

**University of Puerto Rico
Mayaguez Campus
Biology Department**

SYLLABUS

BIOLOGY 4505-HUMAN PHYSIOLOGY

Human Physiology

4 Credits (3 one-hour class conferences and 1 three-hour laboratory per week: Summer = 2.5 hours class conference/day, four 3-hour laboratories/week).

Prerequisites: Biol 3052 (or Cibi 3002), Quim 3031

NOTE: If you have not successfully completed these prerequisites you are ineligible to be enrolled in this course (i.e., Biol 4505) and you will not be permitted to receive credit for it.

Course Description:

An examination of human body processes at the anatomical and biochemical levels: key topics include homeostasis, eukaryotic cell structure and energy production, action potentials, nerve structure and function, the brain, spinal cord, peripheral nervous system, muscles, heart and other components of the circulatory system, lymphatic system, blood, the kidney, endocrine system, digestive physiology, reproduction, immunity, and the senses.

The laboratory will emphasize cellular, histological and anatomical aspects of human physiology. Some of these will include new material that was not presented in the course.

Course Objectives:

Enable the student to secure a firm background in human physiology and understand its significance in biology.

Help prepare students planning to enter medical, health or graduate research fields.

Text Book:

Uscian J.M. (2010) The Human Body: Principles of Form and Function. Librería Universal, Mayagüez. 730 pp.

*Lecture exams will be based upon this book and additional information presented in class.

GRADING: 533 Total Points Possible

Grading Scale:

- A = 90%
- B = 80% to < 90%
- C = 65% to < 80%
- D = 55% and < 65%
- F = < 55%

I. Regular Hour In-Class Exams: 300 points total (each exam = 100 points)

There will be three one hour exams given throughout the semester. Each exam is worth 100 points.

Exam Dates: exact exam dates will be announced at least one week before an exam; generally, the first exam occurs during the fourth week of class and the remaining three exams follow at three week intervals

Hour Exam Topics, each worth 100 points (exam dates to be arranged first week of class)

- Exam # 1: Chapters 1 - 3
- Exam #2: Chapters 4 - 7
- Exam # 3: Chapters 8 - 10

II. Final Exam, worth 100 points: Chapters 11 and 12

III. Laboratory: 133 points (25% of the total grade for the course is from the laboratory)
Please see your lab instructor for lab schedule

According to Law 51

Students will identify themselves with the Institution and the instructor of the course for purposes of assessment (exams) accommodations. For more information please call the Department of Counseling and Psychological Services at the Dean of Students Office (DE-21) at (787) 265 - 3864 or (787) 832 - 4040 extensions 3772, 2040 or 3864. Email: pura.vicenty@upr.edu.

Academic Integrity:

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General By laws.