

**INTERAMERICAN UNIVERSITY OF PUERTO RICO
METROPOLITAN CAMPUS
FACULTAD DE CIENCIAS Y TECNOLOGÍA
DEPARTMENT OF NATURAL SCIENCES**

SYLLABUS

I. GENERAL INFORMATION

Course Title:	Biology Skills Laboratory I.
Code and Number:	BIOL 1103
Sec.:	
Schedule:	
Modality:	
Credits:	1
Academic Term:	
Professor:	
Office Hours (virtual)	
Laboratory:	
Office Phone Number:	787-250-1912, x 2323
E-Mail Address:	
Black Board Address:	

II. DESCRIPTION

Development of skills and basic laboratory techniques applied to the study of biomolecules and the cell. Includes safety rules and proper handling of laboratory equipment. The scientific method is used for the development of laboratory exercises. The writing of laboratory reports is required following the scientific formats *.

III. OBJECTIVES

It is expected that, upon completion of the course, the student will be able to:

1. Apply safety rules when working in the laboratory.
2. Recognize the importance of the scientific method in problem solving.
3. Use the technological resources available in the search and interpretation of scientific information

4. Interpret scientific data using statistical analysis.
5. Distinguish between measurement systems and conversion units.
6. Use the materials and equipment that are required to develop an experiment.

IV. CONTENT*

Section: _____	Lab Number	LABSTER SIMULATIONS **	Subject: Observation All Lab Report must be delivered on the designated date (both the face-to-face and virtual laboratories). No laboratory report will be accepted after that period or they will have a penalty of 10%.
Meeting Days			
	0		Classes start, Labs start on _____
	1	***	Safety Rules and Introduction to the Laboratory
	2	*	Scientific Thinking (Scientific Method.)
	3		Quantitative measures and central tendency (Statistic Analysis)
	4	*	Acids and Bases: pH Scale
	5		Molecular Models Exam # 1 Laboratory exercises from 1 to 5
	6		Biomolecule Analysis or Organic Molecule Detection)
	7	*	Microscopy
	8		Cell Study - Cell Division
	9	*	Cellular Transport (Osmosis and Diffusion
	10	*	Function of Enzymes / Enzyme Activity
	11	*	Photosynthesis-Chromatography Activity Using Photosynthetic Pigments. Exam # 2 Laboratory exercises from 6 to 11
			Last day of class final test) theoretical and / or practical. It will inform later
			Short test 1 and 2 (includes theoretical framework from lab1-11)

* Programming and lab dates could be subject to changes, if change occurs, they will be notified. It is necessary that you check frequently, update in Table of Contents, which must be in the Black Board.

V. ACTIVITIES

- A. Conference
- B. Demonstrations
- C. Laboratories Reports
- D. Short written test.
- E. Search for information in electronic media, etc.

VI. EVALUATION

A. Assessment Instruments

Laboratory Reports	110 points	70%
Shorts Test (2)	100 points	20%
Attendance-participation and execution	<u>10 points</u>	<u>10%</u>
BONUS: Lab Notebooks	10 points	00%
Total	220 points	100%

B. How to calculate yours average

- a. There are a total of 11 laboratories at a rate of 10 points per report. This makes a total of 110 points plus the 100 points of the tests plus 10 points of attendance, participation and execution. When adding them we will have a total of 220 points.
- b. If you get 220 points or are perfect in everything, this will divide it by the total maximum points (220 points) and multiply it by 100, this will give you the grade point average for the course. How does the bonus work? If during the quarter you do not manage to obtain the total points in the course activities, for example you obtain 210 out of 220 and if in the bonus you obtain 10 points, these will be added to the 210 making a total of 220 points which will be divided by the total points of the activities,

in this case would be 220. Therefore, to get your average you will add the points obtained plus the Bonus points (210 + 10 = 220 points that will be divided by the total points of the activities in this case they would be 220. Therefore, to get your average, you will add the points obtained plus the Bonus points (210 + 10 = 220 points that will be divided by the total points of the activities (220 and multiply it by 100 = Percent of your grade. Ex. $(210 + 10/220) * 100 = (220/220) (100) = 100\% = A$

C. Curve- will be :

- a. Standard, this could change to modified curve by rounding at the end of the quarter. Ej. Remember, this curve rounds to 0.8. ej 79.7% = C. With rounding if you get 79.8% or more this will be B and so on.

90 – 100% A

80 – 89 B

70 – 79 C

60 – 69 D

0 de 59 F

* It will be explained to you in class, how to evaluate it if you have any doubts.

VII. SPECIAL NOTES:

a. Auxiliary Services or Special Needs

All students who require auxiliary services or special assistance must request them at the beginning of the course or as soon as they become aware that they need them, through the corresponding record in the Service Office for Students with Disabilities, with Dra. María de los Angeles Cabello, professional counselor of the University Guidance Program.

b. Honesty, Fraud and Plagiarism (Chapter V, General Student Regulations)

Dishonesty, fraud, plagiarism and any other inappropriate behavior in relation to academic work constitute major infractions sanctioned by the General Student Regulations (RGE). Major offenses, as provided by the RGE, may result in suspension from the University for a defined period of more than one year or permanent expulsion from the University, among other sanctions.

C. Use of electronic devices

Cell phones and any other electronic device that could interrupt the teaching and learning processes or alter the environment conducive to academic excellence will be disabled. Urgent situations will be addressed, as appropriate. The handling of electronic devices that allow accessing, storing or sending data during evaluations or exams is prohibited.

D. Compliance with the provisions of Title IX

The Federal Higher Education Law, as amended, prohibits discrimination on the basis of sex in any academic, educational, extracurricular, athletic activity or in any other program or employment, sponsored or controlled by an institution of higher education regardless of whether it is carried out inside or outside the institution's premises, if the institution receives federal funds.

In accordance with current federal regulations, an Assistant Title IX Coordinator has been appointed in our academic unit who will provide assistance and guidance in relation to any alleged incident that constitutes discrimination based on sex or gender, sexual harassment or sexual assault. . You can communicate with the Assistant Coordinator by phone __Mr. George Rivera__, extension _2262 or 2147, or to the email griverar@metro.inter.edu.

The Normative Document entitled Norms and Procedures for Attending Alleged Violations of the Provisions of Title IX is the document that contains the institutional rules to channel any complaint that is presented based on this type of allegation. This document is available on the website of the Inter American University of Puerto Rico (www.inter.edu).

VIII. EDUCATIONAL RESOURCES

a. Text Book or Laboratory Manual

Universidad Interamericana de Puerto Rico. 2008. Manual de Laboratorio Biología 1103: Laboratorio de Destrezas de Biología I. San Juan, Puerto Rico.

b. Electronic Resources:

- c. This must be located in each laboratory exercise (highly recommended that they can study and use them).

IX. BIBLIOGRAFÍA

a. Books _ Some)

Campbell Biology In Focus. Urry, Cain, Wasserman, Minorsky, Jackson, Reece. 2016. Pearson Education Inc. E. Lake Ave. Glenview, IL 60025. ISBN 98-0-321-96275-1, ISBN 0-321-96275-3

Solomon, EP, Berg LR, and Martin DW. Biology 8th ed. Brooks/Cole Thomson Learning. Belmont, CA 2005.

Tillery, BW, ED Enger and Ross FC. Integrated Science. McGraw-Hill Higher Education. New York, NY. 2001.

Important:

If for any reason we cannot meet or the laboratory experience cannot be given, it will be continued in the next virtual laboratory section or you will receive specific information on what will be carried out and how. All this information will be received by you by email, or through the "Collaborate" platform. The activities will continue in the pre-programmed order and sequence, unless you are officially informed of the changes that we may have.