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| Name of the Discipline | **HUMAN PHYSIOLOGY**  |
| Type | Compulsory |
| Year | I |
| Componence | Fundamental |
| Person in charge | Victor Vovc, Svetlana Lozovanu |
| Location | University building nr. 1 „Leonid Cobâleanschi”,27 Nicolae Testemițanu str. |
| Provisional terms and conditions | Program: basic knowledge in sciences such as: anatomy, biology, biochemistry, histology, information technology (creation of computer document, use of virtual programs and computer programs for recording and analysis of physiology functions). Knowledge of the fundamental principles that delimit the biological system from the physical systems. Explaining the essence of humoral and nervous processes in the human body. Acquiring the physical bases of some techniques used in physiology, to know the possibilities and the limits of their application; |
| Skills: basic digital skills (internet use, document processing, use of text editors, digital charts and applications for presentation), team communication skills. Logistics support electronic whiteboard / flipchart. BIOPAC MP36 data acquisition system, which allows the registration of over 20 physiological parameters of the human body and their subsequent analysis. Computer room for running virtual physiology software and watching movies that show some physiological experiences or clinical methods of investigation. Interactive physiology programs of laboratory simulation. |
| Mission of the discipline | The mission of the discipline aims to provide students of the Faculty of Dentistry with fundamental data on the functional properties of cells, tissues, organs and systems, on their neurohumoral mechanisms of regulation and control and to form a set of skills necessary for learning the specialized courses:a) to have both knowledge and a vast ability to understand various physiological aspects in order to be able to develop a wide range of skills, including research, investigation, analysis, and to be able to face and solve some problems, to plan communications and to present a team spirit.b) to have knowledge regarding the physiological constants, their age variations in correlation with the new data within the biomedical sciences;c) to appreciate the importance of studying the functions of regulation and control of the activity of the organs, of the systems of organs as well as of the interactions between them;d) skills for acquiring moral criteria, formation of professional and civic attitude, which allow students to be fair, honest, non-conflicting, cooperative, understanding of suffering, eager to help people, interested in community development;. |
| Themes | Physiology of excitable tissues. Structure and function of synapses in the CNS. Nervous centers, the peculiarities of the propagation of excitation in the nervous centers. Neurohumoral mechanisms for regulating physiological functions. Cardiovascular system. Digestive and respiratory systems. Metabolism. Excretion, fluids of the human body. CNS, somatosensory system. |
| Study finalities  | • Educating students in the spirit of the rigor of the medical act and of understanding the determining role of the fundamental sciences for the given level, as well as for their professional training.• Acquisition by students of practical skills on the correct execution of functional explorations, based on understanding not only the procedures but also the phenomena explored, as well as the principles of the respective techniques;• Theoretical training of students to be able to gain knowledge, through systematized information on the phenomena of functional integration, from cell to organ, organ systems and the whole body.• All this will allow students to gain knowledge about the normal functions of the human body, so they will be able to understand in an integrative way the physiological processes, from cell to body, thus gaining a solid foundation for clinical dental science. |
| Acquired practical skills | • to explain the physical phenomena involved in the functioning of biological systems.• to understand the importance of the mechanisms of nervous regulation of physiological functions in the coordination of organs and separate systems for the normal activity of the whole organism.• to accumulate information on the normal functioning of the human body, following that on this "base" to be added fundamental knowledge from clinical objects;• to develop skills in recording, measuring and interpreting physiological parameters, for verbal and written presentation of their own findings and appreciation of physiological and individual variations;• to understand the use of physical-mathematical techniques in physiological investigations and their role in dental clinical practice.• to interpret the nervous mechanisms of automatic regulation in biological systems;• to establish the correlation between the anatomical structure of the organ and its functional state.• to estimate the role of biological and physiological processes that ensure the vital activity of the human body;• to use modern methods of research on nervous phenomena and processes in the human body;• to use the theoretical-practical knowledge obtained when studying the physiology course by correlating them with the field of professional activity.• to learn methods of studying and appreciating the activity of different organs and systems through virtual and computerized techniques of the BIOPAC system; |
| Method of assessment | colloquy  |