Degree Requirements for Biology Majors (2010-2011)

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 22cr., upper division):**

**Mandatory courses:**
- BIOL 111G&L Natural History of Life and Lab
- BIOL 211 G&L Cellular & Organismal Biology and Lab
- BIOL 305 Principles of Genetics
- BIOL 467 Evolution (305 is a pre-requisite; Recommend taking during senior year)

In addition to the above classes, students must take one class in each of the following biological areas.

*Note: At least one of these must have a laboratory or field component.*

**Cellular Integration (3cr.):**
- BIOL 311 General Microbiology
  (optional 2 cr. lab available)
- BIOL 377 Cell Biology
- BIOL 474 Immunology
- BIOL 490 Neurobiology

**Organismal Integration (3-4 cr.):**
- BIOL 314 Plant Physiology
- BIOL 354 Human Physiology
  (optional 1 cr. lab available)
- BIOL 381 Animal Physiology

**Evolutionary Pattern (3-4cr.):**
(Note: all except 439 have a required lab)
- BIOL 312 Plant Taxonomy
- BIOL 313 Structure & Function of Plants
- BIOL 322 Zoology
- BIOL 330 Comp. Anatomy & Embryology
- BIOL 439 Animal Behavior
- BIOL 447 Ornithology
- BIOL 465 Invertebrate Zoology

**Ecology (3cr.):**
- BIOL 301 Principles of Ecology
- BIOL 473 Ecology of Microorganisms

**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 211 Organic Chemistry or
  - CHEM 313 Organic Chemistry I
  - CHEM 314 Organic Chemistry II
  - CHEM 315 Organic Chemistry Lab
- BCHE 341 Survey of Biochem
  - OR
  - BCHE 395 Biochemistry
- MATH 142G Calc for Bio & Mngmt Sci
  - OR
  - MATH 191 Calculus & Analyt. Geometry I
- A ST 311G Statistical Applications
  - OR
  - (Stats Required)
- PHYS 211 General Physics I
  - OR
  - PHYS 212 General Physics II
  - OR
  - PHYS 211 General Physics for Life Sciences I
  - PHYS 211L General Physics Lab I
  - PHYS 212 General Physics II
  - OR
  - PHYS 212 General Physics Lab II

1 BA students require 20 hours upper division
2 Not required for BA degree
3 BA students may take 1 course from ASTR, CS, GEOL or PHYS110G to fulfill Physics requirement
NEW MEXICO COMMON CORE REQUIREMENTS

In each area the total credits needed must come from courses in different disciplines.

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
HON 223G, 235G, 237G
CJ 101
ECON 201G, 251G, 252G
GEOG 112G, 120G
GOVT 100G, 110G, 150G, 160G
HON 248G, 249G
LING 200G
PSY 201G
HON 203G, 232G
SOC 101G, 201G
W S 201G, 202G
C EP 110G, H LS 150, HNFS 210G
S WK 221G

Area 5 – Humanities and Fine Arts (6-9cr.)
ART 101G, 110G, 295, 296, HON 216G
ENGL 115G, 116G, 220G, 244G
MUS 101G, 201G, HON 208G
HON 225G, 226G, 227G, 228
THTR 101G, HON 270G
DANC 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, other than the College of Arts & Science.
(see list of VWW courses offered in the Class Schedule)


