



American University of Beirut
Faculty of Arts and Sciences
Biology Department
BIOL 202 Laboratory Syllabus and Schedule

Laboratory Coordinator: Mohammad S. Al-Zein

Office: Room 213, Biology Department

Office Extension: 3903

Office hours: Tuesdays 8:30 – 9:20 AM and Wednesdays 2:00 – 2:50 PM;

Please take an appointment using the following link:

<https://mohammadsalzein.acuityscheduling.com/schedule.php>

E-mail: msalzein@gmail.com

The best way to get hold of me is by e-mail. When you e-mail me, please use your university e-mail account (ending with @aub.edu.lb). Kindly make sure that you include the word “BIOL 202” in the title of your e-mail and sign the e-mail with your full name. Please avoid using abbreviations. Although I attempt answering your e-mails within 24 hours, please do not expect replies in a very short period of time, late at night or very early in the morning.

Laboratory Manual:

Vodopich, D. S. and R. Moore. 2014. Biology Laboratory Manual. 10th Edition. Mc-Graw Hill. The companion website for the manual is:

http://highered.mcgraw-hill.com/sites/0073532258/student_view0/

Phillips, Roger. 1985. Dissection of the Fetal Pig. Rex Educational Resources Company (On reserve in the Science and Agriculture Library)

Other References:

The following references are available on closed reserve in the Science and Agriculture Library:

1. A Guide to Biology Laboratory (3rd Edition) by Thomas G. Rust.
2. A Photographic Atlas for the Biology Laboratory by K. M. Van De Graaff and J. L. Crawley
3. Guide and Atlas to the Fetal Pig by D. G. Smith *et al.*

Laboratory Goals: During the first part of the laboratory (First six weeks), you will have the opportunity to study plant diversity, anatomy and physiology. During the last weeks of the laboratory, you will have the chance to understand the anatomy of vertebrates by dissecting a frog and a fetal pig.

Laboratory Grading:

The laboratory component of BIOL 202 is worth 25% of your course final grade, divided as follows:

Part I: Plants		
	Quizzes	40
	Reports	80
	Performance in the laboratory and safety quiz	5
Part II: Vertebrates		
	Quizzes	80
	Evaluation of pig dissection	40
	Performance in the laboratory and safety quiz	5
Total		250

Laboratory Guidelines:

- You must complete all assigned work during the regular laboratory session.
- **There will be no makeup laboratory sessions.** You must attend the section in which you are registered on AUBsis. If you are unable to attend your usual laboratory session due to an accident or illness, we can sometimes place you in a different section for that week, pending the approval of the teaching assistant concerned and the laboratory coordinator; however, you will need a written note or email from your academic advisor, or your physician, explaining your absence from your usual laboratory section. We will NOT schedule makeup sessions for social events or travel convenience. You must notify the instructor and the laboratory coordinator as soon as possible if you need to reschedule a laboratory. **Any student who misses three laboratory sessions or more will be asked to withdraw from the course.**
- **Quizzes.** You will regularly be given quizzes either at the beginning or towards the end of laboratory sessions. You may be asked questions about the previous laboratory or the work to be performed during that laboratory session. **There will be no makeups for quizzes.**
- **Reports.** Several laboratory sessions require a laboratory report. These reports will be completed during the laboratory session and will be submitted at the end of the session. You cannot finish a laboratory report at home or after the laboratory session has officially ended.

- **Be prepared when you come to the laboratory.** Read the assigned exercise(s) in the manual in advance, to ease the osmosis of knowledge. Use the manual as you examine slides and specimens. The laboratory manual also contains step-by-step instructions for experiments and dissections. Whenever you examine slides in the laboratory, it is recommended that you print the discussions that are posted on Moodle and bring them with you to class. Quiz questions are often based on recognition and recall, and the manual can help you remember what you examined in the laboratory. Always check the companion website to the laboratory manual, complete the pre-laboratory questions, go through the directed presentation for that laboratory, watch any animations or videos available and take the on-line laboratory quiz available through the site.
- **Clean your station thoroughly before you leave.** Your area must be clean, your microscope properly stored, and all display materials returned to wherever you found them. Take only one or two slides at a time from the box provided (some are in short supply) and be sure to return them to the proper tray or box.
- All plant and animal matter goes into a special garbage container (near the sinks). Do not put animal material or preserved plant material in the regular trash containers. Dispose slides and other glassware ONLY in the yellow container provided.
- You will be held responsible for any damage you do to the microscopes, slides or equipment. Don't try to rush through the exercises. Remember that everyone in laboratory may be working with sharp blades and small pieces of glass. No running around the room with scissors! **You will be charged for any damage you do in the laboratory.**
- You must wear laboratory gowns at all times during the laboratory session. A dissecting set and gloves are needed for dissection. It is recommended that contact lenses are taken off and regular eyeglasses are used when you are dissecting.
- No food or drinks are allowed in the laboratory. Water bottles should not be visible. All cell phones must be put off during the laboratory session.
- **Have fun! Laboratory sessions shouldn't be a grind!** Unless the display material labels or teaching assistants say otherwise, the first rule in the lab is **handle with care.**

Difficulties and Special Needs:

If you are experiencing difficulties with laboratory content or with anything that your instructor and/or I can help you with, please let us know. Also inform me as soon as possible of any special needs you might have, particularly medical conditions that may require special accommodation.

Conflict Resolution:

If you are having problems with another student in the class, please try to resolve them; otherwise bring them to the attention of your instructor. If you have problems with your instructor, please try to resolve them; otherwise, let me know as soon as you can. If you have problems with me, please try to resolve them with me; otherwise, they may be taken to Dr. Sawsan Kreydiyyeh.

Changes:

I reserve the right to make reasonable changes to this syllabus provided that I give all students registered in the class a timely notification of the changes to be made.

Laboratory Schedule:

Week of	Exercise	Topic
Feb. 3	25 and 28	Non-vascular Plants and Their Ancestors: Phyla Chlorophyta, Hepaticophyta and Bryophyta
Feb. 10	29 and 30	Seedless Vascular Plants and Gymnosperms
Feb. 17	32	Flowering Plant Anatomy I: Herbaceous and Woody Stems
Feb. 24	32	Flowering Plant Anatomy II: Roots and Leaves
March 3	31	Flowering Plants: Flowers, Fruits and Seeds
March 10	33 and 34	Physiology of Flowering Plants
March 17	Handout	Vertebrate Skeletal and Muscular System
March 24	Handout	Vertebrate Nervous System
March 31	Appendix I Roger (1985)	Mammalian External Anatomy Mammalian Digestive System
April 7	Roger (1985)	Mammalian Excretory and Reproductive System
April 14 & April 21	Roger (1985)	Mammalian Circulatory System
April 28	N/A	Fetal Pig Evaluation