

BIO 130: Introduction to Plant Biology

Spring 2019, 5 Credit

Lecture: T, R, F 9:00 AM – 9:50 AM

Lecture Instructor: Ann Impullitti, Ph.D.

Office: CBB 342

Work Phone: 715-346-2772

Email: ann.impullitti@uwsp.edu (this is the best way to reach me)

Office hours: Tues and Thurs 10:00 – 12:00 PM, or by appointment

In general, I have an open door policy. If you have any questions stop by any time and I will answer them, time permitting.

How I will contact you: I will use your UWSP email address so please check your email daily. If you use a different email address, make arrangements to have messages forwarded to the account you use.

Introduction and Objectives

Welcome to Plant Biology! This course will cover many aspects of plant biology, including anatomy, ecology, biotechnology, diversity, and physiology. By the end of this course you will have an appreciation for the role and function of plants in the environment, and you will have gained an understanding about their diversity, physiology, and ecology.

In lecture, we will begin by studying the difference between plants and animals, the evolution of plants, and the intricate details of photosynthesis. We will then begin a journey from the most primitive plants (Bryophytes) to the most advanced (Angiosperms).

Labs will be hands-on so come prepared to explore! The lab is designed to complement the lecture material, so you will be able to see and explore many of the topics we discuss in lecture.

At the completion of this course you should be able to:

- 1) Understand the ecological role of plants and the importance of the relationship between plants and humans in the environment
- 2) Appreciate the species richness and diversity of plants
- 3) Be able to identify and distinguish the differences between the lowest of the low (algae), bryophytes, pteridophytes, gymnosperms, and angiosperms
- 4) Appreciate the importance of photosynthesis for all organisms and explain the process of photosynthesis
- 5) Understand how plants function: hormones, water movement, reproduction, and tropisms

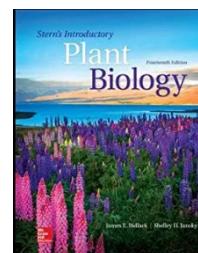
Course Materials

For lecture

Textbook: Bialack, J., Janskey, S., and Stern, K. *Stern's Introductory Plant Biology*, 13th edition. McGraw-Hill
ISBN-10: 0073369446

For Lab

Lab Manual: Essentials of Botany, Seventh ed., Fall 2018, edited by Hardy and Hillier
(REQUIRED, PURCHASE FROM BOOKSTORE).



Student expectations and attendance

I will not formally take attendance in lecture, but you are expected to attend all lectures. Please note that there is also a strong correlation with attendance and being successful as an undergraduate.

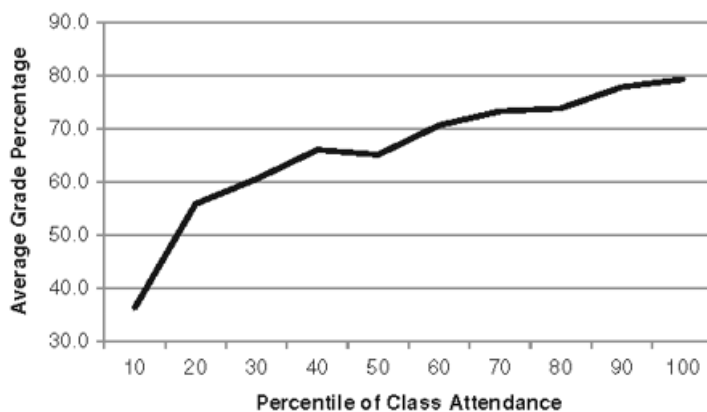


Figure. Illustration of the curvilinear relationship between attendance and grade outcomes. *Data from Gendron and Pieper (2005). Class Attendance in College A Meta-Analytic Review of the Relationship of Class Attendance With Grades and*

Learning is not a spectator sport. Most people learn best by getting involved with the subject material, talking about it, and questioning it. Therefore, we will be writing in class almost daily and doing other activities.

HOW TO DO WELL IN THIS COURSE:

- Attend every lecture and lab! Lecture and lab are complimentary parts of this course. Make every effort to integrate the information presented in lecture, in lab, and in the text.
- Use the lab period wisely. Really study the material and make sure you understand it. If you don't understand something, ask questions. **Make sketches and drawings.** Answer the questions at the end of the chapter. If you finish the lab exercises before the end of the period use the remaining time to review for the next quiz or read the next lab.
- Study frequently and actively. Spend time every day studying for this course. Be sure to find a time and place that is free from distractions so that you can really concentrate and analyze the material.
- Meet regularly with a partner or small study group. **Quiz each other.** Answer each other's questions. One of the best ways to really learn the material (or to discover that you don't understand it after all...) is to explain it to someone else.
- Please take advantage of my office hours. Come in as soon as you have any questions or difficulties with the material.
- **Keep cell phones and other electronic devices turned OFF.**

Assessment

Lecture Exams (375 pts)

Three exams (100 pts/exam) and a final (75 pts) Exams are based on lectures and assigned readings. Exams may be composed of any of the following T/F, multiple choice, fill in the blank, short answer, data interpretation, problem solving, and essay. The final exam is cumulative. Biology is a discipline in which you are constantly building on prior knowledge, and therefore on the final you will be expected to integrate concepts and ideas from throughout the semester.

- A makeup exam will be given if you have a conflict due to a religious observance or a UWSP sponsored event. In cases such as these, you need to make arrangement with me **at least 1 week before the exam. The rescheduled test must be taken 24hrs before the scheduled time. NO EXCEPTIONS**
- Drop/Replace policy
 - I will drop the lowest score of your three lecture exams and replace it with your score on the final. Your lowest score will be replaced with the percentage you earn on the final exam. For example, you missed lecture exam #1 (Score = 0) and earned a 75% (56/75pts) on the final exam. Exam #1 will now be replaced with 75pts.
 - If you miss an exam for any reason (car troubles, illness, family emergency, alarm clock failure, etc.), you will receive a zero on the exam. This '0' will then be your lowest exam score and will be replaced with what you would earn on the final. See calculation above

In-class Assignments (75 pts)

We will have in-class assignments throughout the semester. The purpose of these assignments is to help you master the material, formulate and clarify your ideas/thinking, and improve your critical thinking skills. The assignments will consist of a range of activities. For example, I might give you a writing prompt related to the daily assigned reading at the beginning of class. These in-class assignments could also be in the form of a pop-quiz at the beginning or end of class. There are no make-up assignments. There will be about 85-90 points worth of these assignments during the semester, but the maximum possible score is 75 points. This allows you some flexibility since you can miss two assignments or score less than perfect on several and still have the ability to score all 75 points.

Lab Quizzes (160 pts)

Eight lab quizzes (20 pts/quiz) will be given throughout the semester. Quizzes are drawn from lab and lecture materials. Lecture and lab are complimentary parts of this course! Make every effort to integrate the information presented in lecture, in lab, and in the text. Some quizzes may also include an in-class or take-home component. I will drop the lowest grade of your lowest quiz and replace it with the highest.

Common Plant Identification (50 pts)

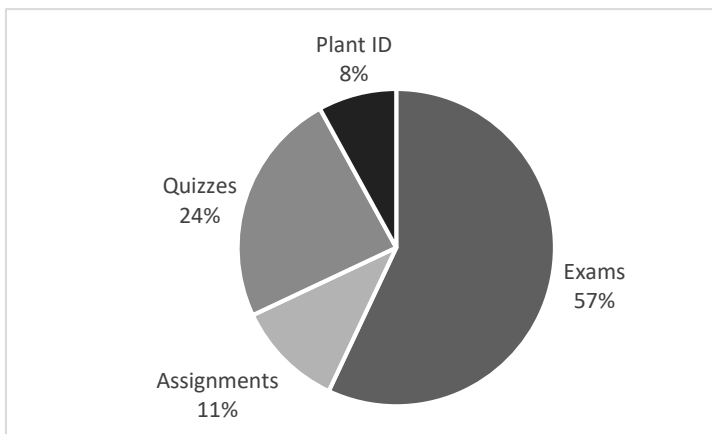
The Appendix in your lab manual describes some of the most common plants in Wisconsin. The accompanying web site (see below) has photos of these plants. This exercise is worth up to 50 points, and there are two options for earning these points. The option with the highest score will be recorded. Option:

1. Immediately following quizzes 2, 3, 4, 5, and 6 you will be asked to identify 5 plants from a specified portion of the list. These exercises are worth 10 points each, or 50 points in total.
2. A comprehensive, 50-point Plant ID exam will be offered later in the semester.

Your grades will be posted on D2L

Grading

A	>93%	> 614
A -	90 - 92.9%	594 - 613
B+	87 - 89.9%	574 - 593
B	83 - 86.9%	547 - 573
B-	80 - 82.9%	528 - 546
C+	77 - 79.9%	508 - 527
C	73 - 76.9%	482 - 507
C-	70 - 72.9%	462 - 481
D+	67 - 69.9%	442 - 461
D	63 - 66.9%	415 - 441
D-	60 - 62.9%	396 - 414
F	<59.9	> 395



****I will supply a hardcopy of the tentative lab and lecture schedule on the first day of class. I will also post a copy of this schedule on D2L. Please also note that I will post any modifications and/or additional readings on D2L.**

BIO130 and UWSP Policies

TECHNOLOGY GUIDELINES: Research supports that having visual access to a cell phone diminishes our ability to learn. Checking social media, texts, emails, and messages is unprofessional and disrespectful to our class community. Please turn off your phone during class; I will do so as well. If I notice that you are using your phone during class I may ask you to share what you are researching or ask you to put it away. Thank you for following these guidelines as they help create a positive learning community.

ATTENDANCE: Attending class will likely be the single most important factor in determining your performance and grade in the course, so plan to attend every class. In most class meetings you will have at least one project, exercise, test, and/or discussion that will impact your grade, and your class discussions will count toward participation. The relationship between attendance and achievement in education has been extensively documented in peer-reviewed research. ***I am not able to re-teach the material to you in the event that you are absent, but you can ask a classmate to share notes.***

ACADEMIC INTEGRITY: Academic dishonesty in any form will not be tolerated! It is your responsibility to be aware of your rights and responsibilities as a UWSP student. Please take the time to read and understand the information found here (and let me know of any questions):
<http://www.uwsp.edu/dos/Documents/CommunityRights.pdf>. Cheating or plagiarism related to any of the course assessments will result in a score of zero for that assessment.

ACCOMODATIONS: I will be happy to help you if you need special accommodations to succeed in this course. Please visit the UWSP Student Disability and Assistive Technology Center (located in LRC 609) to document your needs and contact me so that appropriate arrangements can be made. More information:
<http://www.uwsp.edu/disability/Pages/default.aspx>