

Your lab instructor's name _____ and email _____

Lab Coordinator: Michelle Serreyn, Room 2012 Science Hall ac3042@wayne.edu

What is important about taking and participating in lab for BIO 1510? The purpose of the lab is to:

- provide you with a more hands-on experience to learn about important concepts in biology
- give you an opportunity to better understand the nature and process of scientific inquiry
- introduce you to some basic scientific techniques, equipment and procedures
- divide the class into smaller groups for more individualized/small group instruction & interaction
- allow for alternative assessment options, like lab reports, in addition to traditional testing

Read the lab exercise(s) and complete the pre-lab homework (HW) on Blackboard before attending lab!

The questions will come from the Overview/Introduction and the Procedures (see pages listed) for the lab you are doing that week, interpreting results from the lab that you completed the previous week, and/or support materials posted on Blackboard.

<u>Week</u>	<u>Dates</u>	<u>HW</u>	<u>Exercise Title</u>	<u>Pages/Location</u>
1	1/9-12	no HW	First lab meeting (meet your lab instructor, review syllabus & policies) Discovery Science Lab (complete worksheets for participation points) Assignment due next week: Read and Review a Scientific Paper	p. ix-x and Blackboard p. 1-11 p. 190-191 & Blackboard
2	1/16-19	HW1	Biomolecules – Carbohydrates ☹☹ report #1 ☹☹ - outline due next week	p. 41-58
3	1/23-26	HW2	Biomolecules – Amino Acids ☹	p. 27-39
4	1/30-2/2	HW3	Enzymes ☹☹ report #1 ☹☹ - outline due next week	p. 59-73
5	2/6-10	HW4	ELISA Immuno Explorer ☹	Blackboard and p. 75-79
6	2/13-16	☹☹	Lab Exam #1 (Labs from weeks 1-5; exam policy on back)	
7	2/20-23	HW5	Through the Microscope & Prokaryotic Cells ☹	p. 81-116
8	2/27-3/2	HW6	Cellular Respiration ☹☹ report #2 ☹☹ - due week of 3/19	p. 117-129
9	3/6-9	HW7	Photosynthesis ☹☹ report #2 ☹☹ - due week of 3/26	p. 131-145
10	3/13-16	No lab meeting – Spring Break!		
11	3/20-23	HW8	Cell Reproduction, DNA Extraction, PCR & Electrophoresis – week 1	p. 147-163 & Blackboard
12	3/27-31	HW9	Cell Reproduction, DNA Extraction, PCR & Electrophoresis – week 2 ☹	Blackboard
13	4/3-6	HW10	Introduction to Meiosis & Genetics and Theory of Heredity ☹	p. 167-184
14	4/10-13	HW11	No lab here (since we took out Lipids . . .)	
15	4/17-20	☹☹	Lab Exam #2 (Labs from weeks 7-9 & 11 - 14; exam policy on back)	

Required Materials: *BIO 1510 Laboratory Manual, Second Edition* (bookstore)
Biology, 11th edition, Raven & Johnson (bookstore)

The BIO 1510 lab is covered by policies as stated in the course syllabus. For information about SDS accommodations, plagiarism and cheating, and other course policies, please refer to the course syllabus. SDS accommodations must be approved by the lab coordinator.

Additional lab policies and grading can be found on the back side of this syllabus

Grading and Rules
Absolutely No Extra Credit!!

How to Read a Scientific Paper	6 pts
Mini Lab Reports (Results and Discussion/Question pages from lab manual or handout; do three, 6 points each)	18 pts
Lab Report Outline Draft (report #1 only)	10 pts
Lab Reports (#1 = Enzymes or Carbs; #2 = Respiration or Photosynthesis; 20 points each)	40 pts
Lab Exam 1 & 2 (points on each will vary by number of labs covered)	100 pts
Weekly Homeworks, 11 @ 7 pts (maximum 60 points)	60 pts
Weekly Lab Activity, 11 @ 2 pts (drop 3 lowest)	16 pts
Total	250 pts

Lab Exams: Makeups or rescheduling may be allowed for **extreme and dire emergencies only**. For non-catastrophic issues, students will be expected to take a **makeup within 24 hours** of their regularly scheduled exam. Permission from the lab coordinator is required for an extension. A makeup may be permitted only if **both of the following** occur:

1. Your lab instructor and the lab coordinator must be notified of the reason for your absence within 1 calendar day (24 hours) of your lab meeting. Email your lab instructor directly or call the Bio Sci office at 577-2873 (you must know your lab instructor's first and last names) and leave a message. **You must include your phone number for faster response**. You must print your email to provide proof of the day and time of your email in case it is lost in cyberspace. If you do not receive a response within 12 hours, it is your responsibility to make additional contact before the 24 hour time limit expires.
2. Proper **formal written documentation** (medical billing, obituary, accident report, etc.) explaining your absence must be given to your lab instructor and the lab coordinator within 2 days of the missed lab. Photocopied or prescription pad excuse forms will not be accepted under any circumstances.

Lab Reports: Lab reports can only be written on labs marked by ♪ ♪. An outline draft of report #1 is due one week after the lab is performed and is worth a maximum of 10 points. **Late drafts and electronic copies will not be accepted**. Drafts written in full sentences and paragraphs will not be accepted (see Blackboard for examples). Each Lab Report is due at the student's regular lab meeting three weeks after the lab is performed. Lab reports will not be accepted via email under any circumstances. Late lab reports may be accepted but will incur a loss of at least 2 points per day. A student must attend the lab and perform all of the activities for which any report is written! Any students plagiarizing (this includes the copier and the student whose report is copied from) will receive no credit for this assignment! University policy on plagiarism & cheating: <http://doso.wayne.edu/academic-integrity.html>. Additional information on reports & plagiarism on p. 185-202 in the lab manual.

Mini Lab Reports: Mini reports will be completed for three of the labs marked with a ♪. These will consist of a brief introduction, the results from the lab and the questions/discussion at the end of the lab (in the manual) or a handout. They must be completed and turned in to your lab instructor **the next week**. No late reports will be accepted. You may only do reports for labs you attended.

Weekly Homework (HW): Each homework is composed of questions worth various points for a total of 7 points. The homeworks will be posted in Blackboard and will be open for one week – from 8am Tuesday to 8am the following Tuesday. Questions are from the introductory material in the lab manual AND from the previous week's lab(s). You may use the lab manual. Since you could potentially earn 77 points, but there is a maximum of 60 for this portion of the lab, no make ups will be allowed under any circumstances!

Weekly Lab Activity: Students receive 2 points for each completed lab activity for a maximum of 16 points (8 activities x 2 points each). You will receive credit for staying on task and participating in the lab activity AND lab clean up! Since there are 11 labs, students may choose to not do 3 lab activities and still get 16 activity points (see **dropped lab** absence policy below). Students who do all 11 lab activities will still only get a maximum of 16 points.

Dropped lab activities cover absences including, but not limited to the following: emergency illness, accident (personal or vehicle), denied border crossing, religious holidays not listed on the University's calendar, faulty alarm clocks, power outage, student-scheduled appointments (medical, professional or personal). **If you miss a lab**, you may be able to make it up that same week **if you contact your lab instructor in a timely fashion**. Otherwise, there are no make ups for labs.

Any disruptive student or one not actively participating in the day's activities will not be allowed to remain in class under any circumstances. Any student excused from lab may not return to lab until the next weekly class period.

Any discussion or disagreement regarding any lab or lecture score must be clarified with the TA within 7 days of that assignment – after that is too late – the score cannot and will not be changed.

Any student whose lab or lecture answer sheet is altered in any manner and turned in for a regrade or correction will receive a score of zero (0) for that assignment/test. Such students will not be allowed to withdraw. You are responsible for your answer sheet. Whether you or another student alters it, YOU are responsible for it.