

REQUIREMENTS (Faculty of Dentistry)

Semmelweis University	
Faculty of Medicine	Department of Physiology
Name of subject: Medical and Dental Physiology II	
Type of subject: Compulsory subject	
Subject code: FOKOELT187_2A	
Credit Points: 9	
Head of the Department: Dr. László Hunyady, Full Professor	
Course Director: Dr. Péter Várnai, Full Professor	
Tutor: Dr. András Balla	
Year: 2019/2020	
Aim of Medical and Dental Physiology course: The goal of Medical and Dental Physiology course is to give the students the understanding of the concepts and principles of medical and dental physiology. The lectures provide the information base while the seminars and practices provide the student with an opportunity to assimilate and integrate the material. Appropriate clinical perspectives are presented throughout the course.	
Schedule of the subject: <ol style="list-style-type: none">1. Haematopoiesis. Haemostasis, overview of immune system. Principles of the innate immunity.2. Humoral immunity. Cellular immunity. Regulation of immune response, blood groups3. Endocrine regulations. The hypothalamo-adenohypophyseal system; growth hormone, somatomedins.4. Function of the adrenal cortex. Function of the thyroid gland.5. Hormonal regulation of intermediary metabolism.6. Calcium metabolism, bone tissue, growth. Function of the reproductive system: endocrinology of the sexual differentiation and development.7. Function of the reproductive system: male sexual function; female sexual function; endocrinology of pregnancy, parturition, and lactation.8. Introduction to neurophysiology. Physiology of nerve & glia cells.9. Sensory functions.10. Physiology of hearing and equilibrium.11. Physiology of vision.12. Motor functions.13. Integration of autonomic responses.14. Electroencephalogram (EEG); sleep phenomena. Learning and memory. Regulation of behavioral mechanisms, motivation; emotion.	
Practices: <ul style="list-style-type: none">• Circulatory and respiratory reflexes in rabbit• Human pulmonary function tests	

- Smooth muscle of rabbit small intestine
- Oral glucose tolerance test (OGTT)
- Electrooculography (EOG) and investigation of the vestibular system
- Reflex function
- Computer simulation: Studies on circulatory reactions of a virtual rat
- Computer simulation: Neuromuscular junction

Attendance at classes: The lecture hours per week are 6; the practice hours per week are 3.5. The attendance of a minimum of 75% of practices (including seminars) is necessary for the end-term signature.

Absences:

No more than three absences from practices are allowed for any reason; otherwise the semester will not be credited. Missed sessions must be reported to the teacher the week after. There are no extra practices.

Obtaining signatures:

The attendance of a minimum of 75% of practices (including seminars) is necessary for the end-term signature. Students must write a lab report for each practice using the Practical Book. The Practical Book should be signed by the teacher not later than one week after the practice. Participation in the practices is compulsory. No more than three absences from practices (6 seminar hours and 4.5 practice hours) are allowed for any reason; otherwise the semester will not be credited.

Final exams:

In the examination period the students have to give final exam in the second semester.

Type and grading of exams:

The final exam consists of written and oral part. The written and oral part of the final exam is held on the same day. The oral part consists of two theoretical questions (I-II). Failed (1) theoretical question results in an overall failed (1) final exam. The mathematical average of three grades (written exam grade, and two oral exam grades) gives the grade of the final exam. Lists of the theoretical questions are listed in the webpage in the Department of Physiology. The following rules will be enforced during the exams: electronic devices must be kept in the baggage; baggage and overcoats should be placed next to the wall of the lecture halls; any form of communication is disallowed; students not complying with these rules will be disqualified immediately.

Requirements of the exams:

Final exam: material of the Medical and Dental Physiology I. and Medical and Dental Physiology II.

Registration for the exam:

Registration for the exam must be recorded through the NEPTUN system.

Modification of the registration for the exam:

Modification in the registration must be recorded through the NEPTUN system not later than 48 hours before the start of the exam.

Absences from the exams:

Failing to certify absence or denying it cause registering “absence” = “nem jelent meg” in the lecture book and/or in the NEPTUN system.

List of textbooks:

Textbook: Koeppen-Bruce M- Stanton- Bruce A: Berne & Levy Physiology (7th edition). 2017. ISBN: 9780323393942

Practice book: Practices in Medical Physiology (Edited by: Péter Enyedi and Levente Kiss). 2017. ISBN: 9789633314159.