

# Piedmont Technical College Course Syllabus

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## COURSE INFORMATION

**Course Prefix/Number:** HRT 133

**Title:** Basic Plant Propagation

**Responsible Division:** Industrial Division

**Last Day to Withdraw from this Course:** For the last date to withdraw from this course, consult the current *Student Calendar*.

### Course Description:

For course, credit hour, pre-requisite(s) and co-requisite(s) information, visit the Detailed Course Information page: [www.ptc.edu/courses/HRT133](http://www.ptc.edu/courses/HRT133).

### Textbook and Other Materials:

For textbook information and additional required and/or supplemental materials, visit the [college bookstore](http://www.ptc.edu/bookstore) (www.ptc.edu/bookstore).

### Proctored Examinations:

Proctored examinations for distance learning courses taken at non-PTC campuses may require a proctoring fee for each exam taken.

## COURSE POLICIES

Course policies are available online through the *Academic Catalog* and *Student Handbook*. Visit the [Course Policies page](http://www.ptc.edu/syllabus/policies) (www.ptc.edu/syllabus/policies) for a detailed list of important policies and more information.

## GRADE POLICY

Detailed grading policy information can be found on the [Grading Policy webpage](http://www.ptc.edu/grading-policy) (http://www.ptc.edu/grading-policy). Final grade appeal information is available in the [Academic Catalog](http://www.ptc.edu/catalog/) (http://www.ptc.edu/catalog/).

## **ACCOMMODATIONS**

### **Accommodations for ADA:**

Information is available on the [Student Disability Services webpage](http://www.ptc.edu/ada) (<http://www.ptc.edu/ada>).

## **TITLE IX HARASSMENT AND SEXUAL ASSAULT INFORMATION**

In accordance with Title IX of the Education Amendments of 1972, Piedmont Technical College does not discriminate on the basis of sex in its education programs or activities. Title IX protects students, employees, and applicants from sex discrimination in admissions and employment to include discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. More information regarding Title IX, including contact information for the Title IX coordinators, is available at [Title IX Harassment and Sexual Assault Information](https://www.ptc.edu/about/legal-disclosures/title-ix-harassment-and-sexual-assault-information) (<https://www.ptc.edu/about/legal-disclosures/title-ix-harassment-and-sexual-assault-information>).

## **RATIONALE**

### **Why do I need this course?**

The ability to reproduce plants is one of the most fundamental skills of a horticulturist, and yet it can be quite challenging, especially on a commercial level. Plants can be propagated by seed (sexually) or by cuttings (asexually). Some seeds are easily germinated whereas some seed can require cold or heat treatments, or physical or chemical scarification in order to germinate and grow. The challenge to propagating plants from cuttings is the need for the cuttings to form new (adventitious) roots at the location where the cutting was removed from the parent plant without the plant desiccating from lack of a root system providing water to the plant. Propagation techniques have been developed and researched for decades and very specific protocols have been developed for individual challenges of each species. This course introduces students to the techniques and established protocols for successfully propagating plants both sexually and asexually.

## **PROGRAM INFORMATION**

For program information including required courses, program learning outcomes, gainful employment information and advisement information,

refer to the Academic Program webpage. Go to [Academics](http://www.ptc.edu/academics) (<http://www.ptc.edu/academics>), select your program, and then select Credentials Offered.

## **COURSE STUDENT LEARNING OUTCOMES**

Upon successful completion of this course and/or clinical, each student will be able to:

- Explain the plants physiological basis for sexual and asexual reproduction.
- Summarize typical collecting, storing, and germinating protocols for seed.
- Summarize protocols for the successful rooting and finishing of plants propagated from cuttings.
- Review grafting and budding techniques and protocols.
- Review layering and air-layering techniques and protocols.
- Explain the basic concepts and importance of micropropagation.

## **GENERAL EDUCATION COMPETENCIES**

### **Piedmont Technical College General Education Competencies for All Graduates:**

*This course may address one or more of the following General Education Competencies (assessment will be stated when applicable):*

#### **Communicate effectively.**

Assessment:

N/A

#### **Apply mathematical skills appropriate to an occupation.**

Assessment:

N/A

#### **Employ effective processes for resolving problems and making decisions.**

Assessment:

N/A

**Demonstrate the basic computer skills necessary to function in a technological world.**

Assessment:

N/A

*To validate proficiency in the general education competencies, students in some programs will be tested using Work Keys.*