

# BIOLOGICAL SCIENCES, M.S.

## Program Description

The Department of Biological Sciences offers Master of Science (M.S.) and Master of Arts (M.A.) degrees with a major in Biological Sciences. Students in the School of Biological and Environmental Sciences, composed of the Department of Biological Sciences (BSC) and the Department of Natural Resources and the Environment (NRE), may complete the requirements for an M.S. under a faculty mentor in a range of areas such as aquatic biology, aquatic toxicology, biological anthropology, cellular and molecular biology, ecology, environmental sciences, evolution, genetics, microbiology, plant biology, neurobiology, and wildlife biology.

The Master of Science (M.S.) degree in Biological Sciences is preparation for further study or employment requiring research experience and requires a thesis. An M.S. student must be mentored by a faculty member, so applicants are encouraged (but not required) to contact potential faculty advisors about research projects and graduate assistantships prior to application for admission. Information about faculty may be accessed at the websites for Biological Sciences ([www.marshall.edu/biology](http://www.marshall.edu/biology)) and Natural Resources and the Environment ([www.marshall.edu/nre](http://www.marshall.edu/nre)).

The Master of Arts (M.A.) degree does not require a thesis and allows students to strengthen their education in Biological Sciences through the completion of advanced coursework.

## Graduate Assistantships

Once application has been made to the Graduate College for admission to the Biological Sciences graduate program, students who are interested may also apply to become a teaching or research assistant. To do so, visit the Human Resources website's Employment section, select "Graduate Assistant Employment," and search for listings under Biological Sciences or Natural Resources and the Environment. Open positions are generally posted in late spring and late fall; offers are made on a rolling basis.

## Admission Requirements

Applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at [www.marshall.edu/graduate/admissions/how-to-apply-for-admission](http://www.marshall.edu/graduate/admissions/how-to-apply-for-admission).

Applications for admission to the program are accepted throughout the year. However, graduate teaching assistantship (GTA) positions are open until filled beginning April 1 for GTA positions for the fall semester and October 15 for GTA positions for the spring semester. Later applicants may not be awarded a GTA if all the positions for the upcoming semester are filled.

In addition, applicants should send these materials directly to the Graduate Admissions Office:

- three letters of recommendation from academic or professional references;

- a written statement of educational and professional goals that identifies a member of the graduate faculty from either the Department of Biological Sciences or Department of Natural Resources and the Environment willing to serve as the student's advisor (250-500 words);
- Graduate Record Exam (GRE) scores. Applicants must specify that official test scores are to be sent directly to Marshall University.

Applicant must also have:

- An overall undergraduate GPA of 2.75 on a 4.0 scale and a GPA of 3.0 on a 4.0 scale for all biological sciences courses are required for full admission. GRE scores are required. A composite GRE score (combined verbal and quantitative test scores) of 295 or greater is preferred for full admission. Students may be admitted provisionally for their first semester with a GRE score below 295 but must earn a 3.0 graduate GPA their first semester at Marshall University to be fully admitted..

## Program Requirements

### Requirement for All Degrees

A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements. Students must also have a thesis committee (M.S.) or advising committee (M.A.) consisting of no fewer than three faculty (including the student's advisor) assembled by the end of their first year. Students must meet with their committees at least once within their first year and at least once per semester (excluding the defense) in subsequent years.

### M.S. Degree Requirements

- Students must complete at least 32 hours of graduate coursework, including the thesis. The maximum amount of credit that may be earned for the thesis (BSC 681 Thesis) is 12 hours.
- Candidates for the M.S. degree must register for and participate in three hours of graduate seminars (BSC 660 Seminar I) during their first semester and BSC 662 Seminar II in what is expected to be their final semester and complete at least 18 hours in graded BSC electives at the graduate level (which may include BSC 660 Seminar I, BSC 662 Seminar II, and BSC 681 Thesis).
- Not more than 4 hours of seminar (BSC 660 Seminar I, BSC 662 Seminar II) may be used to complete the 32-hour requirement.
- Not more than 4 semester hours credit in Independent Study (BSC 585 Independent Study-BSC 588 Independent Study) or Special Problems (BSC 650 Special Problems-BSC 652 Special Problems) may be used to complete the 32 hour requirement, and these may only be applied beyond the 18 hours in BSC graduate credits.
- Students may elect to take 6 hours of graduate work in a minor field.
- Successful completion of the program in Biological Sciences requires a GPA of 3.0 or higher, and no more than 6 credit hours of "C" grades may be applied to the total hours for graduation. Upon completion of course requirements and the thesis, M.S. candidates must pass a comprehensive oral examination.