

## HT8137: Plant Propagation - Winter 2020 Syllabus

Linn Benton Community College, Agricultural Sciences Department, CRN 31074

### Instructor Information

Jenny Wetzel (lectures) wetzelj@linnbenton.edu      Miriam Edell (labs) edellm@linnbenton.edu  
Office: WOH 124      Office: WOH 123  
Office Hours: by appointment      Office Hours: by appointment

### Course Information

Lecture: Tuesday and Thursday, 8:30 am – 9:50 am, WOH 212  
Lab: Tuesday, 1:00 pm – 3:50 pm, WOH 122 or Greenhouse  
4 credits

### Course Description

This course will provide an introduction to the principles, techniques, and facilities used to propagate ornamental plants, fruiting trees, and vegetables. Topics include seed propagation, cuttings, grafting, budding, division, layering, and tissue culture.

### Student Learning Outcomes

The successful completion of this course will enable you to:

- Demonstrate sexual and asexual propagation techniques for plants commonly grown in the Pacific Northwest
- Discuss the biological principles of plant propagation
- Manipulate the propagation environment for optimum plant establishment

### Course Materials

Required Text: Plant Propagation by Alan Toogood

Online Materials: Lecture outlines and supplemental readings are available in the course Moodle page (<http://elearning.linnbenton.edu>).

### Assignments, Exams, and Grading

Grading is based on mastery of the course subject matter. Points towards your final grade will be awarded as follows. Assignments and point totals may change.

Graded Assignments	Number of Possible Points	Approximate Percent of Final Grade
Labs: 10 at 10 pts each (lowest dropped)	90	32
Exams: 3 at 30 pts each	90	32
Reading Guides: 9 at 4 pts each (lowest dropped)	32	11
In-class Activities: approx. 12 at 1 pt each	12	4
Final Project	60	21
<i>Total</i>	284	100

Tuesday	Tuesday Lab	Thursday	Reading Assignments
Course Intro and History of Propagation	Propagation Media and Cuttings	Propagation Media and Structures	<i>Toogood</i> : pg. 10-13, 32-35, 38-45 <i>Supplemental</i> : Growing Media for GH Production
Plant Life Cycles, Seed Structure	Seed Sowing	Seed Germination and Dormancy	<i>Toogood</i> : pg. 16-21
<i>Reading Guide 1 due</i>			<i>Supplemental</i> : Propagating Plants from Seed & Starting Plants from Seed (optional)
Plant Genetics, Hybrids, and Cultivars	Field Trip	Seed testing	<i>Supplemental</i> : Hybrids and Heirlooms from the OSA's Seed Saving Guide
<i>Reading Guide 2 due</i>		<b>Draft Project Description Due</b>	<i>Supplemental</i> : Raising Trees and Shrubs from Seed
Intro to Asexual Propagation and Grafting	Grafting and budding	<b>Exam I</b>	<i>Toogood</i> : pg. 22-27, 56-63, 108-109, 239-241
<i>Reading Guide 3 due</i>			<i>Supplemental</i> : Grafting and Budding & Grafting and Budding of Nursery Crops
Budding	Layering	Layering	<i>Toogood</i> : pg. 64, 105-107
<i>Reading Guide 4 due</i>			<i>Supplemental</i> : Air Layering for Diff. to Root Plants/ Layering Instr. for Home Gardeners
Plant Growth Regulators and Division	Plant Care and Seeding II	Specialized Stems and Division	<i>Toogood</i> : pg. 101, 234-235
<i>Reading Guide 5 due</i>			<i>Supplemental</i> : Plant Hormones and Growth Regulators & Selecting and Using Plant Growth Regulators for ...
Cuttings	Specialized Stems and Division	<b>Exam II</b>	<i>Toogood</i> : pg. Division 148-150, 254-255
<i>Reading Guide 6 due</i>			<i>Supplemental</i> : Propagation by Division & Bulbs and More
Treatment and Care of Cuttings	Cuttings	Tissue Culture	<i>Toogood</i> : Cuttings pg. 50-52, 94-101, 154-158, 236-238
<i>Reading Guide 7 due</i>			<i>Supplemental</i> : Herb.Plant Cuttings / Stem Cuttings of Shrubs, Trees
Nursery Production	Field Trip	Vegetable Seed I	<i>Toogood</i> : Sowing Seed 53-55, 102-104, 151-153, 216-219, 232-233, 256-257, 282-286
<i>Reading Guide 8 due</i>			<i>Supplemental</i> : Care and Handling of Micropropagated Plants
Vegetable Seed II	Field Trip	<b>Exam III</b>	
<i>Reading Guide 9 due</i>			
<b>Project Presentations - Date and Time TBD</b>			

Grading Scheme	
A	90 - 100%
B	80 - 89%
C	70 - 79%
D	60 - 69%
F	0 - 59.9%

### Reading Guides

Reading guides will help you focus on key terms and concepts. They will be posted each week on Moodle. The best time to complete the guide is while you are doing the reading assignment.

### In-Class Learning and Activities

This class will be a combination of lecture and active learning. There will be questions and activities in which you will be expected to actively participate, including several graded in-class activities and written reflections. It is important that you come to class so you do not miss out on these!

### Exams

There are three exams during the course of the term. Exams include multiple choice, short answer, and fill-in-the-blank questions based on lectures, readings, and labs.

### Labs

Labs are a critical component of the learning process in all science classes. They provide you with invaluable hands-on learning experiences and challenge you to use critical thinking. Because this is a lab class, **if you miss more than two labs you will earn a 0% for the lab portion of your final grade.** Labs are worth approximately 32% of your final grade, which makes attendance critical for passing the class. Each lab is worth 10 points and the lowest score will be dropped.

### Make-ups

Labs cannot be made up. Your lowest lab and lowest reading guide grades will be dropped. If you miss an exam it is your responsibility to contact me as soon as possible to schedule a make-up time in the Student Assessment Center in RCH 111. No make-ups will be given after the exam is handed back.

### Final Project

Each class member will present an individual term project during the last day of class in week 10 or during week 11 (finals week). The session will also be open to other students, faculty and staff. Each student will select a topic and prepare a table-top visual display and a write-up

about the topic (at least two pages). Your project topic will be your choice and hopefully is something that interests you! Some topic suggestions include:

- How to propagate a specific type of plant (cacti, aquatic plants, conifers, etc.)
- How to propagate a specific plant species (rose, apple tree, orchid, etc.)
- How environmental factors such as light, water, nutrients, and media affect plant propagation
- How to successfully germinate specific kinds of seeds

More information about the project will be discussed later in the term.

## **College Policies**

### **LBCC Email and Course Communications**

You are responsible for all communications sent via Moodle to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email.

### **Disability and Access Statement**

You should meet with your instructor during the first week of class if:

1. You have a documented disability and need accommodations.
2. Your instructor needs to know medical information about you.
3. You need special arrangements in the event of an emergency.

### **Request for Special Needs or Accommodations**

Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

### **LBCC Comprehensive Statement of Nondiscrimination**

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: [linnbentonadvocate.symplicity.com/public\\_report](http://linnbentonadvocate.symplicity.com/public_report)

### **Statement of Inclusion**

To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the

opportunity to interact with values, opinions, and/or beliefs different than their own in a safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce.

### **Title IX Reporting Policy**

If you or another student are the victim of any form of sexual misconduct (including dating/domestic violence, stalking, sexual harassment), or any form of gender discrimination, LBCC can assist you. You can [report](#) a violation of our sexual misconduct policy directly to our Title IX Coordinator. You may also report the issue to a faculty member, who is required to notify the Coordinator, or you may make an appointment to speak confidentially to our Advising and Career Center by calling 541-917-4780.

### **Campus Police/Emergency Resources**

You may review emergency services and resources at the LBCC [Public Safety website](https://www.linnbenton.edu/faculty-and-staff/college-services/public-safety-emergency-planning-ehs/index.php) (<https://www.linnbenton.edu/faculty-and-staff/college-services/public-safety-emergency-planning-ehs/index.php>). Campus Safety can be reached using the 'Code 2' button on any campus phone or by dialing x411 on campus or (541) 917-4440 off campus. Dial 911 for off campus emergencies.

### **Changes to the Syllabus**

I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class through a Moodle Announcement or through LBCC email.

## **Support Services Available**

### **Learning Center, Writing Center, and English Language Learners Center**

The learning center provides academic support and a comfortable place to study. It is located on the second floor above the library. It also provides free tutoring services for all classes.

### **Library**

The LBCC Library is the main library on campus and offers many helpful resources, including computers and printing.

## **Class Policies**

### *Behavior and Expectations*

Students are most successful when they ask questions, actively participate in class, and complete assignments. The more effort that you as the student put in, the more you will get out of this class. My role as an instructor is to support your learning process, so if you have any questions or concerns, please contact me or make an appointment during office hours.

### *Attendance*

Students are expected to attend all lectures and labs. If you miss a class, it is your responsibility to determine what you missed, obtain lecture notes, make-up assignments (when possible), and to keep track of upcoming assignments and due dates.

### *Guidelines for Communication*

My primary communication method with you is through your **Linn-Benton email address** and our **Moodle class page**. Check your LBCC email! If you don't, you will miss emails from me regarding assignments, due dates, and exams.

### *Academic Integrity*

This class is highly collaborative; however, there are expectations for individual work. If it is ever unclear to you when work is required to be done individually, please ask. Any cheating, plagiarism, etc. may result in a zero and possible recommendation to the administration for further consequences. You are held accountable to the [Student Code of Conduct](#), which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

### *Statement of Respect*

I will make every attempt to create an environment free of distraction and one open to free discourse. The college environment is one of exploring ideas, but also in a context of mutual respect for your peers and instructors. If a pattern of disrespect develops the instructor reserves the right to discuss appropriate behavioral expectations with individuals who may not fully understand this responsibility. At no time will a hostile or condescending classroom environment or discussion be permitted.

### *Use of Cell Phones and Laptops*

Cell phones are required to be silenced and put away during class. Cell phones are a part of life but they are a distraction to a productive learning environment, so put them away during class. Laptops are allowed in class but must be used only for class-related activities, such as taking notes or accessing online assignments. I reserve the right to limit laptop use in class if they become a distraction.