

**Biology 130 (Honors): Introduction to Plant Biology Lab Syllabus**

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Office Hours: Tue/Thur/Fri 11:00 – 12:00 or by appointment

**Meeting Time and Location:** Mon/Wed 1:00 – 2:50 in CBB 176

**Required Text:** *Biology 130 Lab Manual* (purchase)

**Lab Illustrations:** <http://www4.uwsp.edu/biology/courses/botlab/default.htm>

**Common WI Plants:** <http://www4.uwsp.edu/biology/courses/plantID/index.htm>

**Lab Grading:** There are 330 points available in lab (taking into account that I drop your lowest two quiz scores; see below), earned via your attendance (130 pts.), your performance on quizzes (20 pts. each), a lab report (50 pts.), and an exam assessing your ability to identify common Wisconsin plants (50 pts.). These points will be added to the points you earn in lecture, and the total will then be used to determine your final course grade (see lecture syllabus for details).

**Attendance:** On-time attendance in lab is mandatory. We will meet for lab 26 times this semester (not including two Common Plants of Wisconsin ID exam meetings), and each of those meetings is worth up to 5 points toward your attendance score (130 points total). I will deduct 1 point from your attendance score for each minute that you are late to a particular lab meeting (up to 5 points). Please be on time.

**Quizzes:** A total of seven quizzes will be offered this semester (see lab schedule, below, for dates). Quizzes will always begin promptly at the start of lab (the door will be closed and you will not be allowed entrance to the room after the quiz begins) and will cover material from the previous 3-4 labs (material covered since the previous quiz). Quizzes are worth up to 20 points each. For practical reasons, missed quizzes cannot be made-up, regardless of the reason the quiz was missed. However, I will drop your lowest two quiz scores before determining your final course grade.

**Lab Report:** At various times this semester you will work on a plant breeding experiment designed to study the effects of artificial selection on trichome number. Upon completion of this work you will produce and submit a lab report worth up to 50 points.

**Common Plants of Wisconsin ID Exam:** By the time you finish this course you are expected to be proficient at identifying some of the most common Wisconsin plants (see list in the appendix of your lab manual and the common WI plants website). To assess your ability to do so, you will take an exam consisting of projected images of 50 plants randomly selected from the 149 species found on the list. I will use images taken directly from the website. The exam is worth up to 50 points. While taking the exam, common names are ok, though I will give you 0.2 points of extra credit for each Latin binomial (i.e., genus and species) you provide. Spelling (in either case) must be 100% correct. You will have two opportunities to take the exam (see lab schedule, below, for dates). In fact, you are welcome and encouraged to take the exam twice; if you do so I will give you the higher of your two scores.

**Lab Schedule:** Note that I reserve the right to change this schedule, with due notice, as we progress through the semester.

Date	Lab#	Activity / Topic	Other
1/23	1	Microscopes I (count trichomes on <i>Brassica</i> )	
1/28	2	Microscopes II (pollinate <i>Brassica</i> )	
1/30	3	Plant cells	
2/4	4	Mitosis	
2/6	5	<b>Quiz I</b> Meristems	
2/11	6	Wood	
2/13	7	Roots	
2/18	8	Leaves	
2/20	9	<b>Quiz II</b> Water relations	
2/25	10	Enzymes and respiration	
2/27	11	Light and photosynthesis	
3/4	12	Growth setup	
3/6	13	<b>Quiz III</b> Gas and photosynthesis	
3/11	12	Growth analysis (harvest/replant <i>Brassica</i> )	
3/13	14	Molecular genetics	
3/25	15	Genetics (count trichomes on <i>Brassica</i> )	
3/27	16	<b>Quiz IV</b> Bacteria	
4/1	17	Fungi I	
4/3	18	Fungi II	
4/8		<b>Common Plants of Wisconsin ID Exam (first version)</b>	<b>Optional: Common Plants of Wisconsin Image Portfolio due in lab (USB drive)</b>
4/10	19	<b>Quiz V</b> Cyanobacteria and algal diversity	
4/15	20	Green algae and lichen	
4/17	21	Bryophytes	<b>Lab report due in dropbox</b>
4/22	22	Ferns and fern allies	
4/24	23	<b>Quiz VI</b> Gymnosperms	
4/29	24	Angiosperms	
5/1	25	Seeds and fruits	
5/6		***** No lab *****	
5/8		<b>Quiz VII</b> <b>Common Plants of Wisconsin ID Exam (second version)</b>	
5/10			<b>Optional: Lab report revision due in dropbox</b>