

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

**Course Prefix and Number:** HRT 115

**Credits:** 3

**Course Title:** Plant Propagation

**Course Description:** Teaches principles and practices of plant propagation. Examines commercial and home practices. Provides experience in techniques using seed spores, cuttings, grafting, budding, layering, and division. Prerequisites: None. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**General Course Purpose:** Introduce and demonstrate plant propagation methods used in the home garden and commercial applications. This includes sexual and asexual methods commonly used in the horticulture industry.

**Course Prerequisites and Co-requisites:**

None

**Course Objectives:**

Upon completing the course, the student will be able to:

- a. Demonstrate grafting;
- b. Demonstrate cuttings;
- c. Demonstrate layering;
- d. Demonstrate tissue culture;
- e. Demonstrate breeding techniques;
- f. Demonstrate seed preparations; and
- g. Demonstrate seed propagation.

**Major Topics to Be Included:**

- a. Plant anatomy and physiology related to propagation
- b. Plant genetics
- c. Propagation structures, environment
- d. Sexual propagation and seed handling
- e. Techniques of propagation by seed
- f. Aspects of asexual propagation
- g. Techniques of cuttings
- h. Techniques of grafting
- i. Aspects of micro propagation
- j. Propagation by specialized stems

**Effective Date of Course Content Summary:** February 12, 2009