

PORTLAND COMMUNITY COLLEGE
Rock Creek Campus

LAT 109

PLANT PROPAGATION

Winter 2007 3.0 credits

INSTRUCTOR: Loren Radford

ADMINISTRATIVE ASST – LANDSCAPE TECHNOLOGY : Cecile Chevraux,
503-614-7257, cchevrau@pcc.edu

OFFICE: Rm 202, Bldg. 7, Rock Creek Campus

OFFICE HOURS: Monday, 9 – 11:30 PM (walk-in),
Tuesday, 11:00 AM –2:00 PM (appt.)
Friday, 9:00 – 11 AM (appt)

(For best availability (besides the walk-in times, call or email ahead, as I may be either at my desk, Bldg 4 and grounds, or the library)

TELECOMMUNICATION RESOURCES:

Telephone: Office: 614-7231(live or voice mail)

FAX: 614-7050

E-mail: Office: lrادford@pcc.edu

TEXT: The Reference Manual of Woody Plant Propagation, Dirr & Heuser

COURSE DESCRIPTION: This course introduces the students to sexual and asexual methods of propagating plants. Topics covered will include propagation equipment and media, stem cuttings, grafting, division and separating, layering and seed propagation.

PREREQUISITES: None though a basic familiarity with Pacific Northwest plant materials is helpful.

LABORATORY: The laboratory is an important and required portion of the course. This is an applied course meaning its emphasis is on the application and skills of propagation. The lab is where you learn to apply it and consistent attendance is critical to the success of the student.

Most of the work will be done in the propagation room and the greenhouse. It is essential that students orient themselves to these facilities and follow their rules.

REQUIRED EQUIPMENT AND SUPPLIES: The student needs to provide for their own personal lab work the following equipment and supplies by the second lab:

- Sharp pruning shears (bypass or scissors type preferred)
- Cuttings, grafting stock, seeds (your instructor will explain what PCC will provide and what you need to provide, two weeks before the lab required)

Other suggested items which the student may like to have (but not required)

- Grafting knife
- A small pair of scissors or micro-shears
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GRADING: Your grade in this course is based on the following components:

Mid-term Exam	25%
Final Exam	25%
Lab Participation	10% (based on lab participation, cleanup, attendance, volume and quality of lab project work)
Competencies	30%
Propagation Log	10%

Final grades will be assigned as follows:

- A = 90 - 100
- B = 80 - 89
- C = 70 - 79
- D = 65 - 69
- F = 0 - 64

EXAMINATIONS: There will be two examinations given during the course. Should you be absent the day of the exam with an excusable absence you must follow the procedures below for scheduling a makeup exam. No one will be excused from an exam for not being prepared or being absent the class before. It is your responsibility when absent to find out what was covered in the class.

MAKEUP EXAMINATIONS: Makeup examinations are discouraged and should only be resorted to when the student must miss the regularly scheduled examination due to a medical or family emergency, or National Guard or Armed forces duties. In order to be eligible for a makeup exam the following conditions must be met.

1. The student must notify the instructor of their absence from the regularly scheduled exam within 48 hours of the starting time of that exam and make arrangements with the instructor for a time to take the makeup.
2. The student must have a bone fide reason that is acceptable to the instructor.
3. Examinations must be made up within 7 school days of the examination date.

ACADEMIC HONESTY: You are expected to do your own work on all tests, assignments, and lab projects. If the instructor suspects a student of cheating during a test or plagiarism in an assignment or lab project, the instructor will award that student a grade of "0" for that test, assignment or project. Communication of any nature during the examinations is considered unacceptable.

WITHDRAWALS: Should you feel you are unable to meet the requirements of the course and choose to withdraw, it is your responsibility to withdraw officially through the Business Office. An automatic grade of "W" will be assigned if you withdraw prior to the official drop date. Students who stop attending and do not withdraw should expect to receive an "X" or "F" as appropriate.

INCOMPLETES: Students who are making satisfactory progress and have completed a substantial amount of the assigned work and through emergency circumstances, that are beyond their control are not able to complete their course work may request a grade of "I" or incomplete. The student is responsible for the arrangement of this grade, subject to instructor approval, and must sign a document specifying the work needed to complete the course. All this must be done prior to the last week of the course. .

Lack of preparation for tests or projects or an increased work schedule does not constitute a reasonable excuse for an incomplete.

AUDITS AND PASS/NO PASS GRADES: Audit students are not assigned grades. An "AUD" will appear on the transcript. Letter grades are not given for the Pass/No Pass option. A "Pass" does require work to be done to a "C" standard. If you wish either of these two options, please see the instructor before the end of the third week. No changes in the grading scheme will be made after that date.

COMPETENCIES: Competencies are skills which the student demonstrates to the instructor usually during lab time. A list of the competencies with the maximum points awarded for each competency is attached to this syllabus.

When a student feels that they can successfully perform a competency, it is their responsibility to grab hold of the instructor and say “ Let me show you competency # ____” and proceed to get the equipment and supplies necessary to do that and then proceed to do it. The instructor will then give full, partial, or no points based on their assessment of your competence in that skill. You may redo competencies twice to better your score.

Your instructor will hand you a record form by which you can track the progress of your competencies and their points. Instructor time to observe competencies will be your most frustrating limiting factor, so a word of warning - Do not wait until the 11th hour to start doing them. Try to work on them as the course progresses rather than all at the end. If the instructor runs out of time because you've waited until the bitter end, then the fault and lack of grade will be your own. Also competencies can only be performed when materials and equipment are readily available. (Translation: If we're doing grafting, don't wait for 4 weeks afterwards to show me grafting competencies.)

STUDENT PROPAGATION WORK: Some propagation work will be assigned by the instructor using PCC materials. You may also bring in your own materials to propagate, however for any propagation done at PCC using PCC materials and sitting in PCC greenhouses – there is a “cut” for PCC. Your lab fees do not begin to cover the cost of media, pots, tools, greenhouse maintenance, heat, and water. All of the operating supply budget for this class comes from the proceeds of our spring plant sale. Some of what students propagate in this class goes towards this plant sale. Here’s the breakdown:

Student Supplied Propagation Stock (Cuttings, grafting, seeds) – Student share 50%; PCC 50%
PCC Supplied Propagation Stock (Cuttings, grafting, seeds) – Student share 20%; PCC 80%

You are limited in how many flats worth of cuttings you can propagate, how many grafts, and how many flats of seeds, as we have limited bench space and many students. Your instructor will give you the limits and monitor adherence to them.

Propagation work which is not ready to be removed from the greenhouse at the end of the course may stay there until April 15 after which it becomes property of the college and may be disposed of as seen fit. The college is also not responsible for any plant material lost due to power outages or watering failures. Students should monitor their propagation work on a weekly basis.

The greenhouse is only available during the plant propagation lab times scheduled for your class.

CELL PHONES: Turn ‘em off! (at least during lecture).

STUDENTS WITH DISABILITIES: If you have a disability and need an accommodation, please make arrangements to meet with the instructor outside of class. PCC students requesting accommodations must provide documentation of disability and work with The Office of Students with Disabilities (OSD) at 977-4341

TUTORIAL ASSISTANCE: Students needing tutorial help with math, writing or reading comprehension are encouraged to contact Annette Murphy, 503-614-7665, amurphy@pcc.edu, M-F, 8:00 AM – 5:00 PM for free tutorial help. Annette has been very helpful in the past in working with students on landscape math applications.

PLANT PROPAGATION
SCHEDULE OF CLASSES

- WEEK #1 Introduction to Propagation
Propagation Media
Lab: Introduction to the Greenhouse & Propagation Facilities, Containers, Taking
Conifer Cuttings
- WEEK #2 Stem Cuttings: Conifer, Hardwood
Disease Control in the Greenhouse
Lab: Conifer Cuttings
- WEEK #3 Stem Cuttings: Softwood, Semi-Hardwood, Herbaceous
Insect Control in the Greenhouse
Lab: Hardwood Cuttings
Herbaceous Cuttings
- WEEK #4 Layering: Tip, Air & Mound Layering
Greenhouse Irrigation Systems
Lab: Layering
- WEEK #5 **!!MID-TERM!!**
Grafting: Cleft and Side Wedge Grafts
Lab: Side Grafting, Cleft Grafting
- WEEK #6 Side Veneer Grafts, Whip & Tongue, Budding
Managing Greenhouse Facilities
Lab: Whip & Tongue Grafts
- WEEK #7 Seed Collecting, Storing & Development
- WEEK #8 Seed Sowing
- WEEK #9 Division & Separating
Lab: Division
- WEEK #10 Tissue Culture
- WEEK #11 FINAL EXAM

When a specific lab topic has not been indicated that means it is an open lab. Open lab is for students to do whatever propagation work is of interest to them, and they are encouraged to do as much as possible up to our space limitations. Those limitations are

Cuttings: _____

Grafts: _____

Seeds: _____