

Lab Syllabus & Table of Contents for Biology 111 Spring 2010 MONDAY Laboratory

DAY	WEEK	Lab Exercise	Pages
		<i>Lab Grade and Notebook Entry Instruction</i>	3-4
2/1	~1~	<ul style="list-style-type: none"> ▪ Common Properties of Life 	5-16
2/8	~2~	<ul style="list-style-type: none"> ▪ Proteases and Membrane Transport 	17-26
2/15	~3~	<ul style="list-style-type: none"> ▪ Holiday 	
2/22	~4~	<ul style="list-style-type: none"> ▪ Cell Communication in Planarians 	27-32
3/1	~5~	<ul style="list-style-type: none"> ▪ Photosynthesis 	33-38
3/8	~6~	<ul style="list-style-type: none"> ▪ Cellular Respiration / Course Review 	39-48
3/15	~7~	<ul style="list-style-type: none"> ▪ Spring Break 	
3/22	~8~	<ul style="list-style-type: none"> ▪ The Cell Cycle 	49-66
3/29	~9~	<ul style="list-style-type: none"> ▪ Virtual Genetics Lab 	67-76
4/5	~10~	<ul style="list-style-type: none"> ▪ Molecular Biology Lab I 	77-84
4/12	~11~	<ul style="list-style-type: none"> ▪ Molecular Biology Lab II 	85-92
4/19	~12~	Holiday	
4/26	~13~	<ul style="list-style-type: none"> ▪ Function of Biochemistry ▪ Biotechnology skills 	93-108 109-124
5/3		<ul style="list-style-type: none"> ▪ Function of Biochemistry (continued) ▪ Biotechnology skills (continued) 	93-108 109-124
		Appendix <ul style="list-style-type: none"> ▪ Multiple Choice Questions ▪ The Micropipettor (<i>How to use one.</i>) ▪ How to Use a Microscope ▪ Organizing and Displaying Data: Tables and Graphs ▪ How to Write a Lab Report ▪ Sample lab report ▪ Equipment picture glossary 	125 127-150 151-156 157-162 163-166 167-169 169-178 179

NO EATING OR DRINKING IS PERMITTED IN LAB.

IT IS EXPECTED THAT YOU WILL :

-PREPARE FOR LAB EACH WEEK BY READING THE LAB MANUAL AND TEXT BOOK
PRIOR TO THE START OF LAB.

-USE CAUTION AND HANDLE EQUIPMENT PROPERLY.

-CLEAN UP AFTER YOURSELF. IF YOU HAVE QUESTIONS, REFER TO YOUR LAB
MANUAL FIRST THEN ASK.

Lab Grade:

1. Multiple Choice Questions:
Due at the end of lab every week (If absent, NO SCORE). 5 points each= total **60 points**.
2. Lab Report **50 points** on Photosynthesis. One rewrite (optional).
Rewrite must be turned in with old lab report.
3. Lab Notebook Each week entry worth 15 points x 10 = **150 points**.
If absent, you may submit TITLE through METHODS up to ONE week late.

There are no lab make ups.

Lab Notebook Entries:

All lab notebook entries should be neat, organized, legible, and follow the format EXACTLY as described below. Notebooks will be left IN THE LAB.

- Each entry should start at the top of the right hand page (5 points deducted otherwise).
- Leave ~1 inch margin on the RIGHT hand side below the name and date (2 points deducted per page without a FULL margin)
- The Words TITLE, OBJECTIVE, MATERIALS, METHODS, RESULTS, and CONCLUSIONS must be written in Capitals on the Left hand margin (deduct 1 point each word missing)
- The Title of the Lab must be EXACTLY the same as in Lab Notebook (1 point deducted if different)
- TITLE, OBJECTIVE, MATERIALS, and METHODS are graded during lab by TA
- TA enters grades on the right with initials at bottom of each page.
- TITLE, OBJECTIVE, MATERIALS, METHODS on Page 1
- RESULTS and CONCLUSIONS on Page 2 (If necessary page 3)
- Notes should be taken in the lab manual, then entered into the lab notebook in an organized fashion.
- No Lab notebook entry for Photosynthesis, Light, Pigments... or Flower Lab I
- As a general rule of thumb: Be succinct (keep it simple but include all necessary information). For example: "We applied light to the planaria" would receive fewer points than "We applied white light to the tails of the planaria for 60 seconds".

Page 1 Lab Notebook Entry Format Example:

Name
Date

TITLE: (1 pt)

OBJECTIVE: 2-3 sentences describing the goal and hypotheses of the lab exercise **(2 pts)**

MATERIALS: Bullet point list of BioTools used in the lab. If many items are used they can be in columns **(1 pts)**

METHODS: outline the methods in an organized presentation (either numbered or by flow chart) **(3 points)**

Page(s) 2-3 Lab Notebook Entry Format Example:

RESULTS: 3-4 sentences describing the results of the lab experiment. Figures such as Hand drawings, charts, tables, or any organized presentation of data are included in the results. Every Figure must have a title (1 points deducted without title) **(5 points)**

CONCLUSIONS: 3-4 sentences that address whether the hypothesis(es) was/were supported or refuted. **(3 points)**