

Northwest Arkansas Community College

Brightwater

Discipline Code

FDST

Course Number

2043

Course Title

Applied Farming

Catalog Description

This course provides the knowledge required to grow healthy produce, offers hand-on learning experience, and hopes to broaden the understanding of local food systems and how to more knowledgably operate inside them. We will focus on the most important aspects of how to grow healthy produce and give students opportunities to grow and further their understanding of local availability and seasonality. The goal of this course is to leave the student feeling confident in their ability to grow and buy locally based on the season.

Prerequisites

None

Credit Hours

3 credit hours

Contact Hours

75 lab contact hours

Load Hours

3.75

Semesters Offered

Fall, Spring, Summer

Grade Mode

A-F

Learning Outcomes

- Recognize planting and harvesting in multiple scenarios
- Identify general plant needs and how to care for them
- Recall and apply information pertaining to plant growth and management
- Identify common vegetables and fruits based on the plant itself
- Recognize seasonality and locality of crop production
- Demonstrate basic techniques in hydroponics, controlled environment, and season extension
- Describe where our food comes from and the management skills required to

- operate a farm
- Employ collaboration and team skills
- Properly apply skills and knowledge in a hands-on setting to maintain small vegetable and fruit crops
- Apply knowledge about protected agriculture by growing crops and conducting experiments in a greenhouse setting

General Education Outcomes Supported

None

Standard Practices

Topics list

- Plant Classification
- Plant Anatomy and Growth
- Growing Environment
- Media and Fertilizers
- Plant Propagation
- Pest Management
- Vegetable Production
- Fruit Production
- Row Crops
- Pruning and Training
- Food and Nutrition
- Food Safety (Good Agricultural Practices)
- Post-harvest Handling
- Organic Production
- Protected Agriculture
- Greenhouse Management
- Interior Plant Care

Learning Activities

- Lecture Material and Quizzes. Information will be presented through lectures, videos, and demonstrations. Comprehension of these topics will be assessed with weekly quizzes.
- Plant Identification. Plant Identification exercises will be included in classroom presentations, in the garden, and in quizzes.
- Garden Participation. Students will participate in outdoor garden activities to enhance lecture material discussed in the classroom. In this setting, students will become familiar with how to identify, plant, maintain, and harvest vegetable crops. Other skills related to tending a garden or farm, such as weed control and irrigation, will also be demonstrated and practiced.
- Orchard Project. The semester-long orchard design project will give students the opportunity to think critically about the decisions necessary when establishing and operating a farm. This project will also present students with the opportunity to explore fruit production, use creative skills for designs and problem solving,

- and practice public speaking in the final presentation.
- Develop team/ collaboration skills through group work

Assessments

- Weekly Quizzes will be administered to assess understanding of lecture material and to test the ability to identify plants at various growth stages.
- Homework assignments: homework assignments will be given so that students may do independent research and describe information pertaining to Good Agricultural Practices, planning seasonal gardens, plant nutrition, edible landscaping, companion planting, and plant propagation.
- Garden participation will be assessed during class times for comprehension of proper plant management and will be included in the participation grade.
- A final exam will be used to evaluate understanding of major topics and plant identification skills.

Revised

April 20, 2022