MAJOR IN BIOLOGICAL SCIENCE, BOTANY CONCENTRATION

Botany is the general study of plants and plant-like organisms from microscopic algae to giant redwoods, from mushrooming fungi to flowering angiosperms. Plant anatomy, how plants grow and develop, and how they survive and interrelate within their environments are topics of study. For students who like the outdoors, a career in plant ecology, taxonomy, or forestry might be appealing. Students attracted to the beauty and design of the microscopic world might enjoy a career in plant anatomy or plant developmental biology. Those interested in chemistry might enjoy plant biochemistry, molecular biology, or plant biotechnology. Those intrigued by plant diseases might become plant pathologists and the mathematically oriented might explore systems ecology, genetics, or plant biotechnology.

The botany curriculum begins with a solid foundation in mathematics, the biological sciences, chemistry, organic chemistry, physics, evolution, and genetics. Botany emphasizing terrestrial plant studies including plant systematics, anatomy, and ecology, biochemistry, and earth sciences round out the core. Botany students also take liberal arts and communications courses to give breadth to their education.

Learning Objectives

Students completing the major in in Biological Science with a concentration in Botany will attain a well-rounded education grounded in the natural sciences, with emphasis on the current state of knowledge in botany. Upon successfully completing the degree, they will be able to:

1. Attain a solid foundation in the natural sciences, with emphasis on biological processes and phenomena;
2. Demonstrate a fundamental understanding of biological concepts, processes, and phenomena that are broadly applicable to organisms, as well as more a detailed understanding of multiple aspects of biological concepts, processes and phenomena applicable to plants and allied organisms;
3. Demonstrate strong analytical, mathematical, and statistical skills, and the ability to apply these appropriately in botanical contexts;
4. Demonstrate the ability to analyze, synthesize, integrate, and evaluate material from botany and related fields, and effectively communicate such information.

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