GoFarm Hawaii: Developing an Online Curriculum to Train Beginning Farmers Statewide

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Food (in)Security in Hawai‘i

- Most remote, populated land mass on earth
- More than 85% of food is imported
The Graying of Hawaii’s Farmers

Average Age of Principal Operator, 1982 to 2012

Source: http://sustainableagriculture.net/wp-content/uploads/2014/05/increase-age.png
GoFarm Hawaiʻi

• Hawaii’s premier beginning farmer development program
• Established in 2012
• Available to all committed trainees
• Includes science-based curriculum and incorporates rigorous hands-on and business training
# The GoFarm Hawai‘i Model

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Duration</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>AgCurious</td>
<td>Interested in farming?</td>
<td>2-3 hours</td>
<td></td>
</tr>
<tr>
<td>AgXposure</td>
<td>Think farming might be right for you?</td>
<td>3 days</td>
<td></td>
</tr>
<tr>
<td>AgSchool</td>
<td>Want to learn farming?</td>
<td>4 months</td>
<td>2x/week</td>
</tr>
<tr>
<td>AgPro</td>
<td>Want to be a farmer?</td>
<td>6 months</td>
<td>2x/week</td>
</tr>
<tr>
<td>AgIncubator</td>
<td>Want to start farming?</td>
<td>Up to 2</td>
<td>months (optional)</td>
</tr>
<tr>
<td>AgBusiness</td>
<td>Ready to start your farm?</td>
<td></td>
<td>Transition guidance</td>
</tr>
</tbody>
</table>

**Ag-Producer**
GoFarm Locations

- Kauai CC
- Windward CC
- Leeward CC
- UH Maui College
- The Kohala Center
- CTAHR Waimalano Research Station
GoFarm’s Online Curriculum

AgSchool-4 months
AgPro-6 months

Modules include

• Field Preparation
• Maintenance & Management
• Post Harvest
• Business (AgPro)
• Advanced Topics (AgPro)
Online Modules – Benefits

• Complement face-to-face sessions
• Compatible with flipped-classroom
• Quizzes identify areas of weakness
• Ensures uniformity and builds community across GoFarm sites and cohorts
• Facilitates expansion to new GoFarm sites
Online Modules – Features

• Video library of GoFarm coaches and experts – UH faculty and UH Extension Agents
• Discussion Board facilitates interaction by students and coaches
• Innovative educational materials
• Includes additional topics of interest for students
• **Future: Wiki-style content enhancement by participants**
Architecture of Modules

Intro to Soils

- **General Overview**
  Soil health is the foundation of productive farming practices. The goal is for water, nutrients, oxygen, and organic matter to hold their essential nutrients and improve soil structure.

- **Student Learning Outcomes**
  Students will be able to:
  - describe the process of soil development and formation
  - demonstrate and describe qualities of soil texture and structure
  - describe the effects of pH on soil and crop health
  - propose ways to change pH to optimize crop production
  - evaluate the pros and cons of till, no-till, and minimum till approaches

- **Weekly Quiz**
  All AgSchool quizzes are administered through Laulima. If you are i.
  - Sample Soils Quiz with answers

- **Lecture Content**
  Please go over the following resources before class. These will help.

- **Readings**
  - Introduction and Chapter 2 from *Building Soils for Better Crops*
  - Pages 97-102 from *Gardening at the Dragon’s Gate* by Wendy J. Peter
  - Fact Sheet 18: Record Keeping for New Entry Sustainable Farmers

- **Recommended Videos**
  - Introduction to Soils by Jay Bost
  - Understanding and Managing Soils for a Healthy and Productive Landscape by Dr. Jonathan Deenik
  - *Symphony of the Soils*. Click here to view the trailer on Youtube.

- **Study Guide**
  - Introduction to Soils
  - Student Workbook
  - Glossary
Example – Compost Diagnosis Flowchart

- Provides diagnostic pathway that students can follow
- Suggests possible causes and actions to remedy problems
Example – IPM Activity

Learning is scaffold for students

• Review information
• Guided practice identifying plants
• Feedback
• Self Check
Mahalo!
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- UH, Leeward Community College
- UH, Kauai Community College
- UH, Agribusiness Incubator Program