

DEPARTMENT OF BIOLOGY

Geraldine Grant, Chair

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Administration

- Geraldine Grant, Chair
- Charles Madden, Assistant Chair
- Andrea Weeks, Associate Chair for Research
- Valerie Olmo, Director of Undergraduate Studies
- Anne Verhoeven, Director of Medical Laboratory Sciences
- Rebecca Forkner, Director of Graduate Studies

Biology is the largest program in the College of Science; there are more than 1,300 students in the major and the department grants degrees to almost 300 students per year. Biology offers a lab-focused program with hands-on training from award-winning faculty. Biology offers diverse courses and research opportunities in animal, plant, and ecology studies. Biology is proud to serve both biology majors and students from other schools and colleges as they strive to achieve their goals and aspirations. Biology provides the background necessary for popular careers in biological sciences and beyond, including but not limited to pre-health, bioinformatics, genetic counseling, health-related fields, microbiology, molecular biology, biotechnology, genetics, environmental management, and medical laboratory sciences.

Undergraduate Programs

The BA (<https://catalog.gmu.edu/colleges-schools/science/biology/biology-ba/>) and BS (<https://catalog.gmu.edu/colleges-schools/science/biology/biology-bs/>) programs in biology provide a sound liberal arts education with substantial experience in quantitative and analytical thought, along with preparation for a related profession. In addition to ensuring the strong background necessary for graduate study in the many fields of biological science, the broad range of courses available at Mason allow students to develop careers in many areas, including secondary school teaching, environmental management, microbiology, molecular biology, biotechnology, genetics, and natural history. Alternatively, students may prepare for postgraduate studies in medicine, dentistry, veterinary medicine, wildlife management, fisheries biology, or marine science.

The department also offers the Medical Laboratory Science, BS (<http://catalog.gmu.edu/colleges-schools/science/biology/medical-laboratory-science-bs/>), please visit the program's catalog entry for details.

Additional information can be found at the Department of Biology's website (<http://biology.gmu.edu/>) or by visiting the department in Exploratory Hall, Suite 1200.

Graduate Programs

The Biology, MS (<http://catalog.gmu.edu/colleges-schools/science/systems-biology/biology-ms/>) is offered by the School of Systems Biology (<http://catalog.gmu.edu/colleges-schools/science/systems-biology/>). The Department of Biology supports the concentration in Evolutionary Biology within the MS degree. Students interested in

this concentration should consult the Department of Biology's website (<http://biology.gmu.edu/>) for a list of faculty and their research interests.

Student Clubs

A variety of biologically-oriented student clubs are available for students. Each club has its own website; for more information visit the Department of Biology's website (<http://biology.gmu.edu/>).

Faculty

Department Faculty Professors

Gilletvet, Kocache, Laemmerzahl, Lawrey, Madden, Tondi, Verhoeven

Associate Professors

Crerar, Edwards, Forkner, Grant, Luther, Masterson, Olmo, Scherer, Weeks

Assistant Professors

Chiari, Epstein, Fondufe, Froelich, Gantar, Hanley, Hunt, Lim, Sutherland

Instructor

Tomson

Adjunct Faculty

Beatty, Beck, Bickley, Brooks-Faulconer, Buckley-Beason, Ebersole, Einhorn, Hermoso, Holbeck, Hunnell, Jamil, Jones, Kaushik, Krcmarik, Munse, Nguyen, Pedicord, Radosavljevic, Rasheed, Rathnam, Rodriguez, Shirazi, Skacel, Sprinkel, Starolis, Temkin

Affiliate Faculty

Cymrot, Einhorn, Hixon, Kiso, Kolowski, Miller, Shah, Shakya

Affiliated Faculty

Andalibi, Couch, Davis, Deluycker, Fox, Lee, Lewis, Freeman, Gilmore, Lessard-Pilon, Lockett, McNeil, Nix, Perilla, Verardo

Requirements & Policies

Requirements

Advising

All biology majors are strongly encouraged to see an academic advisor regularly to help in planning their schedule so that they can graduate on time. Biology majors should see an advisor for permission to register prior to their first semester, again after completing 60 credits, and lastly after completing 90 credits.

Medical Laboratory Science, BS (<http://catalog.gmu.edu/colleges-schools/science/biology/medical-laboratory-science-bs/>) majors must see the director of the medical laboratory science program to obtain permission to register each semester.

Students returning from suspension are required to meet with the director of undergraduate studies or designee prior to being allowed to register.

For more information on advising or to set up an appointment, visit the Department of Biology's website (<http://biology.gmu.edu/>).

Residency Requirement for Transfer Students

Students majoring in biology are required to complete 16 credits in the major at the 300 and 400 levels at Mason in addition to meeting the university residency requirement of at least 30 credits at Mason.

Policies

Policy on Using Biology Program Laboratories

Only authorized experiments and exercises may be carried out in any research or teaching laboratory and must be done under the supervision of a university faculty or staff member. No unauthorized work is allowed in any laboratory.

Policy on Using Organisms in Classes

Direct observations of actual organisms are considered an essential part of learning biology at all levels. Direct observations of organisms may involve the use of living or preserved specimens, dissections of organisms or parts of organisms, and microscopic examination of organisms or parts of organisms. All use of live animals conforms to National Institutes of Health guidelines for the use and care of laboratory animals. Activities specified above may be a required part of a course and thus serve as a basis for grading in the course. Any questions about the administration of this policy should be directed to the course coordinator or instructor.

Writing-Intensive Requirement

Mason requires all students to complete at least one course designated as "writing intensive" in their majors at the 300-level or above. Students majoring in biology fulfill this requirement by successfully completing BIOL 308 Foundations of Ecology and Evolution. Medical laboratory science majors fulfill the requirement by completing MLAB 300 Science Writing.

Minor in Biology

Information about this minor can be found in the Biology Minor (<http://catalog.gmu.edu/colleges-schools/science/biology/biology-minor/>)'s catalog entry.

Premedical, Predental, Prepharmacy, and Preveterinary Students

Web: prehealth.gmu.edu (<http://prehealth.gmu.edu/>)

Many students planning to enter medical, dental, pharmacy, veterinary, optometry, or other health professional schools choose to pursue a major in biology. These students should consult the health professions advising web site on required coursework and overall preparation.

Teacher Licensure

Students who wish to become teachers should pursue either the Biology, BA (<http://catalog.gmu.edu/colleges-schools/science/biology/biology-ba/>) or the Biology, BS (<http://catalog.gmu.edu/colleges-schools/science/biology/biology-bs/>) in addition to obtaining teaching certificates through the College of Education and Human Development (<http://catalog.gmu.edu/colleges-schools/education-human-development/>). For more information, visit the Graduate School of Education's website (<https://gse.gmu.edu/>).

Biology for Non-majors

Students who are not majoring in science or mathematics and wish to fulfill their natural science requirement may enroll in the biology classes listed in the Mason Core Natural Science (<http://catalog.gmu.edu/mason-core/>) section. Chemistry, physics, and mathematics majors should consult with their faculty advisor to determine which biology courses to take.

Programs

- Biology Minor
- Biology, BA
- Biology, BS
- Medical Laboratory Science, BS