seminar in Microbiology (1cr)
  - BIOL 473  Ecology of Microorganism (3cr)
  - BIOL 475  Virology (3cr.)
  - BIOL 476  Soil Microbiology (3cr.)
  - BIOL 477  Applied & Environmental Microbiology (3cr)

**Other departmental requirements (required non-biology classes)**

(Note: all of these courses are required)

- CHEM 111  General Chemistry I
- CHEM 112  General Chemistry II
- CHEM 211  Organic Chemistry or CHEM 313  Organic Chemistry I
- CHEM 371  Analytical Chemistry or CHEM 314  Organic Chemistry II
- CHEM 315  Organic Chemistry Lab
- BCHE 341  Survey of Biochem or BCHE 395  Biochemistry
- CS 110G  Computer Literacy
- MATH 142G  Calc for Bio & Mngmt Sci or MATH 191  Calculus & Analyt. Geometry I
- PHYS 211  General Physics I or PHYS 221  General Physics for Life Sciences I
- PHYS 211L  General Physics Lab I or PHYS 211L  General Physics Lab I
- PHYS 212  General Physics II or PHYS 222  General Physics for Life Sciences II
- PHYS 212L  General Physics Lab II or PHYS 212L  General Physics Lab II

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NEW MEXICO COMMON CORE REQUIREMENTS

Area 1 – Communication (9-10 cr.)
ENGL 111G, 111H, or SPCD 111G
ENGL 203G, 211G, 218G, 311G or 318G
COMM 253G or 265G, HON 265G

Area 2 – Mathematics (3cr.)
Satisfied by taking departmental requirements

Area 3 – Laboratory Sciences (8cr.)
Satisfied by taking departmental requirements

A total of 15 credits (5 classes) must come from Areas 4 & 5.
2 classes from Area 4
2 classes from Area 5
1 class from either Area 4 or 5

Area 4 – Social/Behavioral Sciences (6-9cr.)
ANTH 120G, 125G, 201G, 202G, 203G
C EP 110G
CJ 101
ECON 201G, 251G, 252G
GEOG 112G, 120G
GOVT 100G, 110G, 150G, 160G
H LS 150
JOUR 105G
LING 200G
PSY 201G
SOC 101G, 201G
S WK 221G
W S 201G, 202G

Area 5 – Humanities and Fine Arts (6-9cr.)
DANC 101G
ENGL 115G, 116G, 220G, 244G
MUS 101G, 201G
THTR 101G

Second Language – complete 112/113 level
____ 111
_____ 112/113

American Sign language option: complete 375 level
Complete in sequence, CD 374,375

Waiver option: completed 2 yrs of language in H.S.

VEIWING A WIDER WORLD (6cr.)

Viewing a Wider World courses are a prescribed list of 300- and 400-level general education courses. You must take 2 courses from 2 different colleges.
(see list of VWW courses offered in the Class Schedule)

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