

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: HRT 195

Credits: 3

Course Title: Topics in Horticulture: Hydroponics

Course Description (including lecture hours, lab hours, total contacts)

Introduces students to the general knowledge of water and nutrient relationships as they relate to soilless media. Examines plant/water relationships and optimum nutrition. Lecture 3 hours per week.

General Course Purpose

To give students the knowledge and tools needed to successfully reproduce hydroponic/aquaponic trials. High yield plant production will be the focus of the course. This course serves as an elective for the Horticulture AAS degree program.

Course Prerequisites/Corequisites (*Entry-level competencies **required** for enrollment*)

none

Course Objectives (Each item should complete the following sentence.)

Upon completing the course, students will be able to:

- a. Successfully build their own hydroponic production system.
- b. Identify issues and solve problems as they relate to plant health.
- c. Grow high yield crops and create inexpensive production units from readily available materials.

Major Topics to be Included

- a. Hydroponics
- b. Aquaponics
- c. Plant nutrition
- d. Plant/water relationships
- e. Creative plant production systems

Effective Date of Course Content Summary (Month, Date Year): April 29, 2011