

BIOL 171 Laboratory Outline – Summer 2018
2nd 6 -week Summer session 2019 Course Syllabus

Course runs from July 10 - Aug 14

Lab Meeting Times: TWR 8:30-11:20, Natural Sciences room 203

Materials: 1) A Lab Notebook of your choice

2) Lab Manual for BIOB 171, available only in UM Bookstore

Overview:

The laboratory component of this course provides an opportunity for hands-on learning. There are no "make-up" labs offered, so attendance is essential. It is strongly recommended that you work through the questions at the end of each lab in the manual; these questions can help solidify important concepts and may be used in lab quizzes. You will maintain a record of your progress through the lab with notes and sketches in your own lab notebook to be turned in at the end of the semester. Expectations for your lab notebook will be explained during the first day of lab. The lab final will explore diverse questions and reflections from the semester's lab investigations. This course has an online Moodle supplement with which to track grades and revisit selected course materials.

Learning Outcomes:

This course is intended to complement the exploration of diversity of life offered in Biology 170. The primary objective is to provide hands-on, investigative experiences to meet the following core learning goals:

1. Develop confident skills with a compound light microscope
2. Distinguish major groups of life by key morphological and physiological features
3. Deepen appreciation for science as a process of investigation
4. Cultivate quality record-keeping practices essential to scientific exploration

Lab Grading (separate from lecture grade):

Quizzes (best 7 of 8 @ 10 pts ea.)	70
Lab notebook	30
<u>Lab practical exams (2 @ 25 pts ea.)</u>	<u>50</u>
Total	150

Course policies:

Group work is a valuable learning tool, and is encouraged during lab exercises. Students will be expected to complete quizzes individually. Make-up quizzes will be permitted only with compelling and documented reasons. University policies on drops, adds, changes of grade option, or change to audit status will be observed in this course. Students should specifically note that after **week 2** such changes are not automatically approved. A petition to do so must be accompanied by documentation of extreme circumstances.

Students registered with DSS will be accommodated appropriately during exams, dependent upon completed and shared documentation. Please contact me one week before each exam if you require any service through DSS.

Class Schedule

Note that there is no lab meeting scheduled for the first day, June 26. With this time, please:

- purchase the required Lab Manual at the UM bookstore
- purchase the supplies you might want for lab, especially a **lab notebook**
- double-checked your **netID access** to university computers and Moodle
- **email your TA** Scott Debnam at scott.debnam@umconnect.umt.edu using your student email

Quizzes will be offered at the beginning of lab time covering the previous lab's content.

The two practical exams will explore all previous content with an emphasis on recognition and demonstration of laboratory skills.

<u>Date</u>	<u>Topic</u>	<u>Quiz</u>
July 9	<i>No lab</i> (prepare as outlined above)	--
July 10	Microscopy	--
July 11	Cells & Prep Bacteria	1
July 16	Bacteria & instructor review of notebooks	2
July 17	Protists 1	3
July 18	Prep time for Exam 1	--
July 23	Protists 2	4
July 24	Fungi & Lichens	5
July 25	Mid-term lab practical exam	
July 30	Plants 1	
July 31	Plants 2	6
Aug 1	Prep time for Exam 2	
Aug 6	<i>No lab - work on presentations</i>	
Aug 7	Animals 1	7
Aug 8	Animals 2	8
Aug 13	Final lab practical exam, notebooks due	
Aug 14	Lab wrap-up, collect work	
Aug 15	Prep time for Exam 3	