



Department of Biology

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Majors Offered:  Biology, B.A., B.S.

Links to Web sites:  [Catalogs](#)  [Department of Biology](#) (department maintained)

The Department of Biology is home to many a budding scientist and doctor. Whether they are isolating genes or examining the complexities of the Indiana Dunes National Lakeshore, Valpo Biology majors explore the vastness of life.

What Is Distinctive About Valpo's Program?

Hands-on Learning: Valpo is proud of its hands-on approach to undergraduate learning. Students actually use equipment such as our scanning electron microscope and our molecular biology equipment allows students opportunities in gene technology, including DNA sequencing and PCR. In fact, our hands-on curriculum graduates men and women who can be immediately productive in a professional or academic laboratory setting.

You will carry out inquiry-based collaborative lab work in Modern Microscopy and Developmental Biology courses, as well as Ecology and Field Biology.

You may find it rewarding to work as a Biology Lab Assistant at Valpo after your freshman year.

Summer undergraduate opportunities are available off-campus through a variety of institutions including those supported by the National Science Foundation.

Location: Valpo is just 15 minutes from the Indiana Dunes National Lakeshore, which is one of the most ecologically interesting field sites in the nation and the birthplace of modern ecology. The Biology Department's excellent relationship with the scientists there provides for exceptional opportunities and information access for students.

Our Northwest Indiana setting also provides outstanding resources for the bi-weekly colloquium program. Speakers are experts from Chicago and from

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respected neighboring institutions, such as Purdue University, the University of Notre Dame, and the U.S. Geological Survey, as well as our own faculty.

Research: The Biology Department strongly advocates undergraduate research and its faculty reflects a wide range of research interests. Currently Valpo students assist in researching yellow-bellied sapsuckers, pathogenic characteristics of a *Castanea* parasite, the regulation of growth, quantitative genetics to track gene changes that lead to speciation in plants, and differentiation of cells, among other topics.

What Can I Do With This Major?

Degree, Skills, or Experience Needed for Beginning A Job In This Field: A Bachelor of Science Degree in Biology for entry-level positions.

Kinds of Work Available to Graduates in This Major: A wide range of work is available to Biology majors at the Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) level. Many Biology majors elect to go on for advanced training in graduate or professional schools.

Potential Hiring Institutions: Local, state, and federal government agencies (public health, Department of Education), hospitals (medical technology and allied health fields), educational institutions, pharmaceutical companies, plant and animal industries, U.S. Department of Agriculture, utility companies and industries (environmental health), biotechnology companies, zoological parks.

What Beyond-the-Classroom Opportunities Does Valpo Offer You in Biology?

Extracurricular Groups:

- Alpha Epsilon Delta – National Premedical Honor Society; Biology Club; Premedical Club.
- Biology Club members participate in extensive habitat/stream restoration in Northern Indiana and lower Southwest Michigan.

Off-Campus Opportunities: Students are welcome to participate in any of Valpo's 14 study abroad programs on four continents or in other off-campus programs, such as Urban Studies or the Washington Semester.

Notable Alumni

- Walter Breitingner , Vice-president of commodity futures at a major brokerage firm in Indiana; blends his knowledge in biology into commodity investment and is a successful broker.
- John Gruno , M.D., Professor of Pediatrics, College of Medicine, The University of Oklahoma
- Nancy Monson , Ph.D., Southwest Medical College, University of Texas, Dallas, Texas, a leader in biomedical research in Multiple Sclerosis disease.