

Biotech at New Mexico State

A One Year Non-thesis Master of Science program in the Department of Biology, NMSU



The Biology Department at NMSU offers a one-year non-thesis Master of Science program in Biology degree with an emphasis in Biotechnology. This program focuses on innovative technology and its relationship to life science business. It equips students to pursue successful careers in biotechnology, including basic and applied research, product development and testing, and policy-making. Students will complete coursework in molecular biology, genomics and bioinformatics, statistical analysis, business, bioethics and professional development skills. Additional graduate course work will provide students with further expertise in various areas of interest, including cell, molecular and microbiology; environmental, ecological and evolutionary biology; and systems and integrative biology. Students can complete the program as short as one year or finish it in a longer period when the credits and requirements for graduation are met.

Reviewability & Eligibility

To be reviewable, a student file must be complete including:

- all transcripts from undergraduate and, if applicable, other graduate institutions
- personal statement
- If you have not graduated from or will not graduate from an accredited United States college or university: valid GRE general test scores*
- basic biographical data required by admissions.
- three letters of reference**

*GRE scores (general test only) are required, but no minimum is set. GRE validity will follow that determined by the Education Testing Services (ETS), which administers the GRE program. Currently, scores are valid for five years from the testing year in which they are taken, which begins July 1. For example, valid scores for 2024 applications would be those taken on or after July 1, 2019. GRE is not required for applicants coming from U.S. colleges and universities.

**Letters of reference must be submitted via the online application system. Each letter should evaluate the applicant's abilities regarding graduate studies, including potential for academic success in classwork. References should not be provided by anyone with a potential conflict of interest, such as personal friends or family members.

Prospective students must submit applications via the NMSU [online application system](#).

Course Offerings: The program requires 30 credits for graduation. The curriculum consists of 12-15 credits per semester over two semesters with an optional summer internship. Prior coursework in Genetics and Biochemistry is expected.

Skills (9-10 cr)

BIOL 510: Current Topics in Biology	3
Mol Biol Research Methods (BIOL 550, cross-listed BIOL302 or BIOL509)	3
Bioinformatics (BIOL 566), Genomics (BIOL 562)	3

Statistical Inference I (A ST 505) or BIOL 455 Biometry 3 or 4

Professional Development (5-7 cr)

Ethical issues in Biology (BIOL 540) 1 or 3

Professional Development (BIOL 541) 1

Entrepreneurship (MGMT 503 or MGMT 591)
or approved substitute 1-3

Biological Knowledge Electives (14-16 cr)

Students are expected to choose 5 or more courses numbered 450 or above in Microbiology, Organismal and Cellular Biology, Genetics or Ecology. See Biology department course listings in the NMSU Graduate Catalog.

Optional Internship (3-6 cr)

Summer research internship in a biotech company or a Biology Dept. lab (BIOL 598) Credits count towards the required elective credits.

For more information, please contact the program head Dr. John Xu at jxu@nmsu.edu .