

**Mercer County Community College
Science and Health Professions Division
OHT 219 – Plant Propagation
Course Outline
Fall 2007**

Credits: 3
Lecture Hours: 2
Laboratory Hours: 2

Lecture Instructor: Amy E. Isenecker, Assistant Professor
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Lab Instructor: Marie Wszolek
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Required Text: *Plant Propagation: Principles and Practices*
Authors: Hartmann, Kester, Davies and Geneve

Catalog Description: Principles and techniques in the selection, propagation, and growth of garden flowers, greenhouse crops, woody plants, turfgrass, and plants for interior landscape.

Pre-requisites: OHT 101 or permission of the coordinator

Grading: Grades will be based on the following system.

Midterm Exam	150 points
Final Exam	150 points
Lecture Quizzes	120 points
Lab Notebook	150 points
Attendance/Particip.	<u>60 points</u>
Total	640 points

Explanation of the Points System:

Lecture Exams – The midterm exam will be given in lecture and is based on lecture material. The final exam is cumulative with an emphasis on the second half of the course. The midterm exam date is listed in the course outline. The date of the final exam is to be announced. We reserve the right to re-test you if a grade received is not consistent with your normal performance. You must show up on-time to take your exams. If you are late to class to take an exam, and one of your classmates has already finished the exam and left the room, you will not be allowed to take it. In case of an emergency, you must call within 24 hours of the exam in order to do a make-up.

Lecture Quizzes – Quizzes will be given in lecture each week and will cover material from the previous lecture. Each quiz is worth 10 points and will be given at the beginning of lecture. The lowest quiz grade will be dropped at the end of the semester. You will not be given extra time to complete the quiz if you show up late, and no make-up quizzes will be given.

Lab Notebook – A detailed lab notebook must be kept for the duration of the semester. This lab notebook should be a summary of the lab activities for each lab. You should include information specific to how you propagated plants during lab; conditions that propagated plants are kept under; success rate; conclusions made during lab; information given during lab; etc. Your lab notebook must be turned in each week for a weekly review. Your lab notebook review is worth 10 points per week.

Lab Attendance and Participation – Each week in lab, you will earn a maximum of 4 points for attendance and participation. You will lose the points if...

- Failure to attend lab = -4
- Show up late to lab = -2
- Leave lab early = -2
- You show up to lab (including field trips) without proper foot wear = -14

Cell Phones – Cell phones must be turned off during lab and lecture. If they do go off, you will lose 5 points off from your semester total for every occurrence. If you have an extenuating circumstance that requires your phone to be on, please inform your instructor.

Lab Dress Code – You **must** wear sturdy shoes for lab. This means no open-toe shoes, sandals, flip-flops or slippers.

Behavior Statement – I encourage participation in my course. I enjoy you asking questions and sharing your experiences. I, however, will not tolerate any of the following behaviors in my course. These behaviors will result in your dismissal from class for the day.

- Physical or verbal threatening behavior or derogatory remarks towards the instructor and/or fellow classmates.
- Using cell phones during class – this includes text messaging.
- Carrying on side conversations.

Statement of Academic Integrity:

“Any student who a) knowingly represents the work of others as his/her own. B) uses or obtains unauthorized assistance in the execution of any academic work, or c) gives fraudulent assistance to another student is guilty of cheating. Violators will be penalized in accordance with established college policies and procedures.” – If you are caught cheating in this course, you will receive a 0 for the assignment, and you will be turned in to the Academic Integrity Committee.

Mercer’s Grading System:

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	70-76
D	60-69
F	0-59

Course Objectives:

1. To provide the students with knowledge on basic propagating structures, media and fertilization, and mist systems.
2. To acquaint the students with the principles of anatomy and physiology behind propagation techniques.
3. To provide the students with the techniques for both sexual and asexual propagation of woody and herbaceous material.
4. To gain valuable hands-on experience in the production of a crop through practice is seed, cutting, grafting, budding and layering.
5. To understand the principles of aseptic micropropagation.
6. To understand the importance of seed dormancy, the physical requirements of seeds, as well as the importance of cutting selection.

Behavioral Objectives:

1. Produce container grown crops under field conditions.
2. Design a shade structure and a mist system.
3. Apply the proper amount of fertilizer at the appropriate time.
4. Propagate woody and herbaceous plants from seeds.
5. Propagate woody and herbaceous plants from cuttings.
6. Be familiar with grafting, budding, and layering techniques.
7. Perform cultural requirements necessary in plant production.

Tentative Schedule:

Tue 8/28:	Course Introduction; Introduction to Plant Propagation
Thu 8/30:	Lab Introduction – Writing Lab Reports, Using References, Propagation Materials Used, Misting Systems Chapter 1
Tue 9/4:	Quiz #1; Biological and Environmental Aspects of Plant Propagation; Video
Thu 9/6:	Propagation Experience Chapters 2 and 3

- Tue 9/11: Quiz #2; Biological and Environmental Aspects of Plant Propagation
- Thu 9/13: Field Trip – Rare Find Nursery
Chapters 9 and 10
- Tue 9/18: Quiz #3; Propagation by Cuttings
- Thu 9/20: Propagation Experience
Chapters 9 and 10
- Tue 9/25: Quiz #4; Propagation by Cuttings
- Thu 9/27: Field Trip – Pinelands Nursery
Chapters 9 and 10
- Tue 10/2: Quiz #5; Budding and Grafting; Video
- Thu 10/4: Propagation Experience
Chapters 11, 12 and 13
- Tue 10/09: Quiz #6; Budding and Grafting
- Thu 10/11: Guest Propagator – Jay Verkade
Chapters 11, 12 and 13
- Tue 10/16: Quiz #7; Catch-up; Review for Midterm
- Thu 10/18: Propagation Experience
No readings
- Tue 10/23: Midterm Exam
- Thu 10/25: Propagation Experience
No Readings
- Tue 10/30: Propagation by Seed; Midterm Exam Results
- Thu 11/01: Field Trip – Kube Pak Greenhouse
Chapters 4 and 5
- Tue 11/06: Quiz #8, Propagation by Seed
- Thu 11/08: Propagation Experience
Chapters 6, 7 and 8
- Tue 11/13: Quiz #9; Micropropagation
- Thu 11/15: Propagation Experience
Chapters 17 and 18

Tue 11/20: Propagation Experience
Thu 11/22: Happy Thanksgiving
No Readings

Tue 11/27: Quiz #10; Layering
Thu 11/29: Propagation Experience
Chapter 14

Tue 12/4: Quiz #11; Propagation by Specialized Stems and
Roots
Thu 12/6: Lab Wrap-Up
Chapter 15

Tue 12/11: Quiz #12; Biotechnology; Final Exam Review
Session
No readings

Final Exam - TBA