Real-life jobs
Some examples of what recent graduates majoring in biology at JMU are doing now:

- Cell biologist
- DNA technician (armed forces)
- Environmental analyst (county)
- Ecologist (U.S. Geological Survey)
- Medical technologist (Johns Hopkins Hospital)
- Middle school/high school science teachers
- Pharmaceutical research and sales
- Optometry, medical, pharmacy, veterinary, law school
- Quality control
- Tissue recovery specialist (transplant medicine)
- Graduate degrees at UNC, UVA, VCU, Harvard Public Health, UC-Irvine, UC-Davis, Washington University, Boston University, University of Connecticut, Stanford, Baylor Medical School, Vanderbilt, Tufts
- Research at universities and at the National Institutes of Health
About biology at JMU

The Department of Biology holds as its primary core values providing a superlative educational experience for students; actively involving faculty and students in scholarly pursuits as the ultimate expression of teaching and learning; and serving the department, college, university, and greater academic and non-academic communities in support of our teaching and scholarship missions.

Biology at JMU currently serves more than 800 undergraduate majors and 15 graduate students. It offers a variety of courses for biology and biotechnology majors, general education and pre-health profession preparation.

The 40 full-time faculty members are engaged in teaching and research in a broad range of subdisciplines, and mentor more than 150 undergraduate student researchers during the academic year and in the summer. Many faculty members are supported in their research by external or internal funds.

We value an environment for learning that includes opportunities for undergraduate research; a broadly based academic program; a supportive, diverse and collaborative faculty; an understanding of the process of science; and a recognition of the importance of community outreach and involvement.

Biology curriculum

A major in biology is flexible and can be tailored to the interests and needs of the individual student. The program comprises a four-semester core and the opportunity to tailor one’s upper-division curriculum. The diverse selection of upper-division courses includes:

- Advanced Human Anatomy
- Advanced Molecular Biology
- Animal Communication
- Animal Field Biology
- Animal Physiology
- Biomechanics
- Environmental Toxicology
- Field Botany
- Freshwater Ecology
- Genomics
- Human Histology
- Human Uses of Plants
- Immunology
- Marine and Freshwater Invertebrates
- Mathematical Models in Biology
- Medical Parasitology
- Microbiology
- Microscopy
- Neurobiology
- Ornithology
- Plant Physiology
- Population Ecology
- Plant Systematics
- Study Abroad in Madagascar: Biodiversity and Natural Resource Management or Agroforestry and Farm Forestry Systems

Biology majors may choose a concentration in Ecology and Environmental Biology. The Department of Biology also offers a four-year, interdisciplinary Bachelor of Science degree program for a major in Biotechnology in cooperation with the Department of Integrated Science and Technology and the Department of Chemistry and Biochemistry.

A dual degree program makes it possible for students to earn a B.S. degree in biology from JMU and a Master of Forestry degree from Virginia Tech in five years.

Big-school choices, small-school feel

James Madison University combines the best of both worlds: Outstanding academics and a community atmosphere. In the biology department, students have opportunities for one-on-one faculty interaction and hands-on research experience that are rarely possible at larger schools.

Richness at our doorstep

Nestled between the Shenandoah National Park and the Appalachian Mountains, the Shenandoah Valley is a haven for lovers of biology and the outdoors. Field-based biology courses take advantage of the unique natural richness at our doorstep, allowing students to learn while experiencing the local ecosystems and wildlife firsthand.

As well as the area’s natural beauty, Harrisonburg is within two hours’ drive of the cultural attractions of Washington, D.C, Charlottesville and Richmond.