

# UF/IFAS Horticultural Sciences Department Teaching Garden

## To implement this tour, you will need:

The tour link: https://my.matterport.com/show/?m=Es6U6SsD8KU

A way for your students to view/interact with the tour:

- Option 1: smartphones with Google Cardboard or other viewers
- Option 2: students view the tours via personal computers or tablets with individual headphones
- Option 3: project the tour on a screen at the front of the room for students to view together

# **Background Information**

This tour showcases the UF/IFAS Horticultural Sciences Department Teaching Garden located in Gainesville, Florida. Throughout the tour, students and educators can travel throughout the garden, exploring the main field, the caterpillar tunnels, and one of the greenhouses. Learn about the research happening in the garden, different staff members who conduct the research, and a variety of agricultural techniques and technology used to grow crops.

## **Purpose Statement and Learning Objectives**

The purpose of this iVisit tour is to introduce learners to the practice of hydroponics, the scientists that work at the facility, and a variety of agricultural techniques used to grow crops both commercially and for research purposes.

#### **Learning Objectives:**

After completing this tour, students will be able to:

- Name the different roles of individuals working on or learning at the garden
- Name different agricultural crops that can be grown in Florida
- Discuss research happening at the garden
- Describe UF/IFAS Horticultural Sciences Department Teaching Garden and its purpose
- Discuss different agricultural systems and styles of growing crops at the garden
- Explain different kinds of pest control methods employed in Integrated Pest Management
- Define and explain the importance/purpose of an experimental variety trial
- Define Hydroponics and discuss different reasons for use
- Name at least two different reasons a greenhouse is beneficial for seedlings
- Present potential pathways to starting a career in STEM



## **Key Terms**

Blackout Tarp Integrated Pest Management

Ebb and Flood Nutrient Film Technique

Evergreen System Tabletop Trough System

Hydroponic Trellace

## What You and Your Students Will See in the Tour

This tour of the University of Florida's Horticultural Teaching Garden includes one of the greenhouses on site, both hoop houses, and all the student and research plots in the garden. You can click the white circles along the floor to move through the tour. Throughout the tour, there are information points you can click on to learn more information and view additional media about the area. Some of the information points will contain videos and pictures so be sure to look for the white arrows on either side of the image box within each information point. Refer to the following outline to guide students through the tour. You can navigate the tour using different options:

- 1. Navigate to the first stop, then use the arrows to progress through the facility from beginning to end.
- 2. From the floorplan view, move to a specific area in the facility. This button is found in the bottom left side of the screen.
- 3. Using the mouse to simply move and look around. You can click the white circles along the floor to move through the tour.

Throughout the tour, you can click on information points to learn more and view additional media about the area. You can use the following outline to guide students through the tour.

## Top corner of the Garden

Starting point – Top corner of the garden

- View introductions points and find information point slightly to the right with an up arrow.
- The arrow information point will provide you with directions to the greenhouse, the hoop houses, and the main garden within the tour.
  - You may choose any direction you would like or clip the play button in the bottom right to be guided through the tour.
- Information points include:
  - Welcome to the Horticultural Teaching Farm
  - Choose your direction
  - Wildflower Insectary Row
  - o Organic Vegetable Production Plot
  - o Compost Pile
  - The Classroom Support Building



- There are also other directional points that will help guide throughout the tour to help.
- You may choose whichever direction you like, or you may follow along with the lesson plan directly.

#### The Field

- Starting Move along the right side of the first row of crops towards the middle of the field.
  - Organic Weed Control
  - Organic Vegetable Production Continued
  - Explore the Field
- Turn to the right, facing the length of the field and walk down the middle and explore the information points to learn about different technology, techniques, and crops being utilized and grown in the garden.
- Continue through the field to meet multiple researchers and students working in the garden and learn about the crops and agricultural systems and technology being utilized.
  - Empty Plots
  - Dr. Saba's Sweet Potato Variety Trial
  - Blackout Tarp
  - Individual Student Gardening Plots
  - o Dr. Saba's Pepper Breeding Trial
  - Horticultural Student Science Club Plot
  - Plastic Culture
  - o Dr. Dina Leibowitz and The Amaranth Variety Trial
  - Environmental Monitoring
  - Sorghum Cover Crop
  - Marigolds and Celosia
  - o Corn
  - Pineapple Plot
  - o Casava
  - Passion Fruit Vines
  - Rows of Blueberries
  - Blackberries
  - Grapes
  - End of the Line
- You may either walk back the way you came to get back to the starting location or look
  in the lower right-hand side of the screen and click the middle white button that looks like
  a structure with no walls. This will bring you to the doll house view. Click and drag to find
  the starting location and double click near the hardhat information point.

## The Greenhouse

- Look to the left towards the two greenhouses. Move towards the one closest to you and walk inside the door to explore the systems and plants inside.
- Points before reaching the greenhouse:



- o Head into the Greenhouse
- Teaching Greenhouse
- Points inside the greenhouse:
  - o High Wire Cucumbers
  - Hydroponics
  - Nursery, Transplant Production Area
  - Ebb and Flood Hydroponic System
  - Nutrient Film Technique System
- Walk back to the starting location the way you came or use the doll house view.

## **Caterpillar Tunnel**

- From the starting location, move along the left side of the first row of crops to get to the caterpillar tunnels.
  - Yossef's Raised Bed
  - Head to The Caterpillar Tunnel
  - Caterpillar Tunnel
  - Precision Irrigation and Fertilizer Injector
  - Potted Blueberry Plants
- Go left at the end of the tunnel to learn about the VertiGrow systems and strawberries growing in the garden.
  - Continue Forward to see the VertiGrow and Strawberries
  - Acidifying Nutrient Injector
  - Blackberry Plants
  - VertiGrow Towers
  - Protected Tabletop Strawberry Production
  - Strawberry Plants
  - o End of the Line

## **Acknowledgments**

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