

Bi252: Principles of Biology Winter Term '14

Laboratory Syllabus

You are required to attend each lab, and to arrive for all of your labs on time. Missed labs cannot be made up.

A badge access ID is required to enter Science Building 1 for labs that take place at 6am and on Saturdays. This is different than your student ID. Please make sure you have obtained a badge access ID from Neuberger by the second week of classes, if you do not already have one.

You can find a list of the lab TAs and their office hours on 'd2l'.

The lab handouts are available for download from 'd2l'. You are expected to read these in advance of your scheduled lab meeting.

Grading

Lab work makes up 25% of the total grade in Bi252. The points in lab add up to 280, which will be scaled at the end of the term to be 25% of your points in the class.

Quizzes

At the beginning of each lab, you will be given a quiz on the *previous week's* lab. There will also be questions on the *current* lab, composing of approximately 10% of the total quiz score, so read the lab before you arrive. If you are more than 10 minutes late, you will **not** be permitted to take the quiz.

There will be a quiz every week except the first. There are 9 quizzes, worth 10 points each. The lowest quiz score is automatically dropped. **80 points total.**

NO MAKE-UP QUIZZES.

Lab write-ups

You must complete each lab, and answer all questions to receive full credit. There are 10 labs, worth 20 points each. The lowest lab report score is automatically dropped. **180 points total.**

NO MAKE-UP LABS.

Lab write-ups are due the week after each lab is performed, no later than 30 minutes into the lab. Labs that are turned in late will automatically have 40% (8 points) deducted before grading. Labs may not be turned in more than one week late.

Drawings need to be large enough for clarity, and labeled with the name of the item, its size, and any of its parts named in the lab handout.

Lab questions and their answers need to be typed on a separate sheet in 12 point font, in full sentences. Show your calculations.

Sign your lab with your name, TA's name and lab time, IN PEN, in the upper right corner of the first page. If you miss the lab for any reason and do not discuss with your TA, you will not get any points for that lab write-up.

Lab Project

You will be completing an animal and plant lab project in Bi252 that will be due at the beginning of Lab 10. This project is worth **20 points**. You will be receiving the specific details of this assignment during Lab 3.

Attendance

There is a participation component to each lab report. You must stay for the lab and actively participate. Lack of participation will result in the automatic loss of points for that lab's write-up. If you arrive more than 30 minutes late to the lab, you may not participate in the day's lab and will receive a zero on the lab report unless of extreme circumstances, approved by both the TA and professor.

Labs will not meet on the PSU MLK Jr Day holiday. These labs will be made up on a different day--your TAs will have the details.

Laboratory Rules

- Read the lab ahead of time.
- Turn your phone off for the duration of the lab.
- Arrive on time and prepared for 3 hours of work.

- The computers are for Bi 252–related work only, e.g. data collection, lab report write–ups, or investigation of topics related to the lab exercise or lectures.
- **Cheating and any other academic dishonesty will result in a zero for the assignment, and will be reported to the University administration.**
- Leave the lab benches cleaner than you find them. Messes that someone else has to clean up will result in point deductions.

I. Safety

- Report any injuries or broken equipment to the TA immediately.
- No sandals or open shoes of any kind. You will be asked to leave the lab if you are not in compliance.
- Leave backpacks and jackets in the cubby holes next to the door.
- Absolutely no eating or drinking in the lab.
- Waste containers must be used for all designated substances. Your TA will tell you what can be disposed of in the sink.
- Dispose of cover slips and broken glass in the red sharps container.
- The phone by the elevator is a direct line to campus safety.

II. Your lab manual, table, and partners

- Read over the current material before your lab period. If hypotheses are required, think about how to state them succinctly, but wait until the lab material has been introduced before stating hypotheses in final form. Fill out the required questions, drawings, etc. as much as possible during lab. Your lab records are important for your grade. Use a pencil for drawings.
- Lab work should be completed in cooperation with your table partners (see “expectations for students” below).
- When you are finished, make sure all equipment and chemicals are stored in the proper place (either in the center of the table or on the back bench). Unless instructed otherwise, all glass– and plastic–ware must be cleaned and returned to the center of your lab table for use by the next class. Leave them to dry upside down

on a paper towel (or in a test tube rack) in the center of your lab bench. Do not leave them in or by the sink! Used test tubes should be discarded in the sharps waste container, as instructed by your TA.

- Make sure your table is wiped down and push in the chairs.
- *Stick around for discussion after the lab. This will help you understand the lab more thoroughly and will help you complete the questions in your lab manual. Participation in this discussion is a component of overall participation and therefore influences your grade.*

III. Microscopes and Slides

A. Microscopes: You will be assigned a specific microscope at your bench. **DO NOT MOVE THE MICROSCOPE FROM YOUR BENCH.**

1. When you are through with the microscope, make sure oil is wiped off the oil immersion lens, and make sure it is stored in the correct position (stage down, on 4X, lamp off, and without a slide on it). Clean objectives and oculars using only the special lens paper (not paper towels or Kleenex).
2. Report any microscopes that are not stored properly from the previous lab.
3. If for some reason you need to move the microscope, do so carefully--always use two hands.

B. Slides: Each table will have one box of clean slides and cover slips. Prepared slides will either be on each table or on the back counter.

1. *Prepared slides* must be returned to the box where they were obtained, with the label right side up. Do not mix them up, and do not place them in the wrong box.
2. Dispose of slides and coverslips you prepared yourself in the **sharps** container.

Bi 252 Laboratory Schedule

Week	Topics	Quiz?
1	Orientation and safety Lab 1: Developmental Biology	no
2	Lab 2: Natural Selection	Yes
3	Lab 3: Cnidarians, Platyhelminthes, Nematodes, and Annelids	Yes
4	Lab 4: Mollusks; species accounts assigned	Yes
5	Lab 5: Arthropods	Yes
6	Lab 6: Phylogeny and Comparative Anatomy of Deuterostomes	Yes
7	Lab 7: Photosynthesis and Plant Pigments	Yes
8	Lab 8: Vegetative Structures and Function	Yes
9	Lab 9: Stomatal Density	Yes
10	Lab 10: Reproduction; species accounts due	Yes
Finals	No Lab	

IMPORTANT INFORMATION: Please fill out on Day 1

Your TA's name: _____

Office hour and location: _____

Your labmate's names and email addresses:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Principles of Biology -- Bi 252

Expectations for Students

Learning in the University environment should be stimulating, demanding, and also fair. We encourage the open discussion and exchange of ideas, particularly in the laboratory setting. However, it is essential that all graded work in this course be your own work, and in your own words.

Below are the expectations for students in this class. This set of expectations is intended to maximize debate and exchange of ideas in an atmosphere of mutual respect while preserving individual ownership of ideas and written words. If you feel you do not understand or cannot agree to these expectations, you should discuss this with your instructor and classmates.

1. Students are expected to work cooperatively with other members of the laboratory and show respect for the ideas and contributions of other people.
2. When working as part of a group, students should strive to be good contributors to the group, to listen to others in the group and try not to dominate, and to recognize the contributions of others. Students should try to ensure that everyone in the group makes a contribution, and recognize that everyone contributes in different ways to a group process.
3. Students should conduct experiments and discuss problems as part of a group, but must write lab reports and exams alone, without copying anyone else's work.

*I have read and understood the expectations for students in this class. If I am uncertain about appropriate behavior in the class I will ask one of the instructors for clarification. I understand that **any** instances of*

academic dishonesty (see the PSU "Code of Student Conduct and Responsibility" for more information: <http://www.pdx.edu/dos/conductcode>) will result in a zero for that assignment or exam, and will be reported to the University administration, as outlined in the course syllabus.

Signed,

----- Date: -----