

Horticulture Enterprise Management (Hort/Ag EdS 465)–Year Review

RFR-A1417

Leah Riesselman, graduate student
Hort/Ag EdS 465 instructor
Gail Nonnecke, university professor and
Morrill Professor
Department of Horticulture

Introduction

Originally introduced in the spring of 2011, the cross-listed Hort/Ag EdS 465 course was reintroduced Spring 2014 to the horticulture curriculum at Iowa State University. Modeled after the Ag 450 farm, the purpose of Hort/Ag EdS 465 is to provide students with the experience in managing a horticultural farm and to engage students in active learning of running a horticulture enterprise.

The course is designed as a repeatable, three-part course, with curriculum taught in spring, summer, and fall semesters. All business decisions and operations are conducted by the students enrolled in the course, under the advisement of their instructors. Decisions made by the students include the following: development of company's mission and vision statements, identification of risks and risk management procedures, crop selections and development of enterprise budgets, proposed marketing plan(s), fruit and vegetable crop production practices, and a food safety plan. The “farm” is located at the Horticulture Research Station (HRS), which provides land and operational management assistance including equipment, storage, and processing facilities.

2014 Overview

Spring. A total of 10 students were enrolled in the Spring 2014 Hort/Ag EdS 465A course. Lecture periods provided students with the

opportunity to learn from experienced professionals among the ISU community and the outside workforce. At the beginning of the semester, students were divided into four committees that made decisions related to the planning of business operations. Lab periods were used to conduct business meetings, vote on decisions introduced by committees, and approve sections of their business plan. The class also established their business name: Top Shelf Farm.

To develop sound marketing outlets for their crops, the Spring 2014 class identified a gap in their retail market. To reach the class's vision of community connections, students saw a tremendous possibility of selling their produce directly to consumers via Internet sales. A separate committee, which consisted of students Brad Bathey, Katie Carver, Amanda Groleau, and Savanna Lyons, developed ideas on how a website that sold produce would function, what content would be included, the customer demographic reached, and possible funding sources. Through ISU community connections and educational vision of the class, the Leopold Center for Sustainable Agriculture awarded a grant to the class (Top Shelf Farm) and the HRS for website development. The funds covered website development by Joshua Pilcher, Instructional Support Specialist with the Brenton Center, and an HRS summer intern, Megan Cannon.

Summer. The official collaborated website, <https://foodlo.cals.iastate.edu/>, launched in late July. Because the Hort/Ag EdS 465B course was not taught in the summer semester, HRS summer interns were able to gain vital experience in developing and processing produce orders and creating customer relations with the ISU community. In addition,

awareness of the website among the ISU community was accredited to articles published by the ISU Daily, Inside Iowa State, and the Leopold Center for Sustainable Agriculture. Produce sold on the website was sourced from Top Shelf Farm, the HRS, and Student Organic Farm.

Fall. Six students, including two students who carried over from Spring 2014, enrolled in the fall. High tunnel and field crops selected by the spring semester students were managed and harvested by the students. Lab periods were designed to provide students the experience of produce processing and Good Agricultural Practices (GAP), including the development of a food safety plan. Students also managed website product postings, packaging, and sales. In October, a seminar about the produce website was presented to the Horticulture Department.

Website summary. Total website sales included \$3,661 from the months of July through December. Nearly 50 percent of the total produce sales occurred in August and September. During peak sales times, average weekly labor, website management, and customer relations cost totaled around \$95, with an estimated annual cost of \$1,620. The top five commodity crops sold included apples, red raspberries, cherry tomatoes, Celebrity tomatoes, and leafy greens. Red raspberries, cherry tomatoes, and Celebrity tomatoes were all grown in high tunnels.

Conclusions

The collaboration between the Horticulture Research Station and the Hort/Ag EdS 465 class served as a vital component in the development and success of the produce sales website for several reasons, including: land availability, operational/management assistance, sanitation and storage facilities, labor for compiling and processing orders, and increased product volume. Maintaining semester fluency of students and HRS interns will be essential in ensuring collaboration of the two parties involved.

The need for future fruit and vegetable producers is a growing concern in agriculture today. The goal is for the Hort/Ag EdS 465 class to continue to provide students with the educational framework and experience in managing an enterprise, in addition to providing a model for growers to capture the online retail market.

Acknowledgements

We thank Brandon Carpenter and Nick Howell for their continued support of the class and farm operations. We also thank HRS employees and Hort/Ag EdS 465 students Brad Bathey and Mark Rippke for their dedication and assistance with produce inventory, website organization, website posting, and customer relations. Thanks to Mark Honeyman and Jeff Iles for their financial support of the class and instructor funding. Finally, we thank the Leopold Center for Sustainable Agriculture for funding of website development.