## Student Farm Management II: Harvesting, Marketing and Finances

## STOCKSCH 497SF - 2 Credits

# Tuesdays and Thursdays 11:30AM-12:45PM 103 CNS Research and Education Greenhouse

This course should be taken concurrently with STOCKSCH 498E lab section Tuesdays and Fridays 6:55 AM -9:05 Agricultural Learning Center

#### Instructors:

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#### **Course Description**

In this class students will learn the practical application of harvesting and marketing techniques used for the sale of organic vegetable crops. Students will complete a financial analysis of the current growing season and make recommendations for the next production cycle.

#### **Course Goals**

Students gain knowledge and practical skills related to vegetable harvest and post-harvest care, marketing and financial analysis of a diversified organic vegetable farm. Specifically, students will adopt the following practices:

- Identify and deliver wholesale, retail and CSA vegetable order requests for identified market needs determined in the previous winter/spring semester.
- Create specific crop analyses based on production plans and practices developed and implemented during the growing season.
- Evaluate production practices and efficiencies of small farm business management learned in the classroom and applied during the harvest and sales of vegetable crops.
- Identify financial responsibility of program sustainability through income management.
- Create research paper for publication in the Student Farming Enterprise Handbook.
- Demonstrate safe operation of farm and greenhouse equipment used for vegetable harvest, storage and production.
- Apply learned marketing skills at various markets including wholesale, student farmers market, CSA and student businesses.
- Recognize proper food safety practices used on the farm and follow guidelines of Farm Safety Plan.
- Operate low-energy appropriate vegetable crop storage technologies.
- Utilize successful season extension and protected field production technologies.

## **Required Textbooks**

The Organic Farmer's Business Handbook, A Complete Guide to Managing Finances, Crops and Staff – and Making Profit. By Richard Wiswall – Chelsea Green Publishing 2009. Cost \$34.95

Sharing the Harvest: A Citizen's Guide to Community Supported Agriculture, 2nd Edition. By Elizabeth Henderson - Chelsea Green Publishing, 2007 Cost is \$25

The New England Vegetable Management Guide 2014-2015 edition. Available through UMass Extension Bookstore or through Instructor. Cost is \$25

Wholesale Success - A Farmer's Guide to Food Safety, Postharvest Handling, Packing and Selling Produce. Available online at <a href="https://www.familyfarmed.org">www.familyfarmed.org</a>. Cost is \$70

## **Outline of Topics Covered**

Markets – wholesale, retail and CSA. Identification of customers, their expectations and logistics for harvest and delivery.

Harvest and Post-Harvest – Techniques used in the field, packaging, crop requirements for short and long term storage.

Food Safety – Requirements of and implementation of Food Safety Plan –GAP Certification and Standard Operating Procedures used on the farm.

Food Systems, the Environment and Public Health – A look at the importance of maintain a healthy food system on campus.

Animal Rotations on the Small Farm – Popular livestock options for small farms.

Cover Crops -Determining best cover crops, calibration of equipment and planting techniques.

Alternative Cropping systems – permanent beds, reduced tillage systems, soil amendments, alternative fuels.

Financial Analysis – Calculate profits gained from the sale of vegetable crops. Income- Expenses = Profit.

Next Steps –Resources for beginning farmers, career options, access to capital. Identify all of the costs of farming on your own.

## **Course Requirements**

**Creation of Crop Analysis.** Creating an analysis for crops that were grown, harvested and sold during the field season is the core curriculum for the fall semester. Each student will create a complete analysis for 2-3 crops.

**Participation in weekly classes.** Participation is essential (ie, required!). Class will include lectures, farm visits, discussion, hands-on training, meetings with invited guests, and group decisions and problem solving. Our schedule is driven by what we need to know in order to make decisions in a timely manner to achieve our harvest and marketing goals. If you need to miss class for illness or another problem, let the instructors know via email in advance.

**Participation in field and greenhouse work.** This will include harvesting, cover cropping, greenhouse planting for early spring harvest, low tunnel installation, equipment maintenance and winterization. There will be field and greenhouse work that needs to be done outside of class time.

**Service Learning.** Working on local area farms will be required. Each student is required to spend at least 4-6 hours volunteering on a local vegetable farm. Students will work with the farm crew doing whatever is

needed at that time of the season, and are encouraged to explore conventional operations. A short reflective paper is due after the farm visit.

**Special Topic Research Paper and Presentation.** Each student will be required to write an 8-10 page research paper for publication in the Student Farming Enterprise Student Handbook. Students will be expected to present their paper to their classmates at the end of the semester.

**Fundraising and Public Relations.** Involvement in activities relevant to the ongoing success of the program will be required. Examples of events include Local Food Day, Welcome Back Students, and New Student Orientation. A short paper describing any public relation experiences will be required at the end of the semester.

## **Grading**

Grades will be based on a student's quality and completion of written work in a timely manner and ability to complete the course requirements listed above. A grading rubric will be handed out at the first class with a detailed point system for each assignment and course requirement.

### **Course Policies**

**Late Assignments** – All assignments received after due date will be penalized 5 points each day past the due date. Assignments will not be received a week after due date without instructor permission.

**Attendance Policy** – Attendance is mandatory for both STOCKSCH 397SF and STOCKSCH 398E. After 2 unexcused absences attendance grade will drop by 5 points for each absence.

#### **Academic Honesty Statement**

The integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research. Academic honesty is therefore required of all students at the University of Massachusetts Amherst. Academic dishonesty (cheating, fabrication, facilitating dishonesty) is prohibited in all programs of the University. Plagiarism is the representation of another person's word and ideas as our own. This misrepresentation is a breach of ethics that seriously compromise a person's reputation. Professional careers have been ruined by revelations of plagiarism. Students, therefore, must scrupulously acknowledge sources to give proper credit for borrowed materials. The following rules should be observed to make sure that the distinction between your own words and ideas and those of others is justly maintained. Submitting a paper that is completely the work of another person is plagiarism in its most extreme form. Any student found plagiarizing all or part of an assignment should expect severe penalties, ranging from failure in that assignment to being recommended for a hearing before a judiciary body of the University. Any incident of plagiarism or other form of academic dishonesty in this class will result in recommendation for dismissal from the University of Massachusetts.

#### **Disability Statement**

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), Learning Disabilities Support Services (LDSS), or Psychological Disabilities Services (PDS), you may be eligible for reasonable academic accommodations to help you succeed in this courses. If you have a documented disability that requires an accommodation in the course, you should notify the instructor within the first two weeks of the course so that appropriate arrangements can be made.