

RHODE ISLAND COLLEGE

BIOLOGY 108 LABORATORY

SECTIONS: 06 MONDAY 11 AM- 2PM
03 TUESDAY 8- 11 AM

COURSE DESCRIPTION: This lab course is part one of your general introduction to biology at Rhode Island College (BIO 108). It is intended to mirror the course material that is given to you in lecture using some laboratory exercises and other “hands on” exercises.

COURSE TEXT(S)/MANUAL(S): *Lab Manual and handouts*

OTHER REQUIRED MATERIALS: A PENCIL, A PEN, A NOTEBOOK, AND A CALCULATOR,

GRADING INFORMATION

Your lab grade will be determined by me and then factored into your course grade by your lecture instructor. It will be computed as follows:

Attendance/participation:	40 %
Worksheets:	10 %
Attitude:	5 %
Weekly in-lab quizzes:	15 %
WebCT pre-lab quizzes	10%
Lab final:	20 %

ATTENDANCE/PARTICIPATION COMPONENT

1) Attendance will be taken at the START of class. Consistent lateness is unacceptable, if you cannot arrive to the lab period you are enrolled in on time, you need to switch into a new lab period. Points will be deducted from your attendance grade and therefore your final grade for consistent tardiness.

2). Weekly attendance in lab is expected. **When you know that you must miss a lab, you may attend another lab section IF you:**

1. Contact me **ahead of time** (absolutely necessary)
2. Arrange for the instructor to forward all completed assignments to me
4. If you miss a lab quiz, arrange to make up of the quiz and/or worksheet with me BEFORE FRIDAY 2 p.m. of the week of the missed lab.

I will allow at most 2 missed labs. **Missing 3 labs without make-up can result in a failing grade.**

- 3). Preparedness: You need to always come with the materials stated above.
- 4). You must be an active participant in your group

WORKSHEETS: Each class you will be given a short worksheet that you must complete during the lab period and turn in to me at the end of the period. These worksheets will be graded and kept in a box outside my office for pick-up. **It is strongly recommended that you look for the graded worksheet 2 days after your lab meets to review for the next quiz.**

ATTITUDE: It is expected that you will treat both your classmates and myself with respect and courtesy during the time you are in lab. Addressing, me, your instructor as “Miss” while waving your hands wildly is not appropriate (trust me this has happened often in the past), I am NOT your WAITRESS! I am your professor. In addition, general complaints like “why do we have to do this?” “this lab is so stupid” “why do we have to listen to your pre-lab for a hour”... is not a mature and

respectful way to communicate In addition, your success requires that as your Professor I will do my best to educate you and also **that in turn you will do your best to learn!**

ELECTRONIC DEVICES: Please have cell phone ringers turned off. Texting during lab will NOT be tolerated (cell phones will be confiscated for the remainder of the lab period).

WEEKLY QUIZZES: Each week, you will take a short 15-20 min quiz. In addition to the questions pertaining to the laboratory that you performed the previous week, these quizzes may also have questions about labs previous to the last one or a question using the metric system. In general, most of these questions will be short answer.

WEBCT PRE-LAB QUIZZES: In effort to encourage that you come to lab prepared you will be assigned short (5 question) multiple choice pre-lab quizzes to be completed on-line through WebCt. These quizzes will be “open-book” so that you become familiar with the details of the lab procedure and where they are found in your lab manual. The first quiz will be a practice run (not graded).

ACADEMIC HONESTY: PLAGIARISM AND CHEATING WILL NOT BE TOLERATED. ANY EVIDENCE OF ACADEMIC DISHONESTY WILL BE DELT WITH PROMINANTLY AND HARSHLY.

DATE	TOPIC	Pre-lab Quiz	In lab Quiz
1/25, 26	Introductions, Syllabus, lab safety and the scientific method, metric system	NONE	None
2/1, 2	lab measurements	Lab Safety (pg ix) Measurements (pg 1-14),	Metric Conversions
2/8, 9	Identification of Biological Molecules (proteins, carbohydrates, lipids)	Biomolecules (pg 15-28)	NONE
2/15, 16	Use of the microscope	Microscope (pg 29-46) & handout	Types of Biomolecules & tests, controls
2/22, 23	Eukaryotic Cells	Eukaryotic Cells (pg 47-58)	About the Microscope And magnification
3/1, 2	Prokaryotic Cells	Prokaryotic cells (pg. 59-68)	Eukaryotic cells (drawings, types)
3/8, 9	Cellular Transport Systems (osmosis, diffusion)	Cell transport (pg 69-78)	Prokaryotic cells, types, identification
3/15 -	SPRING BREAK		
3/22, 23	Mitosis and Meiosis and cell division	Mitosis, meiosis, gametogenesis (pg. 91-105)	Cell transport
3/29, 30	Enzymatic assays	Enzymes (pg 79-90)	Cell division, gametes
4/5, 6	Genetics and statistical analysis	Genetics, Chi square test (pg. 105-124)	Enzymes, assays, graphing
4/12, 13	DNA and Protein synthesis simulation	DNA, RNA, (pg 125-138)	Genetics, statistics
4/ 19, 20	Fetal Pig Dissection Part I and II	None	transcription, translation
4/26, 27	Fetal Pig Dissection Part III and IV	None	Fetal Pig I
5/3, 4	Lab practical and written lab final	None	ALL

ADDITIONAL POLICIES OF THE BIOLOGY DEPARTMENT

On Repetition of Courses:

Lecture and laboratory experiences are integrated components of biology courses offered at Rhode Island College. Therefore, if a student repeats a course, he/she must repeat both components. Grades previously assigned in either lecture or laboratory will not be carried forward to a new semester.

On Laboratory Attendance:

A fundamental goal of any laboratory science course is to help students gain appreciation for and familiarity with the scientific enterprise. The Rhode Island College Biology Department believes that a proper understanding of the process of science is best approached by participation in laboratory activities. Therefore, it is a departmental policy that the grade earned in laboratory will determine a significant portion of the overall course grade and that any missed or incomplete laboratory exercises will be reflected in this grade. **Students missing more than two scheduled laboratory sessions are subject to failing the course.**

On Reasonable Accommodation of Disabilities

The Rhode Island College Biology Department is committed to making reasonable efforts to assist individuals with documented disabilities. If you are seeking reasonable classroom accommodations under the Americans with Disabilities Act and /or Section 504 of the Rehabilitation Act of 1973, you are required to register with the Student Life Office. This office is located in Craig-Lee Hall, Room 127. The phone number is 456-8061. To receive academic accommodations in a biology class, students must first complete proper paperwork with the Student Life Office and then discuss appropriate accommodations with instructors at the beginning of each semester.

On Academic Dishonesty

The policy on academic dishonesty at Rhode Island College is stated in the [The College Handbook](#). Chapter 3: Academic Policies and Procedures. It is your responsibility to familiarize yourself with the official definition of and penalties for academic dishonesty. However, if you have questions or concerns, feel free to ask either by email or before or after class. All written work will be subject to "Turn It In" software for identification of acts of plagiarism. A Biology 111 student guilty of a first offense will receive a grade of zero on the work attempted. A second offence is grounds for failure of the course.

Be very certain that you understand what plagiarism is. Any passage that is a direct quotation must be enclosed in quotation marks. Changing a few words of someone else's work is still plagiarism. In science, unlike many other disciplines, direct quotes are almost NEVER used, you must learn to read and listen to the ideas of others and then compile them together into your OWN thoughts. You are NOT ALLOWED to quote your text book! Even definitions can not be quoted. This does no service to either of us, I cannot tell if YOU understand what you have written and you likely will forget what you wrote immediately afterwards. All work is solely your own or your groups words. Do not share your written work or that of your group with others.
