### Western Illinois University

#### **Hort 180**

Horticulture 180: Introductory Horticulture: SUBJECT TO CHANGE

Instructor: Shelby Henning Office: B12 Knoblauch Phone: 298-1089 Email: s-henning@wiu.edu

Office Hours: MW 11:00-11:50, T 12:00-12:50, Th 12:00-1:00

Required text: There is no required text. I recommend 'The Biology of Horticulture ' by John Preece and Paul Read, 2nd Edition, John Wiley and Sons, Inc. as supplementary reading.

There is a \$10 LAB FEE for this class. This fee is due no later than the end of the second week

Class meeting times and locations: MW lecture 10:00-10:50 Knoblauch 226 Thursday lab 10:00-11:50 Knoblauch 305

Horticulture 180 introduces the importance of horticulture in cultivating plants for food and plant ornamentation.

Objectives

At the completion of the course the student will master the following objectives:

 Learn horticultural basics including plant cell, tissue and organ structure, plant classification, plant nutrition, greenhouse environmental control, plant water and soil relationships, plant growth regulators and disease and insect management
Understand important plant functions such as photosynthesis, transpiration, respiration and water and nutrient transport.

3. Understand sexual and asexual plant propagation practices

4. Understand the economic, ecological and environmental impacts of horticulture

- 5. Understand the importance of plant growth regulators.
- 6. Understand the principles of pruning,
- 7. Writing and publishing informative youtube videos and blogposts

Attendance: ATTENDANCE IS A MUST!!!!!!! We are professionals! Students must be prepared to interact, analyze, and discuss topics relating to course assignments. Absenteeism will impede your success on assessments and course assignments. Professional dress is a must every time you present a project.

Late assignments will be deducted 5 points a day starting at the end of the class period for which it was due. They will not be accepted after the end (8:00pm) of the

third day. Assignments will not be hand written unless instructed otherwise! Assignments will be written using 12 point font and 1" margins. Spelling and grammar are critical.

Please turn off or silence cellular phones and no texting during class time or the instructor may ask for it to be returned to the student after the class period! Student Rights & Responsibilities: www.wiu.edu/provost/students/

TPEP Vision & Mission Statements: www.wiu.edu/tpep

# Student Rights & Responsibilities: <u>http://www.wiu.edu/provost/students.php</u>

### Disruptive Student Behavior: http://www.wiu.edu/vpas/policies/disrupst.php

# ADA Compliance:

"In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s) you must obtain documentation of the need for an accommodation through Disability Resource Center (DRC) and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Resource Center (DRC) at 298-2512 for additional services."

### Academic Dishonesty: <u>http://www.wiu.edu/policies/acintegrity.php</u>

Any violation of the Academic Dishonesty Policy in Student Handbook will result in an automatic failure in the course. Plagiarism and cheating are areas of concern for this course. This course is designed to enhance your writing and presentation skills within your academic area, not the ability to copy other's thoughts and ideas.

# Grading Scale: You need to have +/- grading scale (B+, B, B-, etc). Cut-offs determined by you the instructor. There is no departmental adopted +/- scale for the School of Ag. Ask any of your ag colleagues for an example if you need one.

**Absences:** If at any time you have a family emergency, funeral, or just not feeling well, please use the OARS system to report your absence (<u>www.wiu.edu/oars</u>). I will need the email generated from this system prior to class and not after. If I receive the email after class has ended then the late grade policies come into effect.

# **Attention Education Majors:**

The changes within the state teaching license require all education majors to receive a grade of a "C" or better in this course in order to meet these new

requirements. With the university +/- grading system, receiving a "C-" or below will require you to retake this course or find a substitute course to meet School of Agriculture graduation requirements.

### Syllabus subject to change

The syllabus may be subject to change during the semester. The instructor will inform the students of any changes in the classroom and will print a revised schedule for the students.

### Grading and Assignments

Quizzes 25 @ 5 pts	125pts	
Exams 2 @100 pts	200 pts	
Final exam 200 pts	200 pts	
Paper and presentation 100 pts	100 pts	
Blog post 50 pts	50 pts	
Youtube assignment 100 pts	100 pts	
Participation 50 pts	50 pts	
Career Fair 25 pts	25 pts	
Lab assignments	150 pts	
Soil Volume 30 pts		
Microgreens 30 pts		
Fertilizer lab 30 pts		
Static bucket hydroponics 30 pts		
Soil mixing laboratory 30 pts		

TOTAL 1000 pts

We are on a +/- system of grading. As such, final grades will be assigned +/- on the following basis:

А	= 93% and above	С	= 73-76%
A -	= 90-92%	C-	= 70-72%
B+	= 87-89%	D+	= 67-69%
В	= 83-86%	D	= 63-66%
B-	= 80-82%	D-	= 60-62%
C+	= 77-79%	F	= 59% and below

At the beginning of each class there will be a one-question quiz worth 5 pts on the previous class' assigned reading. Most of these readings will go into depth about the concepts that will be discussed the following day. Some will be readings from textbooks or research papers. If the student has any questions concerning the readings I will be happy to discuss the question at the beginning of class.

Each student will also be required to produce a YouTube video explaining and demonstrating knowledge of a horticultural principle or practice. Each student will also be responsible for a blog post discussing issues in sustainability, Green Industry or simply an interesting horticultural issue. The dates of these posts will be assigned to each student, who will choose their own topics after discussing their topics with the instructor. The posts will be turned in to the instructor for review, revised by the student and posted on a WIU Horticulture blog. Rubrics for the video and blog will be presented later. Both the videos and blog posts should be an important component of each student's portfolio when they enter the job market.

A paper and presentation will be assigned to groups concerning a current topic in horticulture, or after review by the instructor, a subject the group is interested in learning more about. The group will present the paper to the class at the end of the semester. The rubric will be presented during the semester.

There will be points awarded for participation. Lively class discussions require input from all. Participation in lab activities is essential to the success of each lab.

Lecture
Introduction to the course and course objectives
History of Horticulture
Classification of plants; Start of quizzes
Plant structure
Labor Day/ No Class
Plant structure, cells, complex tissues
Plant organs, the leaf, stem and root
Floral Anatomy (Bring a flower to class)
Plant hormones
Environmental effects on plant growth; discuss project papers, review
Exam 1
Plant Propagation – pollination, seeds
Plant Propagation – Asexual reproduction
Ag Career Fair
Discussion of career fair; project ideas due; Soils
Plant Nutrition and Fertilization
Morphological changes due to environment
Photoperiodism, temperature, water
plant breeding
Speaker
Chemical control of plant growth
EXAM 2
Biological, chemical control (weeds and herbicides)
Greenhouse management
Vegetable gardening
Fruit production

- 11/20/17 Thankgiving Break
- 11/22/17 Thankgiving Break
- 11/27/17 Indoor plantscaping
- 11/29/17 Ornamental plant/ perennials and annuals
- 12/4/17 Ornamental plants landscaping, production and installation
- 12/6/17 Review

## Laboratory Schedule

Date	Lab
8/24/17	Plant nomenclature and ID
8/31/17	Microgreens
9/7/17	Fertilizer Lab
9/14/17	Hydroponic buckets
9/14/17	Soil volume
9/21/17	Vegetative propagation
9/28/17	Potting soil laboratory
10/5/17	Pruning
10/12/17	TBA
10/19/17	TBA
10/26/17	Sprayer/spreader calibration
11/2/17	Diagnosis of disease/insect problems
11/9/17	Bulb forcing

- 11/16/17 On-campus field trip
- 11/30/17 Presentations
- 12/7/17 Presentations