

Programs

Restricted Electives

Major in Commercial Crop Production and Marketing/Plant Health Management

Course	Title	Credits
HT 2112	Commercial Fruit Production.....	3
HT 2211	Commercial Vegetable Production	3
HT 2335	Principles of Sustainable Agriculture....	2
HT 3204	Small Fruit Culture*.....	3
HT 3240	Integrated Pest Management.....	3
HT 4106	Marketing Horticultural Products.....	2
HT 4202	Advanced Pomology**	3
Total		19

Major in Plant Science and Biotechnology

Course	Title	Credits
BY 3002	General Microbiology	4
CH 2203	Biochemistry.....	3
CH 2203L	Biochemistry Lab.....	1
HT 2112	Commercial Fruit Production or	
HT 2211	Commercial Vegetable Production	3
HT 3025	Plant Cell and Tissue Culture**	2
HT 4225	Plant Disease Diagnosis	3
MP 3231	Statistics for Science.....	3
Total		19

Major in Hydroponic Crop Science

Course	Title	Credits
BA 2225	Accounting Fundamentals.....	3
BA 3141	Small Business Management	3
BY 2010	Introduction to Aquaculture.....	3
HT 2211	Commercial Vegetable Production	3
HT 3230	Hydroponics*.....	3
HT 4106	Marketing Horticultural Products.....	2
OH 4209	Greenhouse Management	3
Total		20

HT 3000, HT 4000- up to 2 additional credits may be taken for a Hydroponics research project.

* Offered in Spring Semester of odd numbered years.

** Offered in Spring Semester of even numbered years.

*** Offered in Fall Semester of odd numbered years.

**** Offered in Fall Semester of even numbered years.

***** Selected Topics I and II, Independent Study Courses, may be taken in either semester of the senior year with permission of the Department Chairperson and under the supervision of a faculty advisor.

LIBERAL ARTS (LA)

Faculty:

Jack W. Schmidt, Chairperson
Allison Buskirk-Cohen
Tanya H. Casas
David A. Snyder
Shih-chieh Su
Richard C. Ziemer

Delaware Valley College has long subscribed to the belief that a college education should emphasize the development of communication skills and a critical understanding of our social, economic, political, and cultural heritage. The Liberal Arts curriculum at Delaware Valley College exposes students to the richness, diversity and complexity of human history, promotes and increased self-awareness and concern for the role of the individual in society, develops students' ability to communicate effectively, and encourages artistic expression. Our courses encompass the fields of history, psychology, sociology, philosophy, speech, foreign languages, music and art. These courses constitute a major portion of the College's Core Curriculum and also provide content area courses for Social Studies Education majors.

MATHEMATICS AND PHYSICS (MP)

Faculty:

Karen G. McPherson, Chairperson
Imad Benjelloun
Svetlana Shkitko
Michael N. Tabachnick
Ruth Trubnik
Jeffrey A. Young

Mathematics is a language common to many different areas of human endeavor. Applied mathematics, in particular, is used in professions as diverse as actuarial science, operations research, management science, decision analysis, engineering physics, biometrics, econometrics and education. The Mathematics Department offers a broad range of courses. At the freshman level, the core courses are designed to increase students' mathematical literacy while providing background in the basic areas of mathematics. The upper level courses offer the specialized knowledge and skills necessary to prepare students for careers in science, business or education.

A minor in mathematics may be obtained by completing a minimum of 15 credit hours of course work in mathematics beyond any mathematics courses required by a student's major. The program of a student who minors in mathematics must in any case include at least 2 semesters of Calculus.

NATURAL RESOURCES AND BIOSYSTEMS MANAGEMENT

Faculty:

Barbara D. Muse, Chairperson
 Richard Cowhig
 Steven S. DeBroux
 Howard Eyre
 Lawrence D. Hepner, Jr.
 Douglas T. Linde
 Mingwang Liu
 John D. Martin
 Eve S. Minson
 Ronald R. Muse

The impact of humans on the planet is becoming increasingly evident. Now as never before, we are using the resources of our planet to provide more food, more clean water, more energy, and aesthetically pleasing living environments for an ever increasing population. Students within this department acquire the knowledge and skills that will enable them to be responsible productive citizens of the earth. Biosystems Management deals with the interaction of humans and natural systems to develop functional connections for food production, water use, waste management, fuel generation, aesthetics and other uses of natural resources to meet human needs in a sustainable fashion. Within Natural Resources and Biosystems Management, there are three degree areas of study: Agronomy and Environmental Science; Horticulture; and Ornamental Horticulture and Environmental Design. Together the three degree areas offer a total of nine different majors.

Agronomy & Environmental Science — page 39

- Environmental Science
- Crop Science
- Turf Management

Horticulture — page 82

- Commercial Crop Production & Marketing/Plant Health Management
- Plant Science & Biotechnology
- Hydroponic Crop Science

Ornamental Horticulture & Environmental Design — page 85

- Environmental Design
- Floriculture & Nursery Production & Marketing
- Landscape Contracting and Management

ORNAMENTAL HORTICULTURE AND ENVIRONMENTAL DESIGN (OH)

Faculty:

Barbara D. Muse, Chairperson
 Mingwang Liu, Assistant Chairperson
 Richard Cowhig
 Howard Eyre
 John D. Martin
 Eve S. Minson

The Department of Ornamental Horticulture and Environmental Design is future oriented. Our programs reach far beyond aesthetics to address the issues which will positively affect our tomorrows and help shape a healthier, more beautiful and livable world. The curriculum reflects the career diversity, importance and ecological foundation of our programs, and has been designed to prepare people for a profession and for life. Programs of study are rich in the basic sciences and mathematics, liberal arts, and the plant and environmental sciences. Course work within the major starts in the freshman year so that professional development can begin immediately.

The curriculum is designed to allow each student to develop strength and depth in a career area specialty: Floriculture and Nursery Production and Marketing, Landscape Contracting and Management, or Environmental Design (specialization descriptions and requirements are outlined on the following pages). Yet, all students receive a skill overview of the entire field. Ample curriculum flexibility is provided so that students can elect additional science, professional or business courses. Students can minor in any major offered on campus, and special minors are also offered in Landscape Management and Plant Biotechnology. This flexibility and interdisciplinary approach helps a student develop a background which best fits his or her personal career objectives.

The College operates approximately 30,000 square feet of greenhouses including the ultra-modern, computerized Arthur Poley Greenhouse Complex completed in 1998. It also operates a field/container landscape nursery operation, lath houses, and a propagation facility which are used extensively in teaching.