

Sustainable Agriculture

Degree Type

Associate of Applied Science

Program Description

This degree prepares individuals for work in the sustainable agricultural industry, including traditional agribusiness and the emerging field of controlled environment agriculture. Agriculture continues to be the largest industry in the State of Pennsylvania. The benefit of a controlled agriculture program is the ability to produce food year-round without dependence upon ideal weather conditions, use of pesticides, or need for the expense of land and heavy equipment.

Students will learn skills that can be transferred to any controlled agriculture industry, including the new medical marijuana production industry that has been introduced in PA, which is highly regulated, with plants grown and harvested in a controlled environment. Additionally, students will learn techniques of horticulture and aquaculture which are growing sectors in sustainable agriculture. Finally, students will gain experience to own and/or operate an agribusiness.

In partnership with Sandyvale Memorial Park, this program will be able to offer both theory and practical hands-on application. The College will use the greenhouse for both hydroponic plant growth and traditional greenhouse growing.

Career Opportunities

- Traditional agribusinesses
- Greenhouses
- Controlled environment agribusinesses

Program Objectives

Upon completion of the program, the student will be able to:

1. Demonstrate the competencies necessary to work in a controlled environment agriculture sector.
2. Identify the need for sustainability in traditional and non-traditional agribusinesses.
3. Demonstrate an introductory knowledge of the skills common to the contemporary business environment.

Obtaining the Degree

To earn the Associate of Applied Science degree, students must:

- Matriculate into the program.
- Satisfactorily complete all degree requirements.

Social Science Electives

(See Social Science Track I and Social Science Track II under Liberal Arts and Sciences for course options)

Major Requirements

Course Code	Title	Credits
ACC 150	Accounting Principles I	3
ACC 220	Automated Accounting	3
ACP 100	Academic and Career Planning	1
AGR 110	Introduction to Sustainability	3
AGR 120	Hydroponic Food Production Lecture	3
AGR 121	Hydroponic Food Production Lab	1
AGR 125	Principles of Sustainable Agriculture Lecture	3
AGR 126	Principles of Sustainable Agriculture Lab	1
AGR 130	Plant Propagation Lecture	3
AGR 131	Plant Propagation Lab	1
BUS 110	Introduction to Business	3
BUS 230	Principles of Marketing	3
CIT 100	Microcomputer Applications	3
COM 110	Interpersonal Communication	3
ENG 110	English Composition I**	3
MAT 110	Business Mathematics	3
	Elective - Social Science	3
	Total Credits	65

Course Sequencing

Fall 1

Course Code	Title	Credits
AGR 105	Botany Lecture	3
AGR 115	Botany Lab	1
AGR 110	Introduction to Sustainability	3
AGR 125	Principles of Sustainable Agriculture Lecture	3
AGR 126	Principles of Sustainable Agriculture Lab	1
BUS 110	Introduction to Business	3
ACP 100	Academic and Career Planning	1

Spring 1

Course Code	Title	Credits
BUS 230	Principles of Marketing	3
AGR 120	Hydroponic Food Production Lecture	3
AGR 121	Hydroponic Food Production Lab	1
AGR 130	Plant Propagation Lecture	3
AGR 131	Plant Propagation Lab	1
ENG 110	English Composition I**	3

Summer 1

Course Code	Title	Credits
AGR 220	Aquaculture and Aquaponics Lecture	3
AGR 221	Aquaculture and Aquaponics Lab	1
AGR 210	Horticulture Lecture	3
AGR 211	Horticulture Lab	1
CIT 100	Microcomputer Applications	3

Fall 2

Course Code	Title	Credits
ACC 150	Accounting Principles I	3
AGR 140	Agricultural Food Safety Lecture	3
AGR 141	Agricultural Food Safety Lab	1
MAT 110	Business Mathematics	3
	Elective - Social Science	3

Spring 2

Course Code	Title	Credits
AGR 290	Agriculture Internship	3
AGR 150	Agricultural Economics	3
ACC 220	Automated Accounting	3
COM 110	Interpersonal Communication	3