University of Nicosia, Cyprus

Course Code	**Course Title**	**ECTS Credits**
BIOL 205	Human Anatomy and Physiology I	6
Department	**Semester**	**Prerequisites**
Life and Health Sciences	Fall, Spring	Biol 101 – General Biology I
Type of Course	**Field**	**Language of Instruction**
Required	Biology	English
Level of Course	**Year of Study**	**Lecturer**
1st Cycle	2nd	Dr. Edna Yamasaki-Patrikiou
Mode of Delivery	**Work Placement**	**Co-requisites**
face-to-face	N/A	None

Objectives of the Course:

This is the first of a two parts course in Human Anatomy and Physiology. Body systems are studies with an emphasis on the interrelationships between structure and function at the gross and microscopic levels of organization. This course also provides the opportunity to practice on basic physiology measurement. The main objectives of this course are to:

- Make students aware of the appropriate terminology related to anatomy and physiology of the skeletal, muscular, the nervous system and special senses.
- Demonstrate the anatomical structures of these systems and their physiology interrelationships through the dissection of animal parts, use of anatomical models, charts and histology specimens, and computer simulations.
- Introduce the principles of homeostasis and demonstrate how feedback loops are used to control the physiology of these systems in homeostasis.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Use the appropriate terminology to recognize and describe anatomical structures and parts of the skeletal, muscular and the nervous systems of the human body.
2. Distinguish and explain the interrelationships and integrative functions of muscle tissue and the skeletal system.
3. Identify and explain the interrelationship and integrative functions of the nervous system and explain how senses work.
4. Report and associate physiologic details and functions with gross and microscopic anatomy and with maintaining homeostasis.

5. Demonstrate basic skills in dissection, assembling of anatomical models and analytical skills in interpreting graphs of anatomical and physiological data.

Course Contents:

1. Introduction to Chemical and Cellular Level of Organization
   LAB: The language of Anatomy; organ system overview
2. Tissue Level of Organization; Tissues & Skin
   LAB: The Microscope; Cell anatomy and division; histology
3. Bones and Skeletal Tissues
   LAB: Overview of bones and Cartilage
4. The Axial and the Appendicular Skeleton
   LAB: The axial and appendicular skeleton
5. Joints and Muscle Tissue
   LAB: Joints and histology of skeletal muscle
6. The Muscular System
   LAB: Gross anatomy of muscles; computerized simulations of muscle physiology
7. Nervous Tissue and Nervous System
   LAB: Histology of nervous tissue
8. Spinal Cord and Spinal Nerves
   LAB: The nervous system
9. Brain and Cranial Nerves
   LAB: Human reflex physiology
10. Integrative Functions
    LAB: General sensation
11. Autonomic Nervous System
    LAB: Special senses: vision, hearing and equilibrium
12. Sensory Function
    LAB: Taste and Olfaction

Learning Activities and Teaching Methods:

Lectures; Laboratory Sessions/Demonstration; Tutorials; Cooperative and independent learning.

Assessment Methods:

Homework, Projects, Continuous Evaluations with Practical Exercises and Assignments, Final Examination.

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
1. Martini F.	Fundamental Principles of Anatomy and Physiology	Prentice Hall	2003, 6th ed.	0805359338

2.Marieb E.	Human Anatomy and Physiology Laboratory Manual	Benjamin Cummings	2001, 7th ed.	9780805355147

Recommended Textbooks/Reading:

Authors	**Title**	**Publisher**	**Year**	**ISBN**
Levy Matthew, Koeppen, Bruce Stanton, Bruce	Berne and Levy Principles of Phsyiology	Elsevier	2005	ISBN-13: 978-0-323-03195-0