COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR ... SEMESTER ...

Course title	*Functional Anatomy*
Course Code	MSM603ANEG
Hours/Week: le/pr/lab	2/0/2
Credits	6
Degree Programme	Biomedical Engineering
Study Mode	*regular*
Requirements	exam
Teaching Period	2022/23 I
Prerequisites	-
Department(s)	PTE ÁOK Anatómiai Intézet
Course Director	*dr. Kiss Péter*
Teaching Staff	*dr. Kiss Péter, dr. Pytel Bence, dr. Sparks Jason*

COURSE DESCRIPTION

A short description of the course (max. 10 sentences).
Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description

Students are requred to learn the basics of human body structure and function. Special emphasis is put on the active and passive elements of locomotor system. During the semester, bones, joints and muscles and internal organ systems of the human body will be taught. The theory sessions will be completed by lab classes in the dissection rooms and histology classes.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

Goals, student learning outcome.
Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction

The purpose of the course is to summarize the anatomical knowledge needed by students, who possess degree in engineering.

2. COURSE CONTENT

Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content

	TOPICS
LECTURE	1. *Basics principles of the structure of the human body – essentials of gross anatomy and microscopy* 2. *Locomotor system, regional anatomy of limbs and trunk* 3. *Anatomy and histology of organ systems: digestive- and respiratory system, urinary system, genital organs* 4. *Endocrine system: hormonal regulatory organs.* 5. *The blood and blood formation, Immune system.* 6. *Neuroanatomy: structure and functional aspects.*
PRACTICE	-
LABORATORY PRACTICE	1. *Basic histology.* 2. *Histology of organs.* 3. *General and specific study of skeletal system, bones and joints.* 4. *Topographic anatomy of the trunk and limbs.* 5. *Topographic anatomy of head and neck.* 6. *Detailed anatomy of internal organs.*

DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

LECTURE

week	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	Main parts of human body, organ systems Bones and joints, muscles	handout	-	-
2.	Histology of epithelia, connective and supportive tissues Histology of muscle, nerve, blood, vessels	handout	-	-
3.	Spine, pelvis Muscles of the body wall, pelvic floor	handout	-	-
4.	Upper limb Lower limb	handout	-	-
5.	Head and neck (including organs) Thoracic organs (overview and gross anatomy)	handout	-	-
6.	Abdominal and pelvic organs (gross anatomy) The central and peripheral nervous system (overview)	handout	-	-
7.	Structure of the liver, the stomach and the intestines (microscopy and functional relations) 1. Structure of the liver, the stomach and the intestines (microscopy and functional relations) 2.	handout	-	-
8.	Respiratory system. Structure of the kidney.	handout	-	-
9.	Genital organs 1. Genital organs 2.	handout	-	-
10.	Autonomic nervous system Endocrine system 1. Overview	handout	-	-
11.	Endocrine system 2. Pituitary, Thyroid. Endocrine system 3. Suprarenal gland, Pancreas.	handout	-	-
12.	Lymphatic system. Blood formation.	handout	-	-
13.	Regulation of compound movements in the CNS. Sensory systems and organs.	handout	-	-
14.	Microscopic structure of cerebrum and cerebellum. Microscopic structure of sensory organs.	handout	-	-

PRACTICE, LABORATORY PRACTICE

week	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	Histology of epithelia (skin), connective tissues	handout	-	-
2.	Histology of supportive tissues, bone formation	handout	-	-
3.	Histology of muscle, nerve, blood, vessels	handout	-	-
4.	Skull & bones of the trunk	handout	-	-
5.	Bones and joints of the upper limb	handout	-	-
6.	Muscles, nerves and vessels of upper limb	handout	-	-
7.	Bones and joints of lower limb	handout	-	-

8.	Muscles, nerves and vessels of lower limb	handout	-	-
9.	Head and neck	handout	-	-
10.	Thoracic cavity, lungs and heart	handout	-	-
11.	Abdomen and lesser pelvis	handout	-	-
12.	Nervous system, sensory organs	handout	-	-
13.	Histology of bone marrow and the lymphatic organs	handout	-	-
14.	Preparation for the exam	handout	-	-

Sidenote: ALL lectures and lab classes have their separate handout pdfs and supplementary material available for downloading for students.

3. ASSESSMENT AND EVALUATION

(Neptun: Instruction/Subjects/Subject Details/Syllabus/Examination and Evaluation System)

ATTENDANCE

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description.

Method for monitoring attendance *(e.g.: attendance sheet / online test/ register, etc.)*

Attendance sheets are required to sign by students in every class.

ASSESSMENT

Course-unit with final examination

Mid-term assessments, performance evaluation and their weighting as a pre-requisite for taking the final exam

(The samples in the table to be deleted.)

NO mid-semester tests.

Requirements for the end-of-semester signature

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Re-takes for the end-of-semester signature (PTE TVSz 50§(2))

The specific regulations for grade betterment and re-take must be read and applied according to the general Code of Studies and Examinations. E.g.: all the tests and the records to be submitted can be repeated/improved each at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

Only attendance is taken into consideration, re-takes are handled individually.

Type of examination *(written, oral):* written

The exam is successful if the result is minimum 40 %.

Calculation of the grade *(TVSz 47§ (3))*

The mid-term performance accounts for ***0*** %, the performance at the exam accounts for ***100*** % in the calculation of the final grade.

Calculation of the final grade based on aggregate performance in percentage.

Course grade	Performance in %
excellent (5)	85 % ...
good (4)	70 % ... 85 %
satisfactory (3)	55 % ... 70 %
pass (2)	40 % ... 55 %
fail (1)	below 40 %

The lower limit given at each grade belongs to that grade.

4. SPECIFIED LITERATURE

In order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY

All teaching supplements and materials are available through TEAMS platform.

https://univpecs.sharepoint.com/teams/FunctionalAnatomy_BioMedicalEngineering/Megosztott%20dokumentumok/Forms/AllItems.aspx?FolderCTID=0x0120007C07E83B47B6334B95709F81B920CC84&id=%2Fteams%2FFunctionalAnatomy%5FBioMedicalEngineering%2FMegosztott%20dokumentumok%2FGeneral&viewid=472e76fc%2D8be9%2D4025%2Dbbd6%2D82366f3d28d6

RECOMMENDED LITERATURE AND AVAILABILITY

Further teaching material is available on the website of the Anatomy Department
http://an-server.pote.hu/OKT/_Jegyz/eJegyz.htm
http://an-server.pote.hu/OKT/VIDEO/eBvideo.htm

Students might also use textbook: A. Faller, M. Schuenke: The human body (Thieme). This however is not meeting the special demands of the course.