



DEPARTMENT OF PLANT AND SOIL SCIENCES

WHAT IS PLANT SCIENCE?

Plant Science applies the principles of agriculture, biology, and chemistry to plant life.

AREAS OF EMPHASIS AT DELAWARE

The Plant Science major is designed for the student with broad interests related to plants. In this major there is maximum flexibility to create a program that best suits one's individual goals. With few specific course requirements, students can pursue the areas of plant science that interest them most.

The major builds on a foundation of basic laboratory and lecture courses, including those in plant and soil sciences. In addition to the courses selected for the major, students are required to complete courses in computers; English; mathematics; social sciences; literature; and the arts. A faculty advisor works with each student to provide assistance with course selection and career planning.

WHAT'S SPECIAL ABOUT THE PROGRAM?

At the University of Delaware, Plant Science majors work closely with the department's faculty, which includes scholars in plant pathology, plant breeding, horticulture, landscape design, soil science, botany, and crop science. Students interact with faculty both in and out of the classroom, learning from them in class and working with them on research projects, as part of the Science and Engineering Scholars program, and in independent studies.

Many students in the Plant Science major enhance their undergraduate experience by joining career related clubs which sponsor sales and take field trips. Part-time jobs on and off campus are available for students who want to apply their knowledge and make money at the same time.

FACILITIES AND RESOURCES

The College of Agriculture and Natural Resources houses the Plant Science major and offers many impressive facilities to students. From the high-tech Fischer

Greenhouse Laboratory to the expansive University of Delaware Botanic Gardens, students have an array of exciting resources to utilize. Townsend and Worrilow Halls contain faculty offices, classrooms and laboratories, as well as a student commons, a library and a modern computing site with geographic information systems, Web and email access, and computer-aided design software.

CAREER PATHS

Plant biologist. Plant production. Greenhouse manager. Golf-course superintendent. Plant breeding. Agricultural-chemical researcher. Plant marketing. Environmental Management. These careers and more are shared by hundreds of plant science alumni. While some students enter the workforce right after college, others choose to further their education in graduate school, studying plant pathology, genetics, physiology, and public horticultural administration. All students are encouraged to participate in job-search workshops and career days; seek internships; develop communication skills; and learn to network with prospective employers. This, in addition to doing well academically, greatly enhances post-graduate opportunities.

THE PLANT SCIENCE CURRICULUM

Starting with the first semester, Plant Science majors usually have at least one course in the major each semester. To earn a bachelor's degree, students must complete **124 credits** and meet the specific requirements for their major, as outlined in the *University of Delaware Undergraduate Catalog*. Each semester's courses will vary, depending on the student's interests, background, and academic preparation. **The following plan is only one example; not every student will take every course in the same order. The average number of credits per semester ranges from 12 -17;** Winter and Summer sessions may be used to lighten the loads of regular semesters.

FRESHMAN YEAR

FALL SEMESTER

Botany I (4 cr.) Introduction to botany, including cell structure and function, anatomy, genetics, reproduction, physiology, taxonomy and ecology of plants. Include one 2 hour lab/week.

Mathematics (3 cr.) The first math course is determined by the student's background, SAT scores, and a math placement test.

New Student Colloquium (1 cr.) Focus on academics, careers and resources as they relate to success in the plant science major.

Land and Water Management (3 cr.) Focus on hazardous waste management, acid rain, wetlands, rainfall, and groundwater quality.

General Chemistry I (4 cr.) Fundamental laws of chemical action and the properties and uses of elements and compounds.

Includes one 3-hr. lab/week.

SPRING SEMESTER

Introduction to Crop Science (3 cr.) Plant structure and plant processes with practical application to the production and management of commercial crops.

Ornamental Horticulture (3 cr.) Focus on the use of ornamental plants, with emphasis on plant materials and their role in creating aesthetically pleasing landscapes.

Critical Reading and Writing (3 cr.) Expository & argumentative composition through analysis of select readings.

General Chemistry II (4 cr.) A continuation of first-semester chemistry. Includes one 3-hr. lab/week.

SOPHOMORE YEAR

Land Surveying (3 cr.)

Elementary Organic Chemistry (4 cr.)

Introduction to Soil Science (4 cr.)

Botany II (4 cr.)

Elements of Entomology (3 cr.)

Elementary Biochemistry (3 cr.)

Breadth Requirements*/Electives

JUNIOR AND SENIOR YEAR

Plant Physiology (3 cr.)

Plant Pathology (4 cr.)

Genetics (3 cr.)

Soil Fertility and Plant Nutrition(4 cr.)

Breadth Requirements*

** There's a total of 21 University and College Breadth credits required for this degree including a minimum of nine credits from any three different College of Agriculture and Natural Resources subject area codes, outside the subject area codes of the student's major. Twelve credits are required (3 from each) from the following categories: Creative Arts and Humanities; History and Cultural Change; Social and Behavioral Sciences; Mathematics, Natural Sciences and Technology. At least one course in multicultural studies must be taken to fulfill graduation requirements.*

FOR MORE INFORMATION

You are welcome to come talk with us about our majors and the ways in which we can help you reach your goals. Please contact us:



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