Department of Fish, Wildlife and Conservation Ecology
Undergraduate Curriculum

New Mexico and University Requirements

Departmental Recommendations

Area I. Communications (10 credits)
   ENGL 111 G (4)
   ENGL 218 G (3) or 318 G (3)
   AXED 201G (3) or COMM 253 G (3) or COMM 265 G (3)

Area II. Mathematics (3 credits)
   MATH 142 G (3) or MATH 191 (3)
   (MATH 121 prerequisite)

Area III. Science, with Laboratory (8 credits)
   BIOL 111 G + L (4)
   PHYS 110 G (4)

Area IV. Social/Behavioral Sciences (6-9 credits)
   ECON 251 G or ECON 252 G (3)
   See Catalog (3-6)

Area V. Humanities and Fine Arts (6-9 credits)
   See Catalog (6-9)

Viewing a Wider World (6 credits, 3 each from two Colleges outside a Students’ College)
   Requirements fulfilled for College of Arts and Sciences
   See Catalog (3)

36 Credits
Departmental Requirements

Extra-Departmental Core Courses
AG E 111 (1) – Freshman Orientation
AGRO 305 (3) – Principles of Genetics
BIOL 111 (4) * – Natural History of Life
BIOL 211 (4) – Cellular and Organismal Biology
BIOL 313 (3) – Structure and Function of Plants
BIOL 322 (3) – Zoology
CHEM 111 and 112 (8) – General Chemistry
(Students requiring additional help with chemistry are encouraged to also take CHEM 101 and 102 – General Supplemental Instruction; Students intending to pursue graduate studies should also take the CHEM 211)
E ST 311 G (3) – Statistical Applications
GOVT 424 (3) – Environmental Policy
MATH 142 G (3)* - Calculus for the Biological and Management Sciences I or MATH 191 (3) – Calculus and Analytic Geometry I
PHYS 110 G (4) * or PHYS 221/222 (8)
(Students interested in pursuing graduate studies should take the 221/222 sequence)
RGSC 307/316 (5) – Range Plants and Grasses or BIOL 312 (3) – Plant Taxonomy
SOIL 252 (4) - Soils or GEOL 111 (4) – Survey of Geology
* - requirement fulfilled if taken for the “New Mexico and University Requirements”

35-54 Credits

Departmental Core Courses
WLSC 110 (3) – Introduction to Natural Resource Management
(Off campus students can take WLSC 110 (3) Distance Education)
WLSC 255 (3) – Principles of Fish and Wildlife Management
WLSC 301 (3) – Applied Ecology
WLSC 330 (4) – Natural History of the Vertebrates
WLSC 393 (3) – Professional Experience
WLSC 402 (1) – Seminar
WLSC 409/509 (3) – Population Ecology
WLSC 462 (3) – Conservation Biology or BIOL 462 (3) – Conservation Biology
WLSC 464/564 (4) – Management of Aquatic and Terrestrial Systems
Quantitative Techniques – choose one of the 4 classes below
   WLSC 455 (3) – Environmental Risks and Decisions or
   WLSC 457 (3) – Ecological Biometry or
   WLSC 488 (3) – Conservation Genetics or
   BIOL 488 (3) – Principles of Conservation Genetics

30 Credits
STUDENTS MUST DECLARE ONE OF THE TWO FOLLOWING OPTIONS
At least two classes must be a taxonomy class (e.g., Invertebrate Zoology, Entomology, Ichthyology, Herpetology, Avian Ecology or Ornithology, Mammalogy).
A maximum of 3 credits of “Problems” can count toward the Option.
More credits can be taken towards the degree.

Wildlife Ecology & Management Option (3 classes (at least 1 from each category) plus 1 class from Aquatic Option – 12-16 credits)

Category 1: Management
WLSC 359 (3) – Advanced Studies in Fishery and Wildlife Sciences (min. GPA 3.0)
WLSC 437 (3) – Wildlife Damage Control
WLSC 466 (3) – Advanced Management of Mammals
RGSC 325 – Rangeland Restoration Ecology or RGSC 440 – Rangeland Resource Ecology

Category 2: Organismal Biology
WLSC 360 (3) – Wildlife Behavior or BIOL 439 – Animal Behavior
WLSC 431 (3) – Mammalogy
WLSC 430 (4) – Avian Field Ecology or BIOL 447 Ornithology
WLSC 536 (3)* – Advanced Avian Ecology
WLSC 432 (4) or ANSC 370 (4) or BIOL 314 (3) or BIOL 377 or BIOL 381 (3) or BIOL 442 or BIOL 474 – Physiology class
EPWS 462 (4) – Parasitology
EPWS 303 (4) – Economic Entomology

Category to be assigned
WLSC 448 (1-3)* – Problems
WLSC 450/550 (1-4) – Special Topics
* - consent of instructor is needed

Aquatic Ecology & Management Option (3 classes (at least 1 from each category) plus 1 class from Wildlife Option – 12-16 credits)

Category 1: Management
WLSC 359 (3) – Advanced Studies in Fishery and Wildlife Sciences (min. GPA 3.0)
WLSC 459 (4) – Aquatic Ecology
RGSC 318 (3) – Watershed Management

Category 2: Organismal Biology
WLSC 432 (4) – Environmental Biology of Fishes
WLSC 434 (4) – Aquatic Contaminants and Toxicology
WLSC 482 (4) – Ichthyology
WLSC 432 (4) or ANSC 370 (4) or BIOL 314 (3) or BIOL 377 or BIOL 381 (3) or BIOL 442 or BIOL 474 – Physiology class
BIOL 465 (4) – Invertebrate Zoology
EPWS 435 (4) – Aquatic and Immature Insects
EPWS 462 (4) – Parasitology

*Category to be assigned*
WLSC 448 (1-3)* – Problems
WLSC 450/550 (1-4) – Special Topics
* - consent of instructor is needed

**ADDITIONAL ELECTIVES**
Take additional credits so the total adds up to at least 128 credits including 55 credits 300- and 400-level classes.
Students are encouraged to pursue a minor course of study with a department of their choosing.
Compatible minors include, but are not limited to, accounting, animal science, biology, business administration, chemistry, environmental science, forensic sciences, geography, journalism, management, and range science.

**Notes:**
1. No more than 6 cr of Physical Education classes will count towards your degree.
2. A maximum of two grades of ‘D’ in WLSC classes will count towards a student's degree.
3. Nine (9) cr. hrs in botany or related plant sciences are required to be eligible to apply for a Government job as a Wildlife Biologist (GS-486). Consider taking BIOL 470 (3) – *Plant Ecology* as an additional elective.