Course Unit Descriptor

Study Programme: Primary Teacher Education, Preschool Teacher Education

Course Unit Title: Human Biology

Course Unit Code: PTE2

Name of Lecturer(s): Associate Professor Danijela Petrovic Graovac

Type and Level of Studies: Bachelor Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

Students will acquire necessary knowledge about the structure and function of the human organism, i.e. the structure and function of the cells, tissues, organs, organ systems, as well as their interconnection and interdependence. In addition, students will gain a basic knowledge in the field of human and medical genetics and the theory of the origin of man.

Learning Outcomes:

After successful completion of the course, it is expected that students poses a general knowledge of the anatomy and physiology of the human body, basic life processes in the body, functioning of the cells, tissues, organs and organ systems, as well as the fundamental body functions. The basic principles of human genetics and human evolution, the biological mechanisms of determination of differences and similarities between people will also be adopted. Thus acquired knowledge will enhance their current understanding of humans as biological beings, and they will be able to actively and immediately implement their knowledge in their teaching practice.

Syllabus:

Theory

History of biomedical sciences; The levels of organization and general overview of the structure and function of the human organism as a whole; Anatomy and physiology of the skeletal, muscular, nervous, circulatory, immune, respiratory, digestive, excretory, endocrine, reproductive system and sense organs; Human and Medical Genetics - the basics of inheritance (monogenic/polygenic, recessive/dominant, autosomal/X-linked), congenital malformations, chromosomal aberrations, cancer genetics, gene therapy and stem cell therapy; Systematics, origin and evolution of humans.

Practice

Introduction to techniques of microscopy; Usage of microscopic preparations, models, and schemes to study cells, tissues, organs and organ systems of humans; Study of the most typical pathologies for each system of the body; Genetics practicals.

Required Reading:

- 1. Petrovic, D., Bogosavljevic Sijakov, M., Krivokucin, I. (2013): Practicum/Manual for practical work;
- 2. Ireland, K.A. (2013): Visualizing Human Biology
- 3. Pocock, G., Richards, C.D. (2009): The Human Body An Introduction for the Biomedical and Health Sciences

Weekly Contact Hours: 4 Lectures: 2 Practical work: 2

Teaching Methods:

Verbal, Textual, Audio-visual teaching methods; Demonstrations, Laboratory

Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class	5	written exam	30
participation		William Chain	
Practical work	5	oral exam	35
Test	15		
Seminar	10		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.