

BIOLOGY (M.S.) NON-THESIS OPTION

Degree: Master of Science

Major: Biology

Concentration: Non-thesis

Total Hours: 38

The Department of Biology offers a Master of Science in Biology degree with either a thesis or non-thesis option. It is designed to enhance the professional competence of graduates in biology or closely related disciplines who are interested in pursuing academic careers, employment in private industry or governmental agencies in biologically oriented fields, entrance to professional schools, or who are presently engaged in or planning to enter secondary school teaching. Students interested in these programs should contact Matthew Pyne for detailed advising (Maes 101B, mpyne@lamar.edu, (409) 880-7458).

Applicants must:

- Have a B.S. or B.A. degree in biology from an accredited institution or complete a minimum of 24 semester hours in the biological sciences including eight hours of general biology (BIOL 1406 General Biology I (Majors) & BIOL 1407 General Biology II (Majors) or the equivalent) and a course in genetics. Excluded from the 24 hours is Anatomy & Physiology (BIOL 2401 Anatomy and Physiology I & BIOL 2402 Anatomy and Physiology II).
- Complete a minimum of one semester of Organic Chemistry, or Biochemistry and one semester of statistics.
- Meet the admission standards of the College of Graduate Studies.
- All students wishing to enter the M.S. program in Biology must take the GRE General Test.
- The minimum composite score for entrance into the Non-thesis program is $431 = (\text{GPA} \times 50) + \text{verbal GRE} + \text{quantitative GRE}$. The GPA used in the calculation is based on a 4.0-grade scale.

Degree Requirements

The candidate for the M.S. in Biology must meet all the College of Graduate Studies general requirements as listed in this catalog. For their professional development, students must enroll in BIOL 5110 Graduate Seminar. They must take the course two times; any subsequent enrollments will not count toward the degree.

Non-thesis Option

This option is intended for those not seeking a higher degree in Biology or those not planning to conduct any research in the future. Students are expected to:

- A maximum of two (2) Special Topics readings credits may be applied toward the M.S. in Biology degree. If 2 readings credits are applied, they must be completed as two separate 1 credit courses taken in different semesters.
- Choose a major advisor and graduate committee of at least two other graduate faculty during the first year of the program. The student must take at least one class from each of the committee members.
- Determine a program of study with the aid of the advisor and graduate committee. Students must complete a minimum of 38

hours of graduate credit. All course work will be in biology. Exceptions must be approved by the major advisor and department chair.

- Pass an exit exam covering the coursework taken during the program. The Biology non-thesis comprehensive examination will be made by the three members of the student's graduate committee and may encompass any and all topics in biology. A minimum score of 70% must be obtained on each of the three subsections of the final exam. The comprehensive examination will be an essay, closed book, and on the premises. Students will not be given any prior knowledge of the specific questions. Two questions will be submitted by each of the three committee members. One hour will be given for each question.
- The exit exam may be repeated twice if a failure occurs. Students will only retake the sections of the exam on which they did not obtain a 70%. Different questions will be asked in those same sections for the second exam. Failure to pass all sections of the comprehensive examination in three attempts will result in a student's being permanently suspended from the degree program.

Students are to schedule their non-thesis written comprehensive examination exam date within 5 business days of the final date posted on the Graduate Studies calendar.

M.S. Biology Non-thesis

Code	Title	Hours
Required Courses for Major		
BIOL 5110	Graduate Seminar (take twice)	2
Electives		
5000-level Biology courses		36
Other		
Leveling or Deficiency Courses ¹		
Comprehensive Exam ²		
Total Hours		38

- Any deficient course work from the application requirements of 24 credits of Biology including two semesters of general biology and a genetics course, one semester of organic chemistry or biochemistry, and one statistics course.
- Minimum score of 70% required.