

Faculty of Physical Education and Tourism

Course Unit					Biology		
Bachelor in Physical Education					Code: I/K/28		
Year of study	Semestr	Type	Workload (hours)		Contacts hours	ECTS credits	Language of instruction
I	I	semestral	50	Lectures	10	2	1. Polish 2. Polish with additional English suport for foreign students
				Problem solving	15		
Name (s) of lecturer (s)							
e-mail:							
Prerequisites:							
<p>Before the course unit the learner is expected to:</p> <p>1. Know the basic concepts in biology at the general secondary school level in the field of cell biology, genetics, histology and embryology.</p>							
Learning outcomes and competences							
<p>At the end of the course unit the learner is expected to:</p> <p>1. Know and understand the basics of the human body structure and functioning.</p> <p>2. Know the basic processes taking place in the human body in ontogenesis.</p> <p>3. Know and understand the place of human in nature as a biological being and the importance and influence of environmental factors in various phases of human life.</p> <p>4. Independently undertake activities related to self-education and permanent training.</p>							
Course contents (lectures):							
<p>1. Structure of the organism, organ systems, organs, tissues, cell</p> <p>2. Structure of the cell nucleus. Cell life cycle: mitosis, meiosis. DNA, types of RNA</p> <p>3. Karyotype, genotype, phenotype. Gene expression. Genetic code. Transcription and translation. Epigenetic factors. Gender determination.</p> <p>4. Endocrine glands and human hormones. Neurohormonal regulation of the development and functioning of the organism.</p>							
Course contents (problem solving):							

1. Cell structure
2. Epithelial tissue - structure, functions and division..
3. Connective tissues - structure, functions and their division. Proper connective tissue. Yellow and brown adipose tissue.
4. Cartilage tissue - division, structure and functions.
5. Bone tissue - division, structure and functions.
6. Blood. Blood cells and their development.
7. Muscle tissue
8. Nerve tissue.

Teaching and learning methods:

Knowledge assimilation method, lecturing method, discussion.

Assessment methods:

1. Continuous evaluation
2. Practical Work

Recommended reading

- | | |
|----|---|
| 1. | Jarygin N., BIOLOGIA . Podręcznik dla studentów kierunków medycznych. Wydawnictwo Lekarskie PZWL, Warszawa 2003. |
| 2. | Campbell N.A., Reece J.B., Urry L.A., Cain M.L., Wasserman S.A., Minorsky P.V., Jackson R.B., BIOLOGIA , Rebis i Pearson, Poznań 2013 (Części 1-3, str. 1-449) |
| 3. | Sawicki W., Malejczyk J. HISTOLOGIA . Wydawnictwo Lekarskie PZWL. Warszawa 2012 |
| 4. | Kilariski W., STRUKTURALNE PODSTAWY BIOLOGII KOMÓRKI . PWN, Warszawa: 2003 |
| 5. | Biology of Sport. <i>Quarterly Journal of Sport and Exercise Sciences. Journal of the Institute of Sport in Warsaw, Poland</i> |

Authorisation – course coordinator and course teachers (signatures):