

University of Puerto Rico Mayagüez Campus College of Art & Sciences Department of Biology Biology Program



FACE TO FACE COURSE SYLLABUS

COURSE SYLLABUS

GENERAL INFORMATION:

COURSE TITLE: General Biology-Laboratory

ALPHANUMERIC Biol 3063

CODIFICATION:

CONTACT HOURS / CREDITS Example: 36 hours / 1 credit

PREREQUISITES,

COREQUISITES AND OTHER

REQUIREMENTS:

Corequisite of Biol 3061

COURSE DESCRIPTION:

ENGLISH:

This course is an introduction to the basic concepts, topics, and methods of the General Biology. The first section of the course is designed to familiarize de student with the concepts and skills necessary to perform a scientific research and how to correctly report the results from an investigation. Second section of course discusses cells, their components and the processes necessary for the cell optimal function. Third section covers the cell processes that affects the development of a living organisms and the perpetuation of life.: «Face to face course»

SPANISH:

Este curso es una introducción a los conceptos, tópicos y métodos de la biología general. La primera parte del curso está diseñada para familiarizar al estudiante con los conceptos y destrezas necesarias para llevar a cabo una investigación científica y cómo reportar correctamente los resultados obtenidos en una investigación. La segunda parte discute y familiariza al estudiante con las células, sus componentes celulares y los procesos básicos que realizan las mismas para su óptimo funcionamiento. La tercera parte discute los procesos que realiza la célula que afectan el desarrollo completo del ser vivo y cuáles son los procesos envueltos en la perpetuación de la vida: «Curso Presencial».

LEARNING OBJECTIVES:

At the end of the course students will be able to:

- a. Apply the scientific method to perform simple experiments, analyze the information and report the results in a scientific paper format.
- b. Define and explain the basic processes that support life.
- c. Identify cell components and their functions.
- d. Define and explain cell processes that transmit the genetic information to future generations, including the importance of the biotechnology,
- e. The students are expected to learn skills on oral and written communication.

SUGGESTED TEXTBOOK: Include textbook reference.

Note: Presentation, videos, and handouts will be provided.

COURSE OUTLINE AND TIME DISTRIBUTION:

(Example of course distribution for three (3) credits, 45 contact hours)

LABORATORY TOPIC	TIME DISTRIBUTION (HOURS)
I. Introduction. Ethics and academic integrity	3
II. Scientific Method	3
III. How to write a scientific paper and the correct use of Internet	3
resources	
IV. Macromolecules and functional groups	3
V. Microscope and cells	3
VI. Enzymes	3
VII. Partial exam (themes 2-6)	3
VIII. Cellular respiration and fermentation	3
IX. Photosynthesis	3
X. Genetics/Molecular biology techniques	3
XI. Biotechnology (Students presentations)	3
XII. Partial exam (themes 7-11)	3
TOTAL CONTACT HOURS	36

INSTRUCTIONAL STRATEGIES:

Some of the following may be used:

X Lectures	X Project Based Learning
X Discussion	X Oral presentations
X Cooperative Learning	X Problem Based Learning (PBL)
X Case Studies	X Experiments

MINIMUM OR REQUIRED RESOURCES AVAILABLE:

RESOURCE	FACE-TO-FACE
Laboratory	Institution

Account in the institutional learning management platform (e.g.	Institution
Moodle or Blackboard)	
Institutional email account	Institution
Computer with high-speed internet access or mobile device with	Student/Institution
data service	
Programs or applications: word processor, spreadsheets,	Student/Institution
presentation editor	
Webcam or mobile with camera and microphone	Student/Institution
Integrated or external speakers	Student/Institution
Whiteboard	Institution
Digital projector	Institution

Other: Materials, equipment and physical facilities necessary to meet the objectives of the course.

ASSESSMENT TECHNIQUES: Include a list of available assessment techniques according to the course department. You may delete those that you will not use in the course and add/modify any that are not listed. (Examples of assessment techniques)

Assessment Technique	Relative Weight
☐ Exams	45%
☐ Assignments	7.5%
☐ Short quizzes	22.5%
☐ Oral presentations	5%
☐ Written reports	20%
Total:	100%

Standard scale: 90 to 100 A; 80 < 89 B; 70 < 79 C; 60 < 69 D; < 59 F

REASONABLE MODIFICATION (REASONABLE ACCOMMODATION):

The University of Puerto Rico (UPR) acknowledges the right of students with disabilities to an inclusive, equitable, and comparable post-secondary education. In accordance with its policy toward students with disabilities, based on federal and state legislation, every qualified student with disabilities is entitled to equal participation in those services, programs, and activities that are physically, mentally or sensorially natured and have thus substantially affected one or more major life activities, such as their area of post-secondary studies. They have the right to receive reasonable accommodation or modifications. If you require accommodation or reasonable modification in the course, you must inform the professor without the need to disclose your condition or diagnosis. Simultaneously, you should promptly request the Office of Services for Students with Disabilities (OSEI) of the unit or campus for your need for modification or reasonable accommodation.

The University of Puerto Rico at Mayagüez (RUM) recognizes that each student has an inherited right to request reasonable accommodation according to Law 51: Law for Integral Educational

Services for People with Disabilities. Every student has the right to receive reasonable accommodation if he/she presents the necessary evidence to be evaluated by the Office of Services to Students with Disabilities (OSEI-RUM), and the related information can be found at the following link: https://www.uprm.edu/cms/index.php/page/85. If your case is approved by OSEI-RUM, you will receive reasonable accommodation in your courses and evaluation, and you must contact each professor for course registered. For additional information contact OSEI-RUM at the Office of the Dean of Students, DE 12, via telephone 787-832-4040 extensions 6734 or 6735, email: oseirum@uprm.edu, at the virtual office: https://meet.google.com/yvd-nrqo-mor, or join by telephone: (US)+1 475-558-0169 PIN: 814 895 818#.

ACADEMIC INTEGRITY:

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Section 6.2 of the UPR General Student Regulations (Certification No.13, 2009-2010, Board of Trustees) provides that academic dishonesty includes, but is not limited to: "fraudulent actions, obtaining grades or academic degrees by false or fraudulent simulations, copying all or part of another's academic work, copying all or part of another's answer to questions on an examination, taking or having another take any oral or written test or examination on behalf of another, and aiding or facilitating another person to engaging such conduct." Any of these actions will be subject to disciplinary sanctions in accordance with the disciplinary procedure provided in the UPR General Student Regulations in force. To ensure the integrity and security of user data, all hybrid, distance-learning and online courses shall be offered through the institutional learning management platform or through tools required by the course, which uses secure connection and authentication protocols. The system authenticates the user identity using the username and password assigned through the student institutional account. The user is responsible for keeping secure, protecting, and not sharing their password with others.

POLICY AND PROCEDURES FOR MANAGING SEX AND GENDER-BASED DISCRIMINATION AT THE UNIVERSITY OF PUERTO RICO:

The Policy and procedures for managing Sex and Gender-Based Discrimination at the University of Puerto Rico, Certification No. 107 (2021-2022) of the Governing Board, certifies that the University of Puerto Rico, as an institution of higher learning and a workplace, safeguards the rights and offers a safe space for those who interact therein, whether they be students, employees, contractors, or visitors. It seeks to promote an environment that respects diversity and the rights of the university community. This policy provides a protocol for handling situations related to the following prohibited conduct in the workplace or in the academic setting: discrimination based on sex, gender, pregnancy, sexual harassment, sexual violence, domestic violence, dating, violence, and stalking.

DIVERSITY, EQUITY, AND INCLUSION

The University of Puerto Rico is committed to establishing an environment that values diversity, promotes equity and equality, and aspires to the full inclusion of its entire university community. Courses will be offered in an inclusive and equitable environment, ensuring the participation of students with diverse backgrounds, experiences, and abilities. Thus, the University of Puerto Rico reiterates its dedication to upholding the principles of diversity, equity, and inclusion in its academic programs.

CONTINGENCY PLAN IN CASE OF AN EMERGENCY OR INTERRUPTION OF CLASSES

In the event of an emergency or interruption of classes, the professor will contact the students through the institutional email or other available means to coordinate the continuity of the course.

The contingency plan must preserve the modality in which the course was created and programmed in the course offering.

Certification 23-29 of the Academic Senate establishes that a face-to-face course may have up to 25% of the hours at a distance and if necessary, this option may be used.

GRADING SYSTEM	
☐ Quantifiable (letters, A, B, C, D, F)	☐ Not Quantifiable (Pass, Fail)