BIOL-UA 4 Human Physiology

Instructor: Susan Lee

Course Description:
The primary goal of this course is to instill an understanding of how the various systems of the human body work together to sustain life. Our approach will be to review some basic chemistry and the functioning of the unit of living things, the cell. We will emphasize the importance of the cell membrane and this knowledge will provide the basis for understanding how the nervous system operates as the chief communication network of the body. This information, in turn, will allow us to understand the cooperative functioning of the other systems of the body listed above. Thus, by the end of the semester, you will have a better idea of how your body works.

Pre-requisite: N/A

Textbook and Required Materials:

Grading:
Lecture exams 60%
Final exam 35%
Class participation 5%

Topics:
Introduction to Physiology - review of major organ systems
Cells, tissues and bio-macromolecules
Cellular metabolism
Membrane dynamics: cell membranes & permeability
Central nervous system chemical & neurotransmitters
Peripheral nervous system
Autonomic nervous system
Circulatory system I (cardiovascular and pulmonary)
Circulatory system II
Enteric brain & digestive system
Endocrinology & reproductive system
Renal physiology