MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Cell and molecular biology			
2.2 Course coordinator: Șef l dr Zazgyva Ancuța-Marilena			
2.3 Practical activities coordinator(s): Șef l dr Zazgyva Ancuța-Marilena, Asist drd. Humă Laurențiu			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 15		
- supplemental documentation at the library, from specialized information portals and in the field: 14		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 44		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: None
4.2 competency: None

5. Conditions

5.1 for lectures: None
5.2 for practical activities: None

6. Specific competencies acquired

6.1 professional competencies: - Initiation into microscopic study: optical and electronic microscopes - Acquiring practical skills for handling microscopes and laboratory equipment - Deepening theoretical and practical notions regarding the structure and ultrastructure of the cell and themolecular mechanisms underlying life - Demonstrating the practical importance of cellular and molecular pathology for the understanding of all medical disciplines - Using the learned concepts in scientific research
6.2 transversal competencies: - Introduction to the study of morphological sciences - Appropriation of theoretical and practical notions regarding the microcosmos of the living world - Development of medical thinking and use of scientific information in order to understand the physiological and pathological processes seen in various diseases - Creating a paper/report, by identifying the objectives to be achieved, available resources, conditions and stage of work, as well as timing and terms of achievement

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The Department of Cell and Molecular Biology aims to study and understand the structure and ultrastructure of the cell and the molecular mechanisms underlying life, using optical microscopy, in common staining (HE), special staining and electron microscopy

7.2 Specific objectives:
- Learning the basics of cell and molecular biology, with subsequent applications in the study of other morphological sciences
- Understanding mechanisms of action at the cellular and molecular level with applications in medical practice
- Comprehensive and basic techniques in preparation of microscopic specimens
- Microscopic study and recognition of different types of cells and tissues, positive and differential diagnosis of normal cellular structure and its implications in medicine

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to Cell Biology	Oral, multimedia presentation	Introductory course, with notions of history	Acid based disturbance. HIV. Immunodeficiency. Chromosomal disorders	2
2	The cell. Prokaryotes. Eukaryotes. Molecular forms of life. Cellularity of dental and periodontal structures. Dental and periodontal structure and ultrastructure	Oral, multimedia presentation	-	HIV. Encephalopathy. Oral disorders (inlcl. caries)	2
3	Chemical composition of the living cell. Biochemistry of dental and periodontal structures	Oral, multimedia presentation	-	Inborn errors of metabolism. Disorders of calcium and vitamin D metabolism	2
4	The glycocalyx. The cell membrane. The cytoskeleton. Intercellular connections. The cytoplasmic matrix	Oral, multimedia presentation	-	Rhesus haemolytic disease	2
5	Extracellular matrix. The basement membrane. Implants	Oral, multimedia presentation	-	Immunization. Malabsorption. Cranial nerve disorders	2
6	Transmembrane transport. Transport through membranes. Vesicular transport	Oral, multimedia presentation	-	Inborn errors of metabolism	2
7	TBL The nucleus. Nuclear chromatin. The nucleolus. Characteristics of the DNA molecule. The chromosomes of eukaryotic Cells	Oral, multimedia presentation	-	Disorders of muscle. Oral disorders (inlcl. Caries)	2
8	Cell cycle. Cell division	Oral, multimedia presentation	-	Chromosomal disorders. Malformations of lip/palate	2
9	Endoplasmic reticulum. Ribosomes	Oral, multimedia presentation	-	Chromosomal disorders. Malformations of lip/palate	2
10	Cell secretion. Golgi apparatus	Oral, multimedia presentation	-	Chromosomal disorders. Malformations of lip/palate	2
11	Cell digestion. Lysosomes. Peroxisomes. Particularities of the orofacial sphere	Oral, multimedia presentation	-	Disorders of lipid metabolism. Disorders of uric acid metabolism. Parotid swelling	2
12	TBL Mitochondria	Oral, multimedia presentation	-	Electrolyte and water balance	2
13	Cell senescence. Cell death. Aspects of cell and molecular biology in dental pathology	Oral, multimedia presentation	-	Degenerative CNS disease. Disorders of lipid metabolism. Ischemic heart disease. Carcinoma of head and neck	2

14	Review. Molecular biology techniques. Cell Biology: present and future	Oral, multimedia presentation	-	Immunodeficiency. Chromosomal disorders	2

Bibliography

Bibliography
1. „Cell Biology”, Mariana Cornelia Tilinca, University Press, Tirgu Mures, 2009
2. „Molecular Biology of the Cell”, Bruce Alberts, Alexander D. Johnson, Julian Lewis, David Morgan, Martin Raff, Watson D. James, 6th Edition, W. W. Norton & Company, 2014
3. „Essential Cell Biology”, Bruce Alberts, Karen Hopkin, Alexander D. Johnson, David Morgan, Martin Raff, Keith Roberts, Peter Walter, 5th Edition, W.W. Norton & Company, 2019
4. „Cell Biology”, Pollard T.D., Earnshaw W.C.: Saunders Elsevier, Philadelphia, 2008
5. The material presented in class

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Microscopy techniques. Light microscopy. Steps for preparing a permanent microscopy slide. Steps for preparing a native specimen for microscopy. Electron microscopy	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Carcinoma of head and neck	2
2	Shapes of the cells from the the gums, lip, dental pulp, mandible	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Carcinoma of the cervix. Disorders of muscle. Oral disorders (inlcl. Caries)	2
3	Chemical composition of the cell. Decalcification methods for the study of soft structures	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Inborn errors of metabolism. Disorders of calcium and vitamin D metabolis	2
4	Extensions of the cell surface. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Inflammatory bowel disease. Acute renal disease	2
5	Extracellular matrix. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Connective tissue disease	2
6	Shapes of the nuclei. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Lymphoproliferative disorders	2
7	Mid-term evaluation test	-	-	-	2
8	Cell division. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Chromosomal disorders. Malformations of lip/palate	2
9	Endoplasmic reticulum. Ribosomes. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Chromosomal disorders. Malformations of lip/palate	2
10	Golgi apparatus and cell secretion. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Disorders of lipid metabolism	2
11	Lysosomes. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Thyroid disorders. Disorders of pancreas. Disorders of lipid metabolism. Oral disorders (inlcl. Caries)	2
12	Mitochondria. Examples from the orofacial sphere	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Inborn errors of metabolism	2
13	Cell senescence. Cell death	Specimen examination in optical microscopy. Practical demonstrations. Multimedia presentation	-	Electrolyte and water balance	2
14	Review: review of all studied specimens, re-testing	Specimen examination in optical microscopy. Practical demonstrations.	-	-	2

		Multimedia presentation			

Bibliography
Bibliography
1. „Cell Biology Practical Works Guide”, Mariana Cornelia Tilinca, Târgu Mureș, University Press, 2011
2. „Cell Biology”, Pollard T.D., Earnshaw W.C.: Saunders Elsevier, Philadelphia, 2008
3. „Molecular Biology of the Cell”, Bruce Alberts, Alexander D. Johnson, Julian Lewis, David Morgan, Martin Raff, Watson D. James, 6th Edition, W. W. Norton & Company, 2014
4. „Essential Cell Biology”, Bruce Alberts, Karen Hopkin, Alexander D. Johnson, David Morgan, Martin Raff, Keith Roberts, Peter Walter, 5th Edition, W.W. Norton & Company, 2019
4. Johnson K.E.: „Histology and cell biology”, Williams & Wilkins, Baltimore, 1991
5. The material presented in class

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

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10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Two TBL evaluations during the semester – the evaluation is mandatory and eliminatory – each represents 10% of the final grade	TBL	20
- practical activities	The activity throughout the semester (test and presentations) and practical works attendance	Practical evaluation, examination in optical microscopy	15
Final evaluation			
- theoretical final exam	Theoretical knowledge about the structure and ultrastructure of the cell and the molecular mechanisms of the living world. Multiple choice tests for the assessment of the theoretical notions taught during the semester. The theoretical exam is mandatory and eliminatory	Theoretical examination based on multiple choice tests, during the session	45
- practical final exam	Practical work: Recognition and description of the studied microscopic specimens: organ diagnosis, diagnosis of staining, description of studied structures, differential diagnosis. The practical exam is mandatory and eliminatory	Practical examination (Examination of microscopic specimens)	20

Minimal performance standards:
Minimal performance standards:
- The mid-term evaluation during the semester is compulsory and eliminatory (minimum passing grade is 5); recognition of a microscopic specimen: organ/ tissue diagnosis, diagnosis of staining, description of studied structures, differential diagnosis
- The minimum passing grade for both exams – theoretical and practical – is 5
- To obtain a grade of 5 for the practical exam, it is necessary to recognize and describe the studied microscopic specimens: organ diagnosis, diagnosis of staining, description of studied structures, differential diagnosis

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Zazgyva Ancuța-Marilena	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physiology			
2.2 Course coordinator: Șef l dr Metz Erzsebet-Julia			
2.3 Practical activities coordinator(s): asist. dr. Nyulas Tiberiu, asist. drd. Kelemen Krisztina			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 10	3.2 lecture: 4	3.3 practical activities: 6
3.4 Total hours in curriculum: 70	3.5 lectures: 28	3.6 practical activities: 42
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 40		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 55		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: Knowledge of basic concepts before the beginning of the lectures: mass, volume, density, force, velocity, acceleration, pressure, friction, yield, frequency, wave, ion, current, ionic current, current intensity, electric field, tension, matter, molecule, solution, mole, concentration, diffusion, osmosis, affinity, pH.
4.2 competency: A. understanding the difference between process and structure B. understanding the difference between the properties and components of a structure, understanding the difference between a process and its parameters C. characterization of substructures and subprocesses (a smaller structure can be part of a larger one, a process can be part of a process line etc.) D. understanding the chronology of processes E. understanding causality and effect

5. Conditions

5.1 for lectures: Lecture hall equipped with blackboard and digital projector
5.2 for practical activities: Rooms equipped with laboratory equipment necessary for „hands on" type laboratory practices

6. Specific competencies acquired

6.1 professional competencies: Attending the Physiology lectures will allow the students to understand the functions of different organs and organ systems, and the integration of these functions. Besides the acquisition of the knowledge regarding the basic functions their correlation with the clinical practice is required as well, based also on the Pathophysiology and Pharmacology studied after the understanding of normal function. After attending the lectures students should be familiarized with the principles of the most frequently performed functional tests and able to perform simple experiments and interpret their results. At the end of the lectures students should know the following key concepts and principles:

1. The general structure of the cells, with emphasis on the structure and functions of the cell membrane. Types and mechanisms of transport across the cell membrane. 2. The generation and spread of the electric impulse (resting membrane potential and action potential). The synaptic transmission, the general synaptic organization of the nervous system. The principles of muscle contraction. 3. The cardiovascular function, electrical and mechanical phenomena, heart cycle, principles of hemodynamics and circulation. 4. Physiology of blood: the role of red blood cells, white blood cells, platelets. 5. Physiology of respiration: respiration, ventilation, gas transport, control of respiration. 6. Physiology of the kidneys, filtration, tubular function, dilution and concentration of urine. 7. Gastrointestinal tract: salivary secretion, digestion, principles of nutrition. 8. Organization of the endocrine system, effects and mechanism of action of the main hormones, role of the endocrine system in the maintenance of homeostasis.
6.2 transversal competencies: Knowledge of the connection between different mechanisms of homeostasis, the influence of the changes of the outer and inner environment, the multidisciplinary approach of the main mechanisms of life. To work individually and in group to perform functional tests during the implementation of the theoretical knowledge. Computer usage, continuous learning and self-testing. To determine the necessity of biological tests, to plan and perform these. To present the result of their own research in written or oral form in student's scientific events.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Integrated understanding the principles of normal body functions. The effect on the human body of the interaction between the body and its environment.
7.2 Specific objectives: Knowledge of the physiological functions of the body as a whole and of the different systems and organs (macro-, microscopic and molecular details). Recognition of problems caused by disturbances of the normal function. Knowledge of the mechanisms of homeostasis. Ability of individual learning and documentation. Elaboration of functional tests and understanding, interpretation of the results. Development of verbal skills, proper knowledge of terminology.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction, levels of organization of the human body. Inner environment and homeostasis. Cell membrane. Body fluid compartments. Diffusion. Osmosis. Oncotic pressure.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Oedema, joint swelling, loose stools, raised intracranial pressure, electrolyte and water balance.	2
2	Functions of the membrane proteins. Receptors. Types of the receptor-ligand interaction. Intracellular signal transduction. Activation-inactivation of proteins. Blood: introduction, hematocrit. Blood proteins. Red blood cells: morphology, number, function. Regulation of the red blood cell number. Hemoglobin. Iron metabolism. Blood types, blood transfusion.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Anemia, Rhesus haemolytic disease, transfusion of blood products, cyanosis, hetapomegaly, jaundice, acute liver disease/failure, chronic liver disease, gallbladder disease, breathlessness, malabsorption, tiredness, palpitations, drug reactions	2
3	White blood cells: general description, classification. Mechanisms of the immune system. Innate and adaptive immune system. The cells of the immune system and interactions between immune cells. Antigen and antibody. Antibodies: production, structure, roles, types. MHC antigens. CD antigens. Immune tolerance and	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Infectious disease of childhood, myeloproliferative disorders, Rhesus haemolytic disease, pruritus	2

	immune vigilance.				
4	Primary and secondary immune response. Effector mechanisms of the immune system: the cytotoxic T cell, the complement system, phagocytosis, killing (enzymatic and oxidative). Macrophage: role, substances produced by the macrophage. Eicosanoids. Mast cell.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Immunisation, allergic disorders, asthma, bullous/ vesicular skin eruption, shock	2
5	Histamine and its effects. Inflammation. Hemostasis: introduction, phases. Platelets	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Allergic disorders, asthma, coagulation disease, purpura.	2
6	Coagulation. Modulation of the coagulation cascade. Regulation of hemostasis. Laboratory assessment of hemostasis.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Coagulation disease, purpura, thromboembolic disease.	2
7	Physiology of the cardiovascular system – introduction, functional levels. Systemic and pulmonary circulation. Mechanical activity of the heart. Heart cycle. Heart sounds. Ionic channels and pumps. Membrane potential. Equilibrium potential. Action potential. Role of intracellular calcium ions. Generation and propagation of excitation. Recording of the electrical activity of the heart.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Cardiac conduction/rhythm disorder, cardiac valve disease, cardiorespiratory arrest, palpitations.	2
8	Elastic blood vessels. Pulse. Relationship between the diameter and elasticity of the vessels and the blood flow. Resistive blood vessels. Redistribution of circulation. Blood pressure. Control of the blood pressure. The renin-angiotensin system. Exchange level. Capillaries. Capacitive level. Regulation of the cardiac output. Factors that influence the venous return.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Cerebrovascular disease, peripheral vascular disease, shock, hypertension, varicose veins.	2
9	Renal physiology. Morpho-functional description of the kidneys. Clearance. Primary and final urine. Glomerular filtration and its control. Tubular function. Glucose-type resorption. The diluting and concentrating function of the kidneys. Control mechanisms.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Electrolyte and water balance, drug reactions, Acid base disturbance, acute renal disease/failure, anemia, chronic liver disease, disorders of lipid metabolism, hypertension, oedema, polyuria	2
10	Physiology of respiration. Ventilation. Perfusion. Alveolar gas exchange. Control of respiration.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Breathlessness, dizziness, pleural effusion, pneumothorax, respiratory tract infections.	2
11	Physiology of the nervous system: introduction. Neuron. Interneuronal communication types. Synaptic signaling. Excitatory and inhibitory neurotransmitters. The role of noradrenalin, dopamine, serotonin and acetylcholine in the nervous system.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Terminal care, post-operatie care, pre-operative care, cranial nerve disorders, brain tumor.	2

12	Sensory systems. Nociception. Receptors. Peripheral transmission of the nociceptive signal. Spinal processing of the nociceptive signal, cerebral polymodal integration.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Abdominal pain, back pain, pain management, migraine, peripheral nerve disorders.	2
13	Endocrine system: principles. Autocrine, paracrine and endocrine control. The hypothalamo-pituitary system. Anterior and posterior pituitary gland. Adrenal cortex. Calcium and phosphate metabolism	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Psychosexual dysfunction, infertility, pituitary disorders, brain tumor, diabetes mellitus, disorders of calcium and vitamin D metabolism, thyroid disorders, hypoglycaemia, hypogonadism.	2
14	Digestive physiology. Salivary secretion. Mastication. Secretion of gastric juice and its control. Gastrointestinal motility. Emesis and the control of emesis.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with students.	-	Infant feeding, carcinoma of the stomach, carcinoma of the pancreas, gastroenteritis, acute liver disease/failure, gall bladder disease, chronic liver disease, oral disorders, eating disorders, peptic ulcer	2

Bibliography
Metz Júlia, Orbán-Kis Károly, Szilágyi Tibor: Physiology - lecture notes, 2021.
web-page of the Department of Physiology
Optional:
- Linda S. Costanzo: Physiology, Elsevier, 2017
- Berne & Levy Physiology, Elsevier, 2017
- W. Boron: Medical Physiology, Elsevier, 2016
- Guyton AC, Hall JE.: Textbook of Medical Physiology, Elsevier, 2016

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General presentation of the laboratory of physiology. Safety procedures and rules in the physiology laboratory. Standards of professional ethics in experimental laboratory.	Oral presentation	-	not applicable	3
2	Measurement of plasma electrolytes.	Oral presentation + laboratory activity	-	Electrolyte and water balance, loose stools, oedema, vomiting.	3
3	Acid-base balance. The role of acid-base balance in homeostasis.	Oral presentation + laboratory activity	-	Electrolyte and water balance, acid-base disturbance.	3
4	Principles of blood cell count. Counting of red blood cells, leucocytes and eosinophiles	Oral presentation + laboratory activity	-	Anemia, cyanosis.	3
5	Leucogram. Peripheral blood smear.	Oral presentation + laboratory activity	-	Immunisation, asthma, pruritus.	3
6	Counting of thrombocytes. Bleeding and coagulation times.	Oral presentation + laboratory activity	-	Coagulation disease, purpura, thromboembolic disease.	3
7	Blood typing. Hemoglobin	Oral presentation + laboratory activity	-	Jaundice, Rhesus haemolytic disease, transfusion of blood products	3
8	Assessment of the cardiovascular system: pulse, blood pressure	Oral presentation + laboratory activity	-	Drug reactions, chest pain, disorders of lipid metabolism, ischemic heart.	3

9	Assessment of the cardiovascular system. Recording the electrical activity of the heart	Oral presentation + laboratory activity	-	Cardiac conduction/rhythm disorder, cardiorespiratory arrest, palpitations.	3
10	Functional assessment of the respiratory system.	Oral presentation + laboratory activity	-	Breathlessness, dizziness, stridor, pleural effusion, pneumothorax, reapiratory tract infection.	3
11	Functional assessment of the nervous system: reflexes, reaction time	Oral presentation + laboratory activity	-	Peripheral nerve disorders	3
12	Functional assessment of the endocrine system	Oral presentation + laboratory activity	-	Psychosexual dysfunction, infertility, pituitary disorders, brain tumor.	3
13	Assesment of the visual system. Assessmentof the auditory system	Oral presentation + laboratory activity	-	Visual impairment, visual loss, hearing loss	3
14	Formative evaluation: evaluation of knowledge obtained at the laboratory practices	-	-	not applicable	3
Bibliography web-page of the Department of Physiology					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- the integration of molecular/cellular functions in organism-level functions;
- the normal function is on the base of pathological clinical conditions;
- performing experiments;
- interpretation of clinical tests.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Assessment of knowledge acquired during the semester	Written/MCQ/oral exam	30
Final evaluation			
- theoretical final exam	Assessment of theoretical knowledge gained during the semester	Summative assessment – Written/MCQ test	70
- practical final exam	-	-	0

Minimal performance standards:
Students are required to attend laboratory practices according to the schedule of groups and rooms. Students should have a proper theoretical background. Students should perform certain practical activities and will be evaluated during the labs. If the student fails to fulfill the requirements, the lab should be repeated.
Students are allowed to attend further examinations only if they have no missed laboratory practices (regardless if the student was not present or validation of the laboratory practice was denied).
Students who failed to fulfill their obligations during the year have to repeat all the laboratory practices during the next academic year. The missed laboratory practices (regardless the cause: absence or not validated) can be recovered during the cycle of the laboratory practices (according to the schedule) or during the recuperations scheduled at the end of the module, but not more than one laboratory practice per day, depending on the existence of vacant seats in the room and with the permission of the teacher. According to The Rulebook of Didactic and Professional Activity of Students in Bachelor's and Master's Programs, the existence of a motivation form the Dean's Office means only that the student can recuperate without paying a fee.
Students are required to perform the given practical exercises and to keep a record of them. At the end of each laboratory practice, the assistant lecturer will certify with his/her signature the lab's validity.
Evaluation of knowledge obtained at the laboratory practices will be done by a formative assessment at the end of the semester (compulsory in the last week of the semester). This formative evaluation is part of the evaluation of the student's activity throughout the year: If the grade obtained at this evaluation is below 5.00, the physiology exam is automatically considered failed. If the formative assessment at the end of the semester is failed, it can be repeated in the reexamination sessions. Students who were absent for medical reasons (they must present proof), can recuperate the formative assessment at the end of the semester during the first, ordinary, session. The grade from the formative evaluation during the last week of the semester accounts for 30% of the final grade.
The final summative evaluation is a written test. At the final summative evaluation, only those students can participate who attended the formative assessment at the end of the semester. Students who were absent at the

formative evaluation at the end of the semester are not allowed to participate at the final summative evaluation, as they did not complete their professional obligations.
At the summative evaluation, the entire curriculum is considered for integrative questions. The time for testing and the number of questions and answers may vary according to the number of lecture hours of the specialization. To pass the final summative evaluation, at least 50% of the maximum score of the test should be obtained. The final summative evaluation accounts for 70% of the final grade.
The mean value calculated from all the grades must be ≥5.00; otherwise the exam is considered failed.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Metz Erzsebet-Julia	Thursday 10-12

Head of departament | Course coordinator | Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Anatomy and embriology			
2.2 Course coordinator: Conf dr Mureșan Mircea-Gabriel			
2.3 Practical activities coordinator(s): Conf dr Mureșan Mircea-Gabriel			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 10	3.2 lecture: 4	3.3 practical activities: 6
3.4 Total hours in curriculum: 70	3.5 lectures: 28	3.6 practical activities: 42
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 35		
- supplemental documentation at the library, from specialized information portals and in the field: 15		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 5		
- other activities: 0		
3.8 Total hours of individual study: 55		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: Not applicable
4.2 competency: basic knowledge in biology, a fair command of the English language, basic understanding and communication skills

5. Conditions

5.1 for lectures: A blackboard of min. 5 m2, colored chalks, projecting device, inclusive an adequate software for presenting static and motion pictures
5.2 for practical activities: Anatomical specimens, human corpse

6. Specific competencies acquired

6.1 professional competencies: Describing and interpreting fundamental notions of the morphology and functioning of the dentomaxillary apparatus, integration of these in concepts/situations meant to apply solutions with the aim of formulating hypotheses and to correctly interpret signs, symptoms and paraclinical modifications for building a morphological and a clinical diagnosis, developing of novel professional competences in the general and the specific dentistry healthcare.
6.2 transversal competencies: Acquiring skills and techniques which enable identification of objectives to be fulfilled, of resources available, of the conditions to match, of the work phases, of the deadlines and afferent risks according to a minimal standard: implementation of projects under coordination for solving certain problems specific of the field
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches.

Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The student becomes acquiesced with the principles of organization, development and functions of the dentomaxillary apparatus generally, and with the specific human aspects particularly. He becomes able to observe and to anticipate the topographic relations between the components of the human dentomaxillary apparatus and to interpret them in a functional context. The student will gain practical and detailed knowledge about the development of the dentomaxillary apparatus and the oral cavity, parts of the body that yet are to be studied which represent the area of their medical activity. The student will comprehend the interrelations between the various components and will be able to make distinction their variations falling within the normal limits versus the pathological phenomena and will also acquire the ability to communicate about this the observations and share his experience with others.

7.2 Specific objectives:
Learning the functional anatomy of the dentomaxillary apparatus, its components, the philogenesis and ontogenesis of the face and of the neck, of the regional anatomy, radiologic anatomy, anthropometry and biochronology. From a functional point of view, emphasis is set on the biomechanics of the motions in the TMJ, of the mastication and of the deglutition. The student will be able for a theoretical and a practical orientation in the oral cavity, especially in the entourage of the dentomaxillary arches. He will develop a vision about the shape and content of the oral cavity with a clear notion of the normal within, both morphologically and functionally, which in turn will serve as a reference when the task will be the restoration of normal relations through his therapeutical activity. The student will also develop an appropriate and detailed vocabulary used in all of the branches of the science he has chosen. The acquired knowledge will serve as a basis for the further studies and the specific sciences in dentistry.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to the study of the anatomy. General osteology.	Oral presentation, Powerpoint presentation, Video materials	-	Osteoarthrits. Osteomyelitis. Osteoporosis	2
2	The articulated skeleton (vertebral column, osteothorax, pelvis)	Oral presentation, Powerpoint presentation, Video materials	-	Vertebral pathology Thoraco abdominal trauma	2
3	General arthrology and myology. Biomechanics of joints and muscles	Oral presentation, Powerpoint presentation, Video materials	-	Movement disorders, joint pain, joint swealling	2
4	Upper and lower limb muscles	Oral presentation, Powerpoint presentation, Video materials	-	Oral presentation, Powerpoint presentation, Video materials	2
5	Blood supply of the superior limb. Brachial plexus	Oral presentation, Powerpoint presentation, Video materials	-	Peripheral vascular disorders	2
6	Blood supply of the inferior limb. Lombosacral plexus	Oral presentation, Powerpoint presentation, Video materials	-	Peripheral vascular disorders	2
7	Application of the knowledge on clinical cases	TBL	-	-	2
8	A topographic synthesis of the walls of the cavities of the torsA topographic synthesis of the walls of the cavities of the torso. The zones of lesser resistance.	Oral presentation, Powerpoint presentation, Video materials	-	Muscular disorders. Herniae	2
9	Anatomy of the mediastinum. Functional anatomy of the lungs Functional anatomy of the heart.	Oral presentation, Powerpoint presentation, Video materials	-	Pleuraesia Pneumothorax Thoracoabdominal trauma	2
10	Anatomy of the abdominal cavities. Peritoneum and the peritoneal formations.	Oral presentation, Powerpoint presentation, Video materials	-	Peritonitis Appendicitis Feeding disorders	2

11	Blood supply of the abdominal organs Functional anatomy of the liver. System of the port hepatic vein. Vascularization and innervation of retroperitoneum.	Oral presentation, Powerpoint presentation, Video materials	-	Hepatomegalia, Coagulopathies, Chronic hepathic disorders, Hepatic encephalopathies, Gall bladder disorders, Acute hepatic disorders	2
12	Functional anatomy of the urogenital organs	Oral presentation, Powerpoint presentation, Video materials	-	Chronic renal disorders Pathology of the prostate Urinary incontinence	2
13	A topographic synthesis of the of the pelvis and perineum in male and in female	Oral presentation, Powerpoint presentation, Video materials	-	Anorectal pain	2
14	Application of the knowledge on clinical cases	TBL	-	-	2

Bibliography

1.Richard Drake, PhD, A. Wayne Vogl, PhD and Adam W. M. Mitchell. Gray's Anatomy. ISBN: 978-0-443-06952-9.
2.Romanes: Cunningham’s Practical Anatomy vol I.-I.-III.

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The bones of the torso. The bones of the facial skeleton, the maxilla, the mandible, the hyoid bone. Frontal, parietal and ethmoid bones. Temporal and occipital bones.	Demonstrations on preparats human corpse	-	-	3
2	The bony nasal cavity, the bony orbit, the pterygopalatine fossa. The infratemporal fossa, the temporal fossa and the bony palate. The internal and external skull base	Demonstrations on preparats human corpse	-	-	3
3	The bones of the superior limb. Muscles of the superior limb.	Demonstrations on preparats human corpse	-	-	3
4	Vessels of the superior limb. Regions of the shoulder girdle. Nerves of the super limb. Regions of the arm of the elbow and of the forearm. Regions of the forearm, of the wrist, of the hand	Demonstrations on preparats human corpse	-	-	3
5	The bones of the inferior limb. Muscles of the inferior limb.	Demonstrations on preparats human corpse	-	-	3
6	Vessels of the inferior limb. Regions of the pelvic girdle. Nerves of the inferior limb. Regions of the thigh, knee and calf.	Demonstrations on preparats human corpse	-	-	3
7	Osteology seminar	Demonstrations on preparats human corpse	-	-	3
8	Muscles and regions of the trunk. Intercostal spaces. Descriptive anatomy of the lungs and pleurae.	Demonstrations on preparats human corpse	-	-	3
9	External configuration of the heart, its cavities, the great vessels. Topography of the mediastinum. Pericardium and the diaphragmatic region.	Demonstrations on preparats human corpse	-	-	3
10	Anatomy of the stomach, of the liver and of the pancreas. The hepatic compartment.	Demonstrations on preparats human corpse	-	-	3
11	The compartment of the stomach. Descriptive anatomy of the intestines. The inframezocolic compartment.	Demonstrations on preparats human corpse	-	-	3
12	Descriptive anatomy of the kidneys and urinary ways.	Demonstrations on preparats human corpse	-	-	3
13	Anatomy of the retroperitoneum	Demonstrations on preparats human corpse	-	-	3
14	Application of the knowledge on clinical cases	Demonstrations on preparats human corpse	-	-	3

Bibliography
1.Richard Drake, PhD, A. Wayne Vogl, PhD and Adam W. M. Mitchell. Gray's Anatomy. ISBN: 978-0-443-06952-9.
2.Romanes: Cunningham’s Practical Anatomy vol I.-II.-III.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Practical value of the classes, not merely of the practical for gaining skills and competence for qualification.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	MCQ TEST	10
- practical activities	Seminar of osteology	Oral examination	20
Final evaluation			
- theoretical final exam	Paper based exam	MCQ TEST	40
- practical final exam	Paper based exam	Identifying structures on pictures	30

Minimal performance standards:
Student is supposed to know the interrelations between the systems and subsystems of the body, to make a distinction between variations within the limits of normal and to discern the pathological. He is also due to communicate about these with others. The student develops a correct vision about the shape and content of the living body, the functional normality which is to re-establish by his therapeutic attitude. The student also builds up a vocabulary that well be used in his further day-by day work

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Mureșan Mircea-Gabriel	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Biochemistry			
2.2 Course coordinator: Prof dr Tero-Vescan Amelia			
2.3 Practical activities coordinator(s): Conf Dr Eniko Nemes-Nagy			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 6	3.2 lecture: 2	3.3 practical activities: 4
3.4 Total hours in curriculum: 42	3.5 lectures: 14	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 30		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 15		
- tutorial activities: 5		
- examinations: 5		
- other activities: 8		
3.8 Total hours of individual study: 83		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Correlation of the diseases with biochemical processes at molecular level involved in imbalances which can affect the state of health of dental tissues. Conservative treatment behaviour of dental and periodontal structures according to biochemical aspects which can influence of above mentioned structures. Diagnosis and therapy of dento-maxillary anomalies taking into consideration any enzyme and vitamin deficiency involved în the development of dento-maxillary area. Prosthetic restoration of dental arches using the most suitable dental materials in correlation with the biochemical peculiarities of each patient.
6.2 transversal competencies: dentification of objectives achieved, resources available, conditions for their completion, phases of work, working time, periods of achievement and risk factors. Identification of roles and responsibilities in a multidisciplinary team in which biochemical metabolism-related knowledge may provide crucial information on the treatment and techniques applied and application of bonding techniques and efficient work within the team and in conjunction with the patient. Efficient usage of informational sources and resources for communication and assisted training.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The aim of the discipline is the formation of a general professional view of medical students. Our aim is presenting the main metabolic pathways taking place în the living cells, with remarks referring to the metabolism of dental and periodontal tissues. Another objective of this course is a general presentation of bacterial metabolism related to tooth decay

7.2 Specific objectives:
Assimilating knowledge regarding the particularities of biochemical metabolism at the level of the oral cavity.
Knowledge of the degradation processes during the formation of dental caries and periodontal diseases

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Amino acids: classification, physical and chemical properties. Peptides with biological importance. Proteins: structure and biological role	oral presentation	-	-	2
2	Lipoproteins. Glycoproteins. Chromoproteins: myoglobin and hemoglobin - structure, biological role, transport of oxygen, CO and CO2. Nucleoproteins, nucleosides and nucleotides. Structure of nucleic acids. Macroergic nucleotides	oral presentation	-	-	2
3	Enzymes (I): structure, classification, nomenclature, specificity, active centers. Models of ES complex formation.	oral presentation	-	-	2
4	Enzymes (II): enzyme kinetics, enzyme activators and inhibitors. regulation of enzyme activity. The localization of enzymes and their origin in plasma	oral presentation	-	-	2
5	Water-soluble vitamins: thiamin, riboflavin, niacin, pyridoxine, biotin, pantothenic acid, folic acid, cobalamin, ascorbic acid - biological role and deficiency	oral presentation	-	-	2
6	Fat-soluble vitamins: carotenes and retinoids, vitamins D, tocotrienols, vitamins K - biological role and deficiency	oral presentation	-	-	2
7	Metabolic processes: general ways of metabolizing organic compounds in the body. central pathways of metabolism: Krebs cycle - mechanism, energy balance, anaplerotic reactions, amphibolic character. The respiratory chain and oxidative phosphorylation	oral presentation	-	-	2

Bibliography
David L Nelson, Michael M Cox - Lehninger Principles of Biochemistry, 8th Edition, 2021
Jeremy M. Berg, Lubert Stryer, John Tymoczko, Gregory Gatto - Biochemistry 9th Edition, 2019
Thomas M. Devlin - Textbook of Biochemistry with Clinical Correlations, 7th Edition, 2015
Tero-Vescan A, Ősz BE, Imre S – Principii de Biochimie Medicală, Ed University Press Tîrgu Mureş, 2018

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Biochemical analysis. Biological materials used in the biochemistry laboratory. Techniques for plasma protein precipitation and supernatant collection.	individual practical activity or in a group of 2 people	-	-	2
2	The concept of pH. Colorimetric and potentiometric determination of pH. Buffer capacity	individual practical activity or in a group of 2 people	-	-	2
3	Preparation of percentage, molar, normal solutions. Preparation of a 0.1N HCl solution, determination of the factor. Errors of volumetric determinations. titration of a NaOH solution with HCl solutions. preparation of a solution of NaCl 2g% and physiological serum	individual practical activity or in a group of 2 people	-	-	2
4	Color reactions of amino acids and proteins (biuret reaction, ninhydrin, xanthoprotein reaction, identification of amino acids with sulfur, Pauli reaction). Protein precipitation reactions	individual practical activity or in a group of 2 people	-	-	2

5	Determination of the concentration of amino acids in the serum by the Sorensen method	individual practical activity or in a group of 2 people	-	-	2
6	Spectrophotometry. Determination of proteins by the biuret method	individual practical activity or in a group of 2 people	-	-	2
7	The chemical composition of teeth. Mineralization of teeth	individual practical activity or in a group of 2 people	-	-	2
8	Determination of calcium by the photometric method. Determination of magnesium in serum by the Mann-Yoe method	individual practical activity or in a group of 2 people	-	-	2
9	determination of serum phosphate by the Briggs method. Determination of fluorine by the potentiometric method	individual practical activity or in a group of 2 people	-	-	2
10	Determination of direct and total bilirubin in the serum	individual practical activity or in a group of 2 people	-	-	2
11	Determination of blood glucose by the enzymatic method. Using the glucometer	individual practical activity or in a group of 2 people	-	-	2
12	Determination of serum iron. Determination of hemoglobin as oxyhemoglobin	individual practical activity or in a group of 2 people	-	-	2
13	Pathological urine analysis. Rapid laboratory tests	individual practical activity or in a group of 2 people	-	-	2
14	Blood vitamin C determination	individual practical activity or in a group of 2 people	-	-	2

Bibliography
Oşan A, Nagy E, Tero-Vescan A - Biochimie practică, Ed University Press Tîrgu Mureş, 2008

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Knowledge of biochemistry is necessary for understanding at molecular level the processes that occur in the dental tissues.
Metabolic pathways involved in the process of caries formation and inflammatory processes that occur in periodontal tissues must be known.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL evaluation	MCQ	10
- practical activities	quizzes or lab reports	MCQ or lab report	20
Final evaluation			
- theoretical final exam	Theoretic exam	MCQ	70
- practical final exam	-	-	0

Minimal performance standards:
General knowledge of the main metabolic pathways. The role of vitamins in the body. Biochemical aspects of the dental caries formation process

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Tero-Vescan Amelia	marti 10-12

Head of departament	Course coordinator	Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Biophysics			
2.2 Course coordinator: Șef l dr Szakács Juliánna			
2.3 Practical activities coordinator(s): Șef l dr Szakács Juliánna			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 2		
- examinations: 5		
- other activities: 3		
3.8 Total hours of individual study: 44		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: not applicable
5.2 for practical activities: Knowledge of the topic of the practical works, the principle and work method of each experiment. Preparation of report before the given deadline.

6. Specific competencies acquired

6.1 professional competencies: Knowledge and understanding of basic concepts, theories and methods of the topic and the field of study, proper usage of them in professional communication. Description of basic methodology of scientific research. Description of basic concepts, theories which influence the health condition of a definite community.
6.2 transversal competencies: Identification of roles and responsabilities in a pluridisciplinary team and application of relationship and efficient work techniques. Execution of a work / project effectuation specific tasks in a pluridisciplinary team.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Identification and explanation of physical phenomena of biologycal system's function, explanation of functional principles of medical apparatus.
7.2 Specific objectives: Usage of some practical methods and physical tools of medical investigation. To measure, describe and explain physical phenomena in biological systems at the atomic to large molecular structure level. To explain the operating principles of medical devices (for best operating and safe use of the equipment).

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. A short introduction to Biophysics. Biophysics in general context of the biological sciences. The subject and methods of Biophysics. The origin and development of Biophysics. Achievements and perspectives in Biophysics.	oral presentation powerpoint presentation blackboard drawings	-	Diagnosis at the cellular/ molecular/quantum level	2
2	2. Basic concepts of biological thermodynamics. Biological thermodynamics concepts. First principle of thermodynamics. Thermodynamics state functions. The biological applicability of the first law of thermodynamics. Second principle of thermodynamics. The biological applicability of the second law of thermodynamics. Free energy fluxes in biological systems.	oral presentation powerpoint presentation blackboard drawings	-	Disorders of Metabolism, Malnutrition, Inborn errors of metabolism, Eating disorders	2
3	3. Water in the biological systems. Structure of the Water Molecule. Physical Properties of Water. The Heavy Water. Models of Liquid Water Structure and Transformations in Presence of Solutes. Water in Living Organisms.	oral presentation powerpoint presentation blackboard drawings	-	Hypothermia, Acid based disturbance	2
4	4. Biomembranes. Models: The lipid amphiphilic bilayer model. The Danielli-Dawson-Robertson model. Models based on sub-units. The fluid mosaic model. Biomembranes components structuring: arrangement of lipids, proteins and carbohydrates	oral presentation powerpoint presentation blackboard drawings	-	Disorders of lipid metabolism, Electrolyte and water balance	2
5	5. General Considerations of Permeability and Transport through Membranes. Passive transport: Simple diffusion, Osmosis, Facilitated diffusion Active transport: Primary active transport, Secondary active transport, Transport by membrane vesicles. Research on the transmembrane transport.	oral presentation powerpoint presentation blackboard drawings	-	Disorders of lipid metabolism, Electrolyte and water balance	2
6	6. Membrane Potentials. The Resting Potential. The Action Potential	oral presentation powerpoint presentation blackboard drawings	-	Spinal disorders, EKG, EEG, EMG, ERG	2
7	7. Biophysics of Respiration. Basically laws involved in the process of respiration.	oral presentation powerpoint presentation blackboard drawings	-	Respiratory tract infection, Pneumothorax, Cardiorespiratory arrest	2
8	8. Biophysics of Blood Circulation. Haemodynamics. Biophysics of Cardiac Contractions. The Elasticity of Large Blood Vessels and of Heart . The Pulse.	oral presentation powerpoint presentation blackboard drawings	-	Cardiac conduction/rhythm disorder, Cardiac valve disease, Hypertension, Ischemic heart disease, Malformations of cardiovascular system, Pericardial disease, Peripheral vascular disease	2

9	9. Muscle Contraction. Chemo-Mechanical Conversion of Energy. Muscular Mechanics and Energetic. Striated Muscle Structure. Muscle Shortening Mechanism.	oral presentation powerpoint presentation blackboard drawings	-	Movement disorders, Disorders of muscle, Inflammatory arthritis	2
10	10. Biophysics of the Vision System. The eye as an optical system. Mechanisms of photoreception. Spectral sensibility of the eye. Visual acuity. Chromatic view. Eye defects and their correction.	oral presentation powerpoint presentation blackboard drawings	Test 1	Vision defects	2
11	11. Biophysics of the Hearing System. The auditory receptor's structure. The electric potential of the internal ear. The genesis of the nervous impulse in the auditory recipient. Information's transmission to the nervous centres.	oral presentation powerpoint presentation blackboard drawings	-	Otitis media	2
12	12. Nuclear Radiations. Sources of nuclear radiations. Characteristic physical quantities of radioactive sources. The interaction of the radiations with the substance. The biological action of radiations. The radiosensitivity of cells and tissues. Biological effectivity. The measurement of biological effects. Iradiation sources of the body. The principles of the present norms of radioprotection.	oral presentation powerpoint presentation blackboard drawings	-	Radiology and radiotherapy	2
13	13. Biological action of non-ionizing radiation. Bunsen's Law. Grotthus' Law. The biological effects of the ultraviolet radiation. The biological effects of the radiations from the visible spectrum. The biological effects of the infrared radiation. The biological effects of the microwaves	oral presentation powerpoint presentation blackboard drawings	Test 2	Radiology and radiotherapy	2
14	14. Imagistic Methods. Röntgen Computerized Tomography. Nuclear Magnetic Resonance.	oral presentation powerpoint presentation blackboard drawings	-	Radiology and radiotherapy	2

Bibliography
Bibliografie obligatorie:
1. Medical Biophysics (3rd edition, Editors: S. Damjanovich, J. Fidy, J. Szöllősi, Medicina, Budapest, 2019, ISBN: 978-963-226-127-0)
2. Miklós Kellermayer, Medical biophysics practices, Semmelweis Publisher, ISBN: 9789633314517, Budapest, 2018, 376 p.
3. Biophysics practicals, Volume I-II., University of Pécs, Medical School, Department of Biophysics, ISBN: 9789634297543, Pécs, 2023.

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Physical quantities. Measurements of physical quantities. Units. Types of errors. Data processing.	oral instruction practical demonstration	-	does not correlate	2
2	2. Determining the solids density by the help of a pycnometer	oral instruction practical demonstration	-	Anemia, Acid based disturbance	2
3	3. Determining the liquids density by the help of a pycnometer	oral instruction practical demonstration	-	Anemia, Acid based disturbance	2
4	4. The Höppler and Ostwald viscosity instrument	oral instruction practical demonstration	-	Anemia, Acid based disturbance	2
5	5. Measuring electrical resistances. Measuring the electromotive force	oral instruction practical demonstration	-	Disorders of lipid metabolism, Electrolyte and water balance	2

6	6. Determining the angular magnification of a microscope. Determining the index of refraction	oral instruction practical demonstration	-	Anemia, Acid based disturbance	2
7	7. Determining the focal distance of a thin lens	oral instruction practical demonstration	-	Vision defects	2
8	8. Determining concentrations of solutions through the polarimetric method.	oral instruction practical demonstration	-	Diabetes mellitus	2
9	9. Determining the solution concentration through the refraction method	oral instruction practical demonstration	-	Nephrosis	2
10	10. Determining concentrations of solutions through spectrophotometric method. Plotting the absorption spectrum.	oral instruction practical demonstration	-	Electrolyte imbalance	2
11	11. Determining the enthalpy variation in the dissolving process	oral instruction practical demonstration	-	Metabolic disorders, Malnutrition, Inborn errors of metabolism, Eating disorders	2
12	12. Determining the specific heat of a solid body	oral instruction practical demonstration	-	Metabolic disorders, Malnutrition, Inborn errors of metabolism, Eating disorders	2
13	13. Determining the activity of a gamma source. Plotting the Curve of Statistical Distribution of the Counting Speed.	oral instruction practical demonstration	-	Radiology and radiotherapy, Bereavement	2
14	14. Examination of practical work.	Individual work	-	not applicable	2

Bibliography
Bibliografie obligatorie:
1. Miklós Kellermayer, Medical biophysics practices, Semmelweis Publisher, ISBN: 9789633314517, Budapest, 2018, 376 p.
2. Biophysics practicals, Volume I-II., University of Pécs, Medical School, Department of Biophysics, ISBN: 9789634297543, Pécs, 2023.
Bibliografie suport:
Nicolaescu Ioan, Moldovan Mircea, Szakács Juliánna, Mesaroş Cornelia, Biofizică şi Fizică Medicală – Lucrări Practice, University Press, Târgu Mureş, 2008, 176 p.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

By acquisition of our discipline's content, the student accumulates the basic knowledge needed to understand courses of speciality, like: physiology, biochemistry, cell biology.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Understanding and integration of all theoretical concepts Knowing of bibliographical references	10% 1st Test (Test1) and 10% 2nd Test (Test2)	20
- practical activities	Correlation between theoretical and practical notions Capacity of performing practical work	-validation of the practical activities during the semester -practical examination	10
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts Knowing of bibliographical references	Evaluation on the UNIX platform.	50
- practical final exam	Correlation between theoretical and practical notions Capacity of performing practical work	-validation of the practical activities during the semester -practical examination	20

Minimal performance standards:
Minimal performance standards:
The minimum passing grade for theoretical exam and practical exam is 5 (five).
FG-final grade
weight of the grades:
10% 1st test (Test1)
10% 2nd test (Test2)
10% lab activity (LA)
20% lab exam (LE)
50% theoretical exam (TE)

FG= 0,1·Test1+0,1·Test2+0,1·LA+0,20·LE+0,5·TE

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Szakács Juliánna	30 de minute după fiecare curs / activitate practică

Head of departament	Course coordinator	Practical activities coordinator(s)

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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical deontology. Bioethics			
2.2 Course coordinator: Conf dr Sălcudean Andreea			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 6		
- examinations: 6		
- other activities: 6		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: Not applicable
4.2 competency: Not applicable

5. Conditions

5.1 for lectures: Not applicable
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: - To acquire the skills for integrating the principles of ethics and bioethics in the practice of the medical profession; - To understand the issues and implications of ethics and bioethics in the medical field; - To recognize the importance of the therapeutic relationship and respect for patients' rights, in accordance with ethical and bioethical rules; - To correlate bioethics concepts with health legislation.
6.2 transversal competencies: - To acquire knowledge about avoiding malpractice and other unethical attitudes; - To understand the connection between the practice of the medical profession and medical ethics; - To develop problem-solving skills in the medical profession, from the perspective of medical ethics and deontology.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
- To understand the importance of medical ethics / ethics and bioethics from a multidisciplinary perspective involving medicine, philosophy, psychology, theology and law, as well as their application in the medical context;
- To ensure optimal preparation and awareness by students of the imminent problems of medical ethics and bioethics.

7.2 Specific objectives:
- To learn and apply the principles of medical ethics and bioethics in relation to patients;
- To demonstrate respect for the rights of patients, taking into account the concepts of suffering and dignity;
- To know the legislation regarding the current ethical issues in the medical context.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	An introduction in the problematics of ethics and bioethics	Oral presentation, Powerpoint presentation	-	Without ICS correlation	2
2	Consent, truth telling, and confidentiality in relation to patients	Oral presentation, Powerpoint presentation	-	Without ICS correlation	2
3	Genetic interventions. Is everything that can be scientifically proven also ethical?	Oral presentation, Powerpoint presentation	-	Without ICS correlation	2
4	Physician-Assisted Death and Euthanasia	Oral presentation, Powerpoint presentation	-	Without ICS correlation	2
5	Ethical and bioethical issues regarding abortions	TBL	-	Without ICS correlation	2
6	The implications of ethics and bioethics in mental disorders	Oral presentation, Powerpoint presentation	-	Without ICS correlation	2
7	Conflict of interest and medical disclosure. Multicultural and religious perspectives in bioethics	Oral presentation, Powerpoint presentation	-	Without ICS correlation	2

Bibliography
1. Dunn, M., Hope, T., (2018). Medical Ethics: A Very Short Introduction, Oxford: OUP Oxford.
2. Pattinson S.D. (2020) Medical Law and Ethics, 6th edition, London: Sweet & Maxwell.
3. Sokol, D. (2018) Tough Choices: Stories from the front line of medical ethics, London: Book Guild Publishing Ltd.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

By focusing on issues such as human dignity and suffering, emphasizing the importance of respecting patients' rights, medical ethics and bioethics are integrated into all medical specializations, both in terms of clinical practice and research.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Comprehension of bioethics and medical deontology concepts	Project	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Acquisition of theoretical knowledge and application of bioethics and medical deontology concepts	Multiple choice test/ Final theoretical project	70
- practical final exam	-	-	0

Minimal performance standards:
The examination will take place at the end of each semester, during the pre-examination period. The final grade will be calculated with the above formula. Students must understand and apply the specific methods of bioethics and medical deontology, arguing each case logically, coherently and correctly.
The minimum graduation grade is 5 (five).

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Sălcudean Andreea	miercuri 16-16,30

Head of departament | Course coordinator | Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical communication. Behavioural sciences. Medical sociology			
2.2 Course coordinator: Conf dr Popa Octavian-Cosmin			
2.3 Practical activities coordinator(s): Conf dr Popa Octavian-Cosmin			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 3		
- examinations: 3		
- other activities: 3		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: - High abilities for collecting information from patients, used the clinical intake interview. - Practical knowledge related with the clinical psychological assessment for different psychological and/or organic diseases. - Basic psychotherapeutic (CBT) skills regarding of treatment for depression, anxiety disorders and personality disorders. - General knowledge regarded to application of mindfulness and relaxations techniques in the medical settings.
6.2 transversal competencies: - Identify and establish a correct psycho-diagnosis of psychological disorders. - Interdisciplinary approaches of relations between psychological factors and different psyche and/or organic disorders/disease. - A dialectic perspective used for understanding causes of etiopathogenesis for many disorders related with psychological factors. - Acquisition of communication skills based on humanistic and compassion attitude in relation with the patients.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
- Acquiring skills in the field of medical psychology that will be used from the perspective of clinical application of different psychological techniques in treatment of patients.

7.2 Specific objectives:
- The understanding of specific dysfunctional thinking involved in psychological disorders.
- The understanding of the relationship between thoughts - emotions and behavior in psychological and / or organic disease.
- Good capacity to choose a appropriate psychological questionnaire for a specific psychological disorder.
- Good capacity in a conduct a clinical psychological interview with a patient.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in medical communication	Presentation, oral exposure	-	-	2
2	Core skills in medical communication	Presentation, oral exposure	-	-	2
3	The relationship between genetics and psychological diseases. The implication of neuroscience in medical psychology	Presentation, oral exposure	-	-	2
4	Psychological problems involved in mood disorders	Presentation, oral exposure	-	-	2
5	Anxiety sensitivity. The distress-vulnerability model	Presentation, oral exposure	-	-	2
6	Emotional regulation and dysregulation. The implication of negative dysfunctional emotions.	Presentation, oral exposure	-	-	2
7	Cognitive-behavior therapy for depression, anxiety, and personality disorders. The Beckian's approach	Presentation, oral exposure	-	-	2

Bibliography
Popa, O.C., Lee, W., Rus, A.V. (2020) New approaches behavioral sciences, Tirgu-Mures:University Press.

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Conducting a clinical interview with patients	Role-play, small group work	-	-	2
2	Core skills in medical communication. Applications.	Role-play, small group work	-	-	2
3	The implication of neuroscience in medical psychology. Practical applications.	Role-play, small group work	-	-	2
4	The assessment and psychological intervention in mood disorders	Role-play, small group work	-	-	2
5	Anxiety sensitivity. Techniques for the management of anxiety disorders	Role-play, small group work	-	-	2
6	Emotional regulation and dysregulation. Practical applications.	Role-play, small group work	-	-	2
7	Cognitive-behavioral techniques for improving the quality of life	Role-play, small group work	-	-	2

Bibliography
Popa, O.C., Lee, W., Rus, A.V. (2020) New approaches behavioral sciences, Tirgu-Mures:University Press.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The complexity of challenges and interdisciplinary nature in medical field, supposes that the doctors acquire a high level theoretical and practical skills. Also, this abilities must be completed with knowledge from medical psychology for a good understanding of sanogenesis and pathogenesis factors involve in health and disease.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the requirements of the discipline.	TBL	15
- practical activities	According to the requirements of the discipline.	Project	15
Final evaluation			
- theoretical final exam	According to the requirements of the discipline.	Multiple choice test	40
- practical final exam	According to the requirements of the discipline.	Role-play/project	30
Minimal performance standards: Minimum grade for passing the evaluation is 5 (five),			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Popa Octavian-Cosmin	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physical education			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Lect dr Steff Zakarias			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Șef l dr Țurcanu Dana-Simona			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture:	3.3 practical activities: 4
3.4 Total hours in curriculum: 28	3.5 lectures: 0	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations:		
- other activities:		
3.8 Total hours of individual study: 0		
3.9 Total hours: 28		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: good health - harmonious physical development - adequate physical qualities
4.2 competency: Knowledge of techniques learned in high school to develop body strength and physical qualities. - practice of sports (competitive/leisure)

5. Conditions

5.1 for lectures: -
5.2 for practical activities: Sport gym, fitness gym, tennis courts, outdoor, swimming pool, football court

6. Specific competencies acquired

6.1 professional competencies: - Making use of the information, methods and means specific to physical education and sports in order to optimize health and harmonious physical development - Building the skill of knowledge transmission referring to exercises to develop basic physical skills, qualities and muscle usage - Application of specific methods to develop physical qualities
6.2 transversal competencies: - Application of rule systems specific to the organization and practice of physical education and sports, as well as acquisition and application of adequate behavior in interpersonal relations and in groups - Using body language to express and understand ideas, feelings, general and physical aethethics of the body - Using electronic means to select information regarding elements that are characteristic to physical development - Active integration into various groups

6.3 related to the study program:

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Systemic and organized practice of physical exercise and favored sports

7.2 Specific objectives:
1) Continuous improvement of healthy condition, physical and mental vigour and harmonious body development ;
2) Raising of the general motricity level and aquirement of basical sport skills;
3) Participating at interuniversity's competiotions

8.1 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introductory lesson ; the requirements of a Physical Education class	explication, demonstration, repetition	-	-	2
2	Athletics – the school of running	explication, demonstration, repetition	-	-	2
3	Basketball – checking the initial level of acquiring the basic elements	explication, demonstration, repetition	-	-	2
4	Volleyball - checking the initial level of acquiring the basic elements	explication, demonstration, repetition	-	-	2
5	Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
6	Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
7	Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
8	Athletics – developing leg strength with different jumping exercises	explication, demonstration, repetition	-	-	2
9	Basketball - repeat the dribbling, ball catching and passing	explication, demonstration, repetition	-	-	2
10	Swimming – teaching the basic elements	explication, demonstration, repetition	-	-	2
11	Aquagym	explication, demonstration, repetition	-	-	2
12	The testing contain two tests which targets the physically skills, as long jump from standing position, testing the force of the abdominal strength (sit ups during 30 sec.), testing the back muscle strength (back extension during 30 sec.), speed running on 30m or the swimming test which means to swimm 25m pool length in one of the 4 main events of swimming	activity evaluation	-	-	2
13	Testing the students who where absent at the tests	activity evaluation	-	-	2
14	End of school year, conclusion of the school report; recommendations for the sporting activity during the holidays.	conclusion	-	-	2

Bibliography

1. Badau D., Tanase T. ¬ Volei, teorie si metodica, Ed. OMNIA, Brasov, 2006
2. Carstea G. ¬ Teoria si metodica educatiei fizice, Ed. An¬Da, Bucuresti, 2000
3. Hantiu I. ¬ Teoria educatiei fizice si sportilui, note de curs, Univ. Oradea, 2012
4. Macovei S. ¬ Stretching, Ed AFIS, Bucuresti, 2012
5. Neagu N ¬ Teoria si practica activitati motrice umane, Ed. University Press, Tg. Mures, 2010
6. Filipescu, D., Gherghişan, D., Bologa, M., ¬ Educaţie fizică în învăţământul superior medical, Editura UMF, 2001
7. Badau D. ¬ Metodica disciplinei sportive ¬ handbal, Ed. Universitatii Transilvania din Brasov, 2009
8. Badau A, Ungur R, Badau D. – Activitatile fizice acvatice indoor, Ed, Universitatii Transilvania Brasov, 2016

9. Correlations between the contents of the discipline and the expectations of the community

representatives, professional associations and representative employers in the domain

- Development of the capacity to choose healthy life-style, by practicing sports, combining physical exercise with intellectual efforts, motion and rest, work and leisure. - Availability to practice physical exercise independently - Constant interest in sports as a phenomenon

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	the attendance on the lessons - control test of the 1st semester - control test for 2nd semester	Total attendances for the both of semester -finish all the control tests -effectuate two essay one in each semester for the students those exempt from physical education	100
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	Minimal performance standards: 1. Assist for at least 70% of the lessons, that means 20 attendences/year (including the exempted students) 2. The final examination contains 2 motor tests, at the student choice, as follow: long jump from standing position, testing the force of the abdominal strength (sit ups during 30 sec.), testing the back muscle strength (back extention during 30 sec.), speed running on 30m or the swimming test which means to swimm 25m pool length in one of the 4 main events of swimming. For the students who are exempted from effort, they need to realize a paperwork on the final of the semester, in domain of physical education, theme which is chosen by the own teacher. (they don't need to go to the physically tests.)	Total attendances for the both of semester -finish all the control tests -effectuate two essay one in each semester for the students those exempt from physical education	0
Minimal performance standards: Minimal performance standards: 1. Assist for at least 70% of the lessons, that means 20 attendences/year (including the exempted students) 2. The final examination contains 2 motor tests, at the student choice, as follow: long jump from standing position, testing the force of the abdominal strength (sit ups during 30 sec.), testing the back muscle strength (back extention during 30 sec.), speed running on 30m or the swimming test which means to swimm 25m pool length in one of the 4 main events of swimming. For the students who are exempted from effort, they need to realize a paperwork on the final of the semester, in domain of physical education, theme which is chosen by the own teacher. (they don't need to go to the physically tests.)			

11. Appointment timetable (for students)

Lect dr Steff Zakarias	Luni 19-20
Șef l dr Țurcanu Dana-Simona	luni 16-17

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Romanian language			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Asist dr Rațiu Bogdan			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture:	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 0	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: Videoproiector

6. Specific competencies acquired

6.1 professional competencies: Studentul va prezenta, la nivel începător, următoarele abilităţi: -citirea corectă şi fluentă, precum şi înţelegerea conţinutului şi ideilor generale ale unui text simplu -înţelegerea mesajelor receptate pe cale auditivă -vorbirea cu respectarea regulilor gramaticale şi de pronunţie -cunoaşterea şi utilizarea corectă a unui vocabular de bază
6.2 transversal competencies: Utilizarea limbii române ca mijloc de comunicare cu alţi vorbitori ai acelei limbi, în situaţii generale.
6.3 related to the study program:

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Cunoașterea limbii române la nivel mediu pentru a putea înțelege mesajul unui text scris sau audiat.

7.2 Specific objectives:
La finalul cursului, studentul va prezenta abilități de comunicare, formulare de întrebări și răspunsuri pe teme precum: prezentare, casa, ocupație, interese, familie.

8.1 Content of seminar, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Alfabetul si sunetele limbii române. Prezentarea. Formule de salut	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
2	Date personale (nume, naţionalitate, ţară) Pronumele personal, verbul „a fi”	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
3	Date personale (vârstă, adresă, profesie) Mulţumiri şi scuze	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
4	Verbul „a avea”, „a face” Numeralul cardinal	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
5	Substantivul: număr, gen. Sala de clasa: obiecte inconjuratoare Articolul nedefinit plural	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
6	Culorile, acordul adjectivului Conversaţia telefonica	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
7	Exprimarea timpului: ora, zile, luni, anotimpuri, vremea Exerciții. Recapitulare	Rezolvarea unor probleme, conversația, dialogul, munca pe perechi și în grup; PBL; TBL	-	-	4

Bibliography
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2. Dafinoiu,CV, Pascale, LE, Limba română - manual pentru studenti straini,Ed.Univ.București, 2015
Hedeşan,Otilia(coordonator),Jebelean,Elena, Leucutia Florentina, Musat, Nicoleta, Percec,Dana, Popa,Corina Bun venit in România!Manual de limba română şi de orientare culturală ,Imprimeria MIRTON,Timişoara, ,2008
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6. Platon,Elena ,Sonea,Ioana ,Vilcu,Dina Manual de limba română ca limbă străină(RLS),Casa Cărţii de Ştiinţă,2012

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Cunoasterea limbii romane va facilita comunicarea cu pacientii si personalul medical in timpul stagiilor de practica si integrarea in comunitatea locala

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Abilitatea de a intelege si completa exercitii de multiple choice, potrivire, folosirea corecta a numarului, articolului verbelor invatate	Test scris care cuprinde exercitii de vocabular si gramatica	50
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	Abilităţile de citire, vorbire, receptarea și transmiterea de mesaje pe cale orală	Verificare orală - extragerea unui bilet care cuprinde citirea unui text, raspuns la intrebari, dialog medic-pacient	50

Minimal performance standards:
Să se poată prezenta, să răspundă la întrebări legate de familie, casă, interese,timp, să poată formula întrebări și cere informații folosind un vocabular de bază, o pronunție clară şi fără greşeli mari la nivelul organizării discursului şi al folosirii structurilor gramaticale necesare comunicării.

11. Appointment timetable (for students)

Asist dr Rațiu Bogdan	Luni: 16.00-18.00

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Advanced digital skills			
2.2 Course coordinator: Prof dr Enăchescu Călin			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 4		
- supplemental documentation at the library, from specialized information portals and in the field: 3		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 3		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: knowledge of PC use, knowledge of Internet use

5. Conditions

5.1 for lectures: classroom with video projector and Internet
5.2 for practical activities: classroom with video projector and Internet

6. Specific competencies acquired

6.1 professional competencies: Elaboration and communication of plans and projects in the field of ensuring cyber security. Identifying cyber security dimensions. The use of cyber security techniques, mechanisms and procedures for the protection of personal and organizational data.
6.2 transversal competencies: Optimum management of professional tasks and learning to execute them on time, rigorously, efficiently and responsibly; Compliance with ethical rules specific to the field (eg: confidentiality) Application of team communication techniques; the development of empathic interpersonal communication skills and the assumption of specific roles in teamwork with the aim of making the group's activity more efficient and saving resources, including human resources Identifying and using effective learning methods and techniques; awareness of the extrinsic and intrinsic motivations of continuous learning.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The discipline underpins the field of cyber security – terminology, threats, vulnerabilities, risks, cyber attacks, protection and response measures to IT security incidents, disaster recovery measures.
Through the topics covered, the course raises the degree of preparation and awareness of students in the field of the urgent need to protect data, services and systems in the context of the Security by Design paradigm.

7.2 Specific objectives:
After completing the assignments, students will be able to understand the fundamental concepts of cyber security in the context of an increasingly digitized society.
The content is focused on the concrete presentation of the main topics in the field of cyber security adapted to the requirements necessary to protect data, IT systems and services, and the appropriate tools for developing cyber resilience capacities and increasing the level of culture in the field of cyber security.
Students will understand the risks related to the processing and storage of data in a virtual environment, the risks of using the Internet and interconnected computing systems, and will be able to identify and choose methods and mechanisms that provide an adequate degree of protection of personal IT data, systems and services and organizational.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to Cyber Security. The need for cyber security. Domains of cyber security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
2	Protection of data and personal privacy. Organizational protection. Behavioral approach to cyber security. Programmatic approach to cyber security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
3	Dimensions of cyber security. The CIA Triad (Confidentiality, Integrity, Availability). Cyber security guarantees.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
4	Cyber Threats, Vulnerabilities and Attacks – Concepts, Mechanisms and Techniques. Countermeasures against cyber threats. Understanding reactive, proactive and operational security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
5	Data encryption as a mechanism to provide data privacy. Access control. Data masking as a data security and protection mechanism.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
6	Data integrity. Types of data integrity checks.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
7	Availability of IT systems and services (The Five Nines concept). Responding to IT security incidents. Disaster recovery.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2

Bibliography
1. Augenbaum S., The Secret to Cybersecurity: A Simple Plan to Protect Your Family and Business fromCybercrime, Forefront Books, 2019.
2. Cisco Networking Academy, Cybersecurity Essentials, v1.1, https://www.netacad.com.
3. Evans L., Cybersecurity: What You Need to Know About Computer and Cyber Security, Social Engineering,The Internet of Things + An Essential Guide to Ethical Hacking for Beginners, Independently published, 2019.
4. Evans L., Cybersecurity: An Essential Guide to Computer and Cyber Security for Beginners, Including EthicalHacking, Risk Assessment, Social Engineering, Attack and Defense Strategies, and Cyberwarfare, Independentlypublished, 2018.
5. Kennedy G., Data Privacy Law: A Practical Guide to the GDPR, Bowker, 2019.
6. Stallings W., Cryptography and Network Security: Principles and Practice, 8th Edition, Pearson, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Corroboration of the contents of the discipline with the expectations of community representatives, professional associations and representative employers in the field related to the program:
Today's society has become totally dependent on technology, and especially on managing data in digital format. The role of cyber security, both for individuals and organizations, regardless of their business, is vital for data protection and for guaranteeing the functioning of IT services, systems and infrastructures. The inclusion of security procedures and policies within professional activities is no longer an end in itself, but an objective necessity. For this reason, the discipline is structured in a practical and pragmatic way to respond to these realities. Moreover, the entry into force of the GDPR legislation imposes strict measures regarding the protection of personal data in the European Union space, which determines the obligation of digital culturalization in the field of cyber security of every employee in every organization / company. In this context, the topics studied provide the set of information necessary for the understanding and application of the protection mechanisms of digital data and IT infrastructures.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Formative assessment to verify preparation throughout the semester. The ability to analyze and synthesize	TBL testing	30
- practical activities	Acquiring and understanding the treated issue	written test	50
Final evaluation			
- theoretical final exam	Summative evaluation to verify the preparation and understanding of the course topic. Knowledge of fundamental notions and concepts.	written test	20
- practical final exam	-	-	0

Minimal performance standards:
- Knowledge of the concepts, mechanisms and techniques that underpin the field of cyber security.
- Identifying the dimensions of cyber security.
- Designing basic sets of security procedures and policies at personal and organizational level.
- A minimum grade of 5 must be obtained for each evaluation and each exam.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Enăchescu Călin	30 de minute după fiecare curs / activitate practică

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: How to read and publish statistical results in medical research			
2.2 Course coordinator: Conf dr Olah Peter			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 4		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 1		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: • The student will need to demonstrate the ability to organize and graph numerical and non-numerical data in a scientific study or experiment. • Demonstrating the ability to understand and present the statistical protocol in the Material and Method section of a scientific article • Demonstrating the ability to present the statistical results in the Results section of a scientific article and to interpret these results in the Discussions, respectively Conclusions sections of the article
6.2 transversal competencies: • Ability to critically evaluate the presentation of the statistical protocol and of the results in biomedical scientific articles
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the

managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
• In the current context of evidence-based medicine, Biostatistics has become one of the essential work tools for the practitioner or researcher in the biomedical field. The volume of specialized literature is constantly growing, and the selection of relevant information in this context is becoming more and more challenging. As such, the main objective of this discipline is to develop students' skills to critically read specialized literature and to eloquently publish the results of their own research, from the point of view of statistical protocols and statistical results.

7.2 Specific objectives:
• Developing students' ability to graphically represent numerical and non-numerical data, as well as to interpret such representations published in specialized literature
• Developing students' ability to present the statistical protocol used in the Material and Method section of a scientific article
• Developing students' ability to present the statistical results obtained in the Results section of a scientific article.
• Developing the students' ability to present the conclusions reached based on the statistical results in a scientific article

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Data types. Data organization. Primary data. Indexed data. Contingency tables.	Oral presentation, Powerpoint presentation, Video materials	-	Biological variability	2
2	Graphic representation of numerical and non-numerical data	Oral presentation, Powerpoint presentation, Video materials	-	-	2
3	Presentation of the statistical protocol in the Material and Method section of a scientific article	Oral presentation, Powerpoint presentation, Video materials	-	-	2
4	Presentation of statistical results in the Results section of a scientific article.	Oral presentation, Powerpoint presentation, Video materials	-	-	2
5	Presentation of conclusions based on statistical results in the card of a scientific article	Oral presentation, Powerpoint presentation, Video materials	-	Clinical trials	2
6	Correlations and regressions. The correlation coefficient. The coefficient of determination. Linear and non-linear regressions. Their importance in the biomedical field.	Oral presentation, Powerpoint presentation, Video materials	-	Clinical trials	2
7	VERIFICATION of accumulated theoretical knowledge	Grid test with Multiple Choice Questions	-	-	2

Bibliography
1. Bacârea Vladimir, Ghiga Dana, Măruşteri Marius, Oláh Péter, Petrişor Marius - A Primer in Research Methodology and Biostatistics, University Press Targu Mures, 2014
2. Motulsky Harvey, Intuitive Biostatistics: A Nonmathematical Guide to Statistical Thinking, Oxford University Press, 2013

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Adequate acquisition of the mentioned curricular content provides the student with the theoretical and practical framework for the critical reading of scientific articles in the biomedical field, as well as basic skills to correctly and eloquently present the protocols and results obtained in their own studies and research.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Understanding and integration of all theoretical concepts Knowledge of bibliographical references	Multiple choice test	100
- practical activities	-	-	0

Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	-	-	0

Minimal performance standards:
• The ability to organize and represent relevant data according to the needs of a scientific study or experiment
• The ability to correctly present the statistical protocol and its results in a scientific article
• The ability to formulate correct and pertinent conclusions based on statistical results

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Olah Peter	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Applied linguistics and communication skills in Romanian language			
2.2 Course coordinator: Lect dr Năznean Adrian			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: sală dotată cu echipamente multimedia
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: La sfarsitul cursurilor, studentul va putea sa: -foloseasca functiile specifice limbajului de specialitate (sa adreseze intrebari, formuleze opinii, sfaturi, sa convinga, sa explice, sa descrie situatii concrete specifice domeniului medicina dentara) -citeasca fluent si corect si sa inteleaga continutul unor texte de specialitate de dificultate medie/ avansata -sa inteleaga mesaje receptate pe cale auditiva legate de sfera profesionala -sa vorbeasca fluent si corect, folosind un vocabular variat si adecvat unor situatii specifice domeniului -sa scrie corect, conform regulilor gramaticale, folosind un stil si un vocabular adecvat continutului de idei -sa utilizeze un vocabular variat de termeni din domeniul de specialitate.
6.2 transversal competencies: Studentul va putea să: -utilizeze limba română ca mijloc de comunicare cu alți vorbitori ai aceleiași limbi în situații din domeniul medicinei dentare; - facă prezentări orale; - se documenteze și să structureze informații, să sintetizeze date obținute prin chestionare administrate unui grup

țintă pentru pregătirea și elaborarea de lucrări în domeniu, participarea la stagii; - se familiarizeze cu utilizarea unor platforme de comunicare virtuală și munca în grup.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Cunoaşterea limbii române la nivel avansat.
7.2 Specific objectives: Dezvoltarea celor patru abilităţi de bază: citirea, înţelegerea mesajelor receptate pe cale auditivă, comunicarea verbală, comunicarea scrisă precum şi familiarizarea cu vocabularul din domeniul de specialitate.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introducere în terminologia medicinei generale 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
2	Introducere în terminologia medicinei generale 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
3	Introducere în terminologia medicinei dentare 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
4	Introducere în terminologia medicinei dentare 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
5	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
6	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

7	Bolile dinților. Boli parodontale. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

Bibliography

Butiurcă, Doina, 2009, Fundamentele greco-latine ale terminologiei medicale, Revista Limba Română, Nr. 11-12
Frînculescu, Iulia Cristina, 2009, Limbajul medical românesc în sincronie şi diacronie, Revista UNITERM, nr.7/ 2009
Melnic V., 2003 , Mijloace de formare a terminologiei clinice medicale in limba romana, Revista Limba română, Nr. 2-3, anul XIII
Rusu, Valeriu, 1983 Mic dicţionar medical, vol. I, II, Iaşi
Ursa A., Marcean, N., 2018, Limba română medicală. Româna pentru obiective specifice, Limes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Corectitudinea structurilor folosite - Complexitatea limbajului - Adecvarea la registru, nivel de formalitate specifice situatiei	Întrebări cu complement multiplu, formare de cuvinte, potrivire de cuvinte, completare de spații	100
- practical final exam	-	-	0

Minimal performance standards:
Să poată interacționa cu pacientul în conducerea interviului medical, să știe să adreseze întrebări referitoare la anamneză, să poată oferi explicații, recomandări simple; să citească și să înţeleagă ideile principale ale unui text sau mesaj audio, să poată răspunde la întrebări pe baza lor fără greşeli mari la nivelul organizării discursului, să cunoască un număr satisfăcător de termeni specifici domeniului.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Lect dr Năznean Adrian	20 de minute după fiecare activitate practică sau curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Historical impact of drug discoveries			
2.2 Course coordinator: Prof dr Brassai Attila-Miklos			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 0		
- supplemental documentation at the library, from specialized information portals and in the field: 11		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: According to the Internal rules and Regulations of the D.of Pharmacology and Clinical Pharmacology
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The interesting historical influences caused by certain drug discoveries
6.2 transversal competencies: Correlation between the medical use of medications and the effects behind
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Understanding the impact of pharmacological drug discoveries on the world's history

7.2 Specific objectives:
Correlation between the use of a medicine and the effects observed in the population

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The history of medicine shaped by drugs. Strong active substances in plants – common and famous poisonings.	MS Power Point, Case based interactive discussions	-	Drug reactions	2
2	. The art of discovery in medicine – penicillin and five more	MS Power Point, Case based interactive discussions	-	Drug reactions	2
3	The modern drug discovery cycle. Drug discovery in America: story of curare and others	MS Power Point, Case based interactive discussions	-	Drug reactions	2
4	The use of placebo in medicine. . James Lind and the citrus fruits in scurvy therapy	MS Power Point, Case based interactive discussions	-	Drug reactions	2
5	The opium war. Drug discovery in ancient Asia: India and Tibet	MS Power Point, Case based interactive discussions	-	Drug reactions	2
6	The “PILL”. Drug discovery in Europe: German and Greek traditional medicine	MS Power Point, Case based interactive discussions	-	Drug reactions	2
7	Clinical trials – then and now Regulatory affairs of drug discovery: US and Canada, UK, EU and Japan	MS Power Point, Case based interactive discussions	-	Drug reactions	2
Bibliography Bibliografie: 1. Thomas Hager - Ten Drugs; Abrams Press; 2019					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Project presentation	Oral presentation	50
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Knowledge regarding the overview of pharmacological implications of drug discovery	Written assignment/Oral exam	50
- practical final exam	-	-	0
Minimal performance standards: Passing grade: 5.00			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Brassai Attila-Miklos	35 de ninute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Tobaccology			
2.2 Course coordinator: Șef l dr Germán-Salló Márta			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 3		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: mod de organizare frontal sau în condiții epidemiologice nefavorabile online
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Awareness of the fact that smoking is a chronic disease for which there are effective methods of treatment. Assessment/diagnosis of tobacco consumption and tobacco dependence Organizing the documentation of the smoking status in the medical records Delivering the minimal intervention counseling of persons assisted smoker Proper use of the available resources in anti-smoking counseling (specialized anti-smoking centers, quitline)
6.2 transversal competencies: Awareness of the role of the physician in smoking prevention and in the prevention for smoking related diseases Organizing a smoking prevention programs Acquiring knowledge about the psychology of lifestyle change Awareness of bio-psycho-social consequences of a widespread disease
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Correct diagnosis and treatment of the tobacco dependence disease

7.2 Specific objectives:
Recognition and measurement of nicotine dependence
Motivation for smoking cessation
Delivering the brief anti smoking advice
Knowledge of non-pharmacological and pharmacological methods for the treatment of nicotine dependence
Realizing the role of the physician in anti-smoking efforts

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	History of tobacco use. Information on smoking prevalence and trends of consumption indicators worldwide, at European and national levels. Psychosocial causes of smoking. The economical aspects of smoking.	prezentare multimedia	-	-	2
2	Informations on the health consequences of tobacco smoking. Chemical composition of tobacco smoke. Causal role of smoking in respiratory diseases, cardiovascular diseases, tumors, hematological, gynecological diseases. Effects of smoking in pregnancy. Environmental effects of smoking . Social and economic impact of smoking	prezentare multimedia	-	durere în piept, dispnee, patologie cardiacă ischemică	2
3	Recognition of tobacco use and dependence in general practice. Tobacco addiction industrial spread disease. The mechanism of of tobacco dependence. The natural history of tobacco dependence Fagerstrom Test for the evaluation of dependence level. Clinical diagnosis of tobacco dependence (carbon monoxide, cotinine, using biomarkers)	prezentare multimedia	-	-	2
4	Smoking cessation. Therapeutic education. Behaviouralsupport. Smoking cessation motivation. Brief advice on stopping tobacco use. Prevention of relapse.	prezentare multimedia	-	-	2
5	The role of the physician in tobacco control Cognitive - behavioral treatment of tobacco dependence. Nicotine replacement therapy (mechanism of action, clinical evidence of efficacy, indications, prescribing instructions, contraindications, adverse effects) treatment with bupropion, varenicline, Nonpharmacological interventions for smoking cessation	prezentare multimedia	-	-	2
6	Treatments recommended in special circumstances. Treatments recommended for pregnant women, under 18 years, Recommendations for smokers with respiratory and cardiovascular diseases, cancer or other comorbidities Recommendations for the prevention and management of weight gain following smoking cessation. Recommendations for preventing relapse. Group counseling for quitting smoking	prezentare multimedia	-	-	2
7	Smoking prevention at the population level. National tobacco control legislation. MPOWER strategy for global tobacco control. Governmental and non governmental institutions specialized in tobacco control	prezentare multimedia	-	-	2

Bibliography
2018 European Network for Smoking and Tobacco Prevention (ENSP) European Smoking cessation guidelines 2016
http://elearning-ensp.eu/assets/English%20version.pdf ENSP
Allen Carr's Easy Way To Stop Smoking

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Curricula disciplinei este alcătuită conform Standardelor europene de acreditare a serviciilor și programelor de formare profesională publicate în Ghidul European pentru renunțare la fumat redactat de ENSP European Network for Smoking and Tobacco Prevention
Course curriculum is designed according to the recommendations drafted in the European Standards for accreditation of training programs and services published European Guidelines for smoking cessation ENSP(European Network for Smoking and Tobacco Prevention)

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Însuşirea cunoştinţelor de bază şi capacitatea de a corela conceptele teoretice însuşite	test grilă, multiple choice	100
- practical final exam	-	-	0
Minimal performance standards: Nota minimă de trecere 5 minima grade Tobacco epidemic in Europe and the world; Factors that lead to tobacco use; Pharmacological basis of tobacco dependence; Health dangers of tobacco; Other consequences(economic, environmental ..)of tobacco smoking; Approaches to tobacco control; The role of the physician in tobacco control; Delivering the brief anti smoking intervention Assessment of smoking status Analysis of previous attempts a patient smoking cessation Motivating smoking cessation in a clinical context Knowledge of support services for smokers functional in Romania Knowledge of the indications and contraindications for the treatment of smoking addiction medications Knowledge of global strategies to control smoking Tobacco control legislation			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef l dr Germán-Salló Márta	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dental materials in paediatric dentistry			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Signingin a minimum number of students (a group of 15-17 students). Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: -In addition to acquiring material handling modern techniques of dental materials used in restorative pediatric dentistry, the student will know the composition, the physical, mechanical and chemical properties of the dental materials in order to understand the impact of dental materials that come in contact with oral tissues and will have the necessary knowledge for a proper and effective use of these materials in practice. There is a specific use of the dental materials in pediatric dentistry, new restorative and therapeutic materials have been developed, and there are specific pedodontic materials that the student will endorse. -Future dentist should know that there are many variants of restoring coronary lesions in temporary and young permanent teeth and he or she should be able to choose a material from the variety of options on the market. They must know which material is better, more efficient and especially wich matchesthe requirements and demands of the small patients, ensuring the optimum conditions to comply with the international norms. In addition, the student will understand the orthodontic biomechanical ways and the materials from wich are manufactured the orthodontic brackets and devices for functional rehabilitation used in orthodontics.

6.2 transversal competencies:
-Collaboration and teamwork is today a complex, requiring permanent university training. The student realizes that the work they perform it is a teamwork and the human factor is: the dentist, the dental assistant and the dental technician who must ensure the health and safety at work and the use of modern technologies in pediatric and orthodontic practice.
-Teamwork, passion for performance and commitment to helping patients equally bounds students to become increasingly efficient dental professionals in dental practice.
-Marketing and dental practice management performance through knowledge of dental materials.
-Didactic activity in practical instruction or administration in the field of dental materials used in pedodontics and orthodontics.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-To acquire the necessary knowledge for the proper and efficient use of materials in pediatric dentistry and orthodontics.

7.2 Specific objectives:
-To acquire the ability to understand different aspects about the composition and properties of dental materials which have major implications in practice in pediatric dentistry and orthodontics.
-Understanding theoretical aspects on dental materials to be able to use in pediatric dentistry.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Generalities, conditions of materials used in pediatric dentistry. Profilactic materials: fluoride containing products.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
2	Pit and fissure sealants.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
3	Materials for pulpo-dentinal protection, cavity base materials for pediatric dentistry use.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
4	Restorative materials. Materials used for endodontic treatments in pediatric dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
5	Materials used for cementation of orthodontic appliances. Materials used for prosthodontic treatment in pediatric dentistry (crowns for children).	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
6	Materials used for different orthodontic appliances.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
7	Materials for mouthgards used in sport activities. Impression materials in pediatric dentistry. Generalities about reparation and reconditioning of appliances used in pediatric dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2

Bibliography
1. SC Leal, EM Takeshita: Pediatric Restorative Dentistry. Springer International Publishing, 2019.
2. Van Noort R: Introduction to Dental Materials. 4th ed. Mosby Elsevier Publishing, Edinburgh, 2016.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent

			of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course topics.	Test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge within the course topic	Colloquium written evaluation or project presentation.	70
- practical final exam	-	-	0
Minimal performance standards: Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of dental materials used in paediatric dentistry, to have no more than 20% unjustified or unrecovered absences.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	30 minute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Genetic hereditary factors in determining the scope of orofacial disorders			
2.2 Course coordinator: Șef l dr Bogliș Alina			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 1		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: minim 10 persoane
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Formularea de ipoteze si interpretarea corectă a semnelor, simptomelor clinice, a modificărilor paraclinice. Acordarea sfatului genetic, calcularea riscului de recurenta a bolilor genetice. Evaluarea corectă a riscului de îmbolnăvire, respectiv alegerea si aplicarea măsurilor adecvate de profilaxie în familie si în populatie în caz de boală genetică. Implementarea unor abordări noi privind procesul de stabilire a diagnosticului si managementului bolilor genetice în relatie cu progresul cunoasterii si cel tehnic din domeniul biologiei moleculare Initierea si derularea unei activităti de cercetare stiintifică în domeniul geneticii
6.2 transversal competencies: Constientizarea nevoii de formare continuă în domeniul geneticii si biologiei moleculare în era de genetizare a medicinei: utilizarea eficientă a resurselor si tehnicilor de învătare pentru dezvoltarea personală si profesională, a surselor informationale si a resurselor de comunicare, a literaturii de specialitate la zi, a bazelor de date

genetice si softuri de asistare a stabilirii diagnosticului în bolile genetice cu implicare in sfera oro-maxilo-faciala.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Însuşirea noţiunilor de genetică medicală cu aplicaţii în medicina dentara.

7.2 Specific objectives:
Cunoaşterea rolului factorilor genetici în realizarea trăsăturilor fiziologice şi a bolilor genetice cu implicare in sfera oro-maxilofaciala.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Genetics of Orofacial Development. Elements of genetic semiology of the filtrum and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
2	Elements of genetic semiology of the lip and associated disorders. Genetic basis of cleft lip and palate.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
3	Elements of genetic semiology of the tongue and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
4	Genetics of tooth development. Classification of dental anomalies and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
5	Elements of genetic semiology of the maxilla and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
6	Chromosomal abnormalities associated with oro-facial syndromes	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
7	Congenital anomalies induced by teratogens. Genetic counseling in syndromes affecting craniofacial and dental structures.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases.	2

Bibliography
Mandatory bibliography:
1. Lyons Jones K., Crandall Jones M., Del Campo M. Smith's recognizable patterns of human malformation, 7th edition, Ed. Elsevier, 2013
Supplementary bibliography:
1. Medical genetics - Courses - PowerPoint presentation
2. Agnes Bloch-Zupan, Heddie Sedano, Crispian Scully. Dento/Oro/Craniofacial Anomalies and Genetics.Ed Elsevier, 2012.
3.Raoul Hennekam, Judith Allanson, and Ian Krantz. Gorlin's Syndromes of the Head and Neck, Editura: Oxford University Press. 2010

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Recunoaşterea şi abordarea factorului genetic în determinarea tulburarilor din sfera oro-maxilofaciala

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the specifics of the domain	test, proiecte in echipa- discutii.	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	According to the specifics of the domain	written exam	70
- practical final exam	-	-	0

Minimal performance standards:
Basic knowledge of medical genetics,
The minimum grade to pass the exam is 5 (this will result from the grades received for activities during the semester and at the final exam). The theoretical exam consists of a test with simple and multiple choices, according to the regulation.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Bogliș Alina	Șef l dr Bogliș Alina - orele 12-14, luni si miercuri

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Occupational diseases and work-related diseases in dentistry			
2.2 Course coordinator: Conf dr Moldovan Horațiu-Remus			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 2		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 2		
- examinations: 1		
- other activities: 2		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: Cunoștințe generale de anatomie, fiziologie și fiziopatologie
4.2 competency: nu este cazul

5. Conditions

5.1 for lectures: Sala de curs, suport IT, platformă digitală pentru predare on/line, în funcție de evoluția epidemiologică
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Cunoasterea noxelor profesionale fizice, chimice si biologice, precum si a suprasolicitarilor anumitor organe si/sau sisteme ale organismului in procesele de munca in domeniul stomatologiei. Cunoasterea unor efecte ale acestor noxe asupra organismului.
6.2 transversal competencies: Aplicare de masuri de preventie eficiente pentru prevenirea imbolnavirilor profesionale sau a imbolnavirilor cu factori profesionali contributori in domeniul stomatologiei.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Constientizarea, recunoasterea factorilor de risc profesionali la personalul din domeniul stomatologiei si a tehnicii dentare. Elaborarea unor planuri de preventie.
7.2 Specific objectives: Recunoasterea semnelor, simptomelor unei eventuale imbolnaviri profesionale.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Occupational risks and risks related to occupation in dentists, classification. Physical injury factors in dentistry: basic ergonomics concepts; occupational injuries caused by vibration and noise.	Oral/ multimedia	-	osteomuscular pain, dizziness, hearing loss, pain	2
2	Occupational physical risks in dentistry: different types of electromagnetic radiation (laser, UV, visible light) -, ionizing radiation (Rx) -, occupational injuries caused by electricity, accidents.	Oral/ multimedia	-	asthma, dyspnea, burns, cardiorespiratory arrest, pruritus	2
3	Occupational physical hazards: microclimate and occupational diseases caused by various dust. Classification of elementary dust particles: metals, other types of dust (organic substances, inorganic substances, composites). Lung self-cleaning process, prevention techniques.	Oral/ multimedia	-	asthma, acne, carcinoma, gastric ulcer, intoxication	2
4	Occupational diseases caused by inorganic particles in dentistry: pneumoconiosis, interstitial pneumonia. Harmful chemical factors in dentistry: diseases caused by irritating gases, vapors, organic solvents.	Oral/ multimedia	-	immunodeficiency, candidosis, osteomyelitis, otitis media, tuberculosis, endocarditis, sepsis, skin infections, respiratory infections	2
5	Latex allergy. Contact dermatitis caused by acrylates and metals. Occupational asthma: epidemiology, diagnosis, evolution.	Oral/ multimedia	-	dermatitis, intoxication	2
6	Occupational diseases caused by metal oxides (Ni, Cr, Co, Hg) in dentistry. Diseases caused by biological factors in dentistry (epidemiology, prevention procedures - vaccination programs recommended by the WHO): HIV, hepatitis B, C, TB, other common bacterial, fungal and viral infectious diseases.	Oral/ multimedia	-	intoxications, chronic liver disease, vision loss, anxiety, neurological diseases	2
7	TBL	Oral/ multimedia	-	intoxications, chronic liver disease, vision loss, anxiety, sleep disorders, immunodeficiency, candidiasis, osteomyelitis, otitis media, tuberculosis, endocarditis, sepsis, skin infections, respiratory infections	2

Bibliography

1. Encyclopaedia of Occupational Health and Safety, 2012, online http://www.iloencyclopaedia.org
2. H.G. 355/2007
3. H.G. 1169/201
4. A. Cocarla, Medicina ocupationala, vol I, II, 2009 Editura Medicala Universitara Iuliu-Hatieganu, Cluj Napoca
5. L. Szasz, Vandemecum de medicina muncii, Editura Universitas, Targu Mures, 2008

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	during the lectures	participation in debates during classes	10

- practical activities	-	-	0
Final evaluation			
- theoretical final exam	-final exam	-verification	90
- practical final exam	-	-	0
Minimal performance standards: - minimum presence for internship - 75% - patient examination and anamnesis - 25%			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Moldovan Horațiu-Remus	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Adhesive modern techniques in dentistry			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Signing in a minimum number of students (a group of 15-17 students). Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Acquiring theoretical knowledge on contemporary dental adhesive techniques covering various ramifications of adhesion and adhesives in the broad domain of dentistry, providing an important evidence base. A solid grasp of the principles, mechanics and techniques of bonding and modern adhesive systems is essential in dentistry. The course includes theoretical aspects of the concept of „adhesive dentistry" as it is apparent that adhesion and adhesives play important roles in modern clinical dentistry. Students will develop skills and confidence through the design and execution of minimally invasive indirect and direct adhesive techniques in order to achieve the best functional and aesthetic results, in point of view of achieving an appropriate treatment plan.
6.2 transversal competencies: The course will be delivered as a series of interactive meetings. For students to achieve a comprehensive, well-rounded education, integrated teamwork on several fronts is vital. Teamwork is necessary between students and between students and teachers. The more teamwork fundamentals exhibited, the more opportunity exists for students to learn the vital skills of compromise and collaboration in modern adhesive dentistry.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-The student has to understand the basic concepts on the techniques used in adhesive dentistry.
-The student will learn to develop skills to apply the gained knowledge with an appropriate correlation in various clinical situations in which it is possible to use these methods.

7.2 Specific objectives:
-The student will be able to describe the concepts and methods used in modern adhesive techniques.
-The student will acquire the ability to understand different aspects of composition and properties of various adhesive systems which have implications for major applications in dentistry.
-Applications of theoretical knowledge on various adhesive systems to their use in dental practice.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Adhesive techniques: from classic to modern. Explanation of the terms used, exemplifying.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
2	Fundamental concepts of enamel and dentin adhesion.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
3	Chemical and histological characters of enamel; adhesion to enamel. Chemical and histological characters of dentine; adhesion to dentin.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
4	Materials, methods and technique options for adhesive fixing.	Test	Two hours every week in english.	-	2
5	Adhesive bridges.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
6	Adhesive techniques used in pedodontics.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
7	Successful treatment plans in adhesive dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2

Bibliography
1. Bors A, Szekely M, Molnar-Varlam C. Tehnici adezive moderne in medicina dentara. Editura: University Press 2015.
2. Jorge Perdigao: Current perspectives on dental adhesion: (1) Dentin adhesion – not there yet, Japanese Dental Science Review, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-Course content is in accordance with the courses on the same topic listed in other universities with important achievements in theoretical and empirical evidence techniques in adhesive dentistry.
-Acquiring these modern restorative methods will be extremely useful for future dentists, adhesive techniques representing the greatest progress that restorative dentistry it registers itself.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course topics	Test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge within the course topic.	Colloquium written evaluation or project presentation.	70

- practical final exam	-	-	0
Minimal performance standards: Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of modern adhesive techniques used in dentistry, to have no more than 20% unjustified or unrecovered absences.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	Marti 14-15

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Diet principles in oral pathology			
2.2 Course coordinator: Prof dr Tarcea Monica			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: - nu e cazul
4.2 competency: - nu e cazul

5. Conditions

5.1 for lectures: minim 15 cursanti
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Descrierea noţiunilor de bază ale funcţionării organismului uman şi a mecanismelor generale de producere a bolilor. - Integrarea noţiunilor de bază în concepte/ situaţii care se aplică organismului uman cu scopul de a explica semne şi simptome. - Descrierea conceptelor, teoriilor şi noţiunilor fundamentale de fiziopatologie, pe sisteme şi mecanisme de acţiune. - Stabilirea tehnicilor de îngrijire impuse de existenţa unor semne şi simptome de boală. - Stabilirea principiilor terapeutice care modifică mecanismele fiziopatologice în vederea ameliorării simptomelor bolii. - Utilizarea noţiunilor dobândite în cadrul disciplinei pentru cercetarea ştiinţifică ulterioară
6.2 transversal competencies: Realizarea unei lucrări/referat/ caz clinic cu identificarea obiectivelor de realizat, a resurselor disponibile, condiţiilor de finalizare a acestora, etapelor de lucru,timpilor de lucru, termenelor de realizare aferente şi riscurilor aferente diverselor mecanisme fiziopatologice. - Identificarea rolurilor şi responsabilităţilor într-o echipa pluridisciplinară şi aplicarea de tehnici de relaţionare şi

muncă eficientă în cadrul echipei şi în relaţie cupacientul.
- Utilizarea eficientă a surselor informaţionale şi a resurselor de comunicare şi formare profesională asistată (portaluri Internet, aplicaţii software de specialitate,baze de date de tip PUBMED, cursuri on-line etc.) atât in limba romană, cât şi într-o limbă de circulaţie internaţională.
- Dezvoltarea gândirii medicale şi folosirea informaţiilor ştiinţifice în contextul interdisciplinarităţii

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Learning of basic diet principles and how to elaborate on specific diets recommended in various oral and dental illnesses.
- To monitor and evaluate the hazards related to nutrition, their effects on teeth and oral mucosa, and proper intervention to reduce and prevent the illnessesrelated to it and to promote the dental health status of the population.

7.2 Specific objectives:
- Analysis of main components of a healthy diet with a good impact on teeth
- Identification of general functions and major food sources for each nutrient necessary for dental and oral system
- To know the methodology of evaluation of food quality and food safety.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Definition and importance of nutrition in for a healthy dental status and prevention of chronic diseases. Healthy diet principles for mouth and teeth.	Oral presentation and multimedia	-	disorders of calcium and vitamin D metab	2
2	Dietary assessment. Digestion, absorbtion and metabolism of food and nutrients and dental impact.	Oral presentation and multimedia	-	eating disorders	2
3	Dietary reference and nutrients and caloric intakes for the body. Major food sources recommended in oral pathology and cooking technics	Oral presentation and multimedia	-	eating disorders	2
4	Diet recommendations during life cycle for healthy teeth: children, teenagers, adults, senior, athletes and pregnant women.	Oral presentation and multimedia	TBL	malabsorbtion	2
5	Diets and menus recommended in various oral and dental ilnesses like: caries, edentations, trush, granulomatosis, dermatosis, candidiasis or viral infections.	Oral presentation and multimedia	-	candidiosis	2
6	Diets and menus recommended in cancer	Oral presentation and multimedia	-	malnutrition	2
7	Diets and lifestyle practices recommended in diabetes, heavy metals poisoning, fluorosis or xerostomia	Oral presentation and multimedia	Final evaluation by Essay	xerostomiosis	2

Bibliography
1. Mahan LK, Escott-Stump S. - Krause's Food, Nutrition, and Diet Therapy. 14th ed. W.B. Saunders Co, Philadelphia, 2014.
Bibliografie suport:
2. Nnakwe NE. – Community Nutrition, Planning Health promotion and Disease Prevention, 3rd edition, Edit. Jones & Bartlett Learning, 2017

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Evaluation and analysis of food nutritional risk factors and proper implementation of dental health programs, preventive measures, and education training forthe population.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			

- lecture	TBL	test grila	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Verificare	Referat	60
- practical final exam	Studii de caz	Discutii, dezbateri	30
Minimal performance standards: - admitere la examenul practic doar daca nu depaseste 50% din absente nerecuperate - nota minima 5 la practic si teoretic			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Tarcea Monica	30 minute dupa fiecare curs sau LP

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical first aid			
2.2 Course coordinator: Conf dr Lazăr Alexandra-Elena			
2.3 Practical activities coordinator(s): asist univ dr Branea Oana, asist univ dr Almasy Emoke, Asist Univ dr Butiulca Mihaela			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 8		
- supplemental documentation at the library, from specialized information portals and in the field: 8		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 1		
- examinations: 1		
- other activities: 2		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: Basic anatomy and physiology knowledge
4.2 competency: -

5. Conditions

5.1 for lectures: Internet access. Video-projection possibility
5.2 for practical activities: Internet access Training manikins

6. Specific competencies acquired

6.1 professional competencies: After this course, the student will be able to recognize a life-threatening situation that implies first aid measures. Can recognize respiratory and cardiac arrest, and traumatic and neurologic emergencies. Will be able to execute first aid measures in the situations mentioned above.
6.2 transversal competencies: After this course, the student will recognize the specific cases where he is legally bound to intervene, know his competency level, and be trained to activate the emergency system 'survival chain'. The student will understand the ethical and legal aspects of his intervention, identifying the priorities and his role in a particular emergency situation.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Life-saving first aid maneuvers.

7.2 Specific objectives:
First-aid situations can be encountered in a dental practice and if not solved, can endanger a patient's life.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	First aid measures: definition, objectives. Guidelines and protocols. Ethical and legal aspects of first aid.	Oral presentation Multimedia presentation	-	Cardio-respiratory arrest, sudden death, infant s sudden death	2
2	Cardio-respiratory arrest diagnosis. Resuscitation history. Chain of survival. Rescuers risks	Oral presentation Multimedia presentation	-	Cardio-respiratory arrest, sudden death, infant s sudden death	2
3	Children and infants Cardio-respiratory arrest resuscitation guidelines. Foreign body airway obstruction: diagnosis and first aid protocols in children and infants	Oral presentation Multimedia presentation	-	Cardio-respiratory arrest, sudden death, stridor	2
4	Adult Cardio- respiratory arrest resuscitation guidelines. Foreign body airway obstruction: diagnosis and first aid protocols in adults.	Oral presentation Multimedia presentation	-	Cardio-respiratory arrest, sudden death, stridor	2
5	Automatic external defibrillation. Special situation resuscitation: drowning, electrocution, pregnancy, hypothermia.	Oral presentation Multimedia presentation	-	Rhythm abnormalities, hypothermia.	2
6	Trauma. Acute coronary syndromes, dyspnea, fainting, convulsions, stroke, diabetic coma- first aid measures. Animal/ insects bites/ stings, behavioral emergencies: diagnosis and first aid measures	Oral presentation Multimedia presentation	-	Thoracic and abdominal trauma, head trauma, limb trauma, spine trauma. Ischemic cardiac pathology. Diabetes. Epilepsy.	2
7	Shock. Hemorrhage. Diagnosis and first aid protocols.	Oral presentation Multimedia presentation	-	Shock	2

Bibliography
http://www.cprguidelines.eu/2020

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Universal safety measures	Practical activities Multimedia presentation	CBL	Cardio-respiratory arrest	2
2	Airway, foreign body airway obstruction protocol, lateral safety position in adults, children and infants.	Practical activities Multimedia presentation	CBL	Dyspnea	2
3	Adult Basic life support	Practical activities Multimedia presentation	CBL	Cardio-respiratory arrest	2
4	Adult Basic life support	Practical activities Multimedia presentation	CBL	Cardio-respiratory arrest	2
5	Children and infants' basic life support	Practical activities Multimedia presentation	CBL	Cardio-respiratory arrest	2

6	Children and infants' basic life support	Practical activities Multimedia presentation	CBL	Cardio-respiratory arrest	2
7	Trauma - fracture splinting, victim mobilization, transportation. First aid in hemorrhages.	Practical activities Multimedia presentation	CBL	Thoracic and abdominal trauma, head trauma, limb trauma, and spine trauma.	2
Bibliography http://www.cprguidelines.eu/2020					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The knowledge of basic first aid ensures the first-year student the capacity to intervene with competence in possible situations that could affect him/her directly, the family or the professional community where he/she conducts his/her activities or the community in general. The theoretical and especially practical knowledge acquired throughout the course will set the base for learning, as a first contact with the medical terms for the disciplines in the years to come.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	TBL	15
- practical activities	-	CBL	15
Final evaluation			
- theoretical final exam	Knowledge of theoretical aspects of first aid.	Multiple choice written test	50
- practical final exam	Knowledge and execution of basic first aid maneuvers.	Practical demonstration on simulation manikins	20

Minimal performance standards:
Minimum knowledge should comprise:
- definition and diagnostic criteria for cardiac arrest
- correct execution of first aid techniques in adults, children, and infants
- airway obstruction recognition and first aid maneuvers
- particularities of first aid in special situations
- legal and ethical aspects of first aid
- understanding and using a communication protocol

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Lazăr Alexandra-Elena	30 minute dupa curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Histology. Cytology			
2.2 Course coordinator: Conf dr Nechifor-Boila Adela-Corina			
2.3 Practical activities coordinator(s): Conf dr Nechifor-Boila Adela Corina, Asist dr Salagean Alexandru			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 1		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 44		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Knowledge of the normal structure, ultrastructure and function of various types of tissues and organs in order to establish positive and differential diagnosis - Knowledge and understanding of structural relations between tissues and organs of the human body in order to assimilate fundamental concepts, theories and notions regarding diseases, signs and symptoms that are characteristic to each disease, useful in clinical diagnosis - Assimilation of preliminary knowledge needed for applying various diagnostic protocols - Knowledge of ancillary diagnostic methods and techniques (cytology, histochemistry, immunohistochemistry) useful in establishing positive and differential diagnosis and in assessing prognosis - Using assimilated notions in scientific research. Starting, structuring and developing scientific research activities. Framing these activities within research projects - Developing and implementing new approaches to functional histology and molecular biology regarding diagnosis in relation to scientific progress

6.2 transversal competencies:
- Familiarization with efficient use of information, communication and assisted professional development resources (internet portals, special software, databases, online courses)
- Developing a work/project, including identification of objectives, available resources, work conditions and stages, timelines and deadlines
- Preparing, editing and presenting a study concerning an up-to-date subject by using various information sources and instruments
- Awareness of the need for continuous professional education

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The purpose of Histology is constituted by the study and knowledge of normal tissue and organ structure with the help of optic microscopy in usual stains (hematoxylin and eosin), special stains, immunohistochemistry stains and also in electron microscopy.

7.2 Specific objectives:
- Thoroughgoing study of the recognition criteria for various tissues and organs
- Learning the methods used in differentiating similar structures
- Learning the methods used in differentiating normal from pathological structures
- Understanding structure-function relationships, following the principle according to which the morphological features of any structure are strictly dependent on its function

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to histology. Epithelial tissues: General features. Classification. Covering epithelia. Glandular epithelia.	Oral, multimedia presentation and drawings	-	-	2
2	Connective tissues I: General features. Classification. Soft connective tissues: mesenchymal, loose, adipose and reticular connective tissues	Oral, multimedia presentation and drawings	-	-	2
3	Connective tissues II: Bone tissue – structure, ultrastructure. Immature and mature (fibrous, haversian) bone.	Oral, multimedia presentation and drawings	-	-	2
4	Lymphopoietic organs. Immunity: Cells of the immune system. Central lymph organs: thymus. Peripheral lymph organs: lymph node, MALT.	Oral, multimedia presentation and drawings	-	-	2
5	The oral cavity I: Oral mucosa: general structure. Masticatory mucosa: gums (anatomical classification, histological structure and functions), hard palate.	Oral, multimedia presentation and drawings	-	-	2
6	The oral cavity II: Oral mucosa. Lining mucosa: soft palate. Specialized mucosa: tongue, taste bud. Lips. Palatine tonsil.	Oral, multimedia presentation and drawings	-	-	2
7	The oral cavity III: Salivary glands: general structure, classification, minor salivary glands, major salivary glands (parotid, submandibular, sublingual).	Oral, multimedia presentation and drawings	-	-	2
8	The oral cavity IV: The tooth, general structure. Dental pulp: structure and regions, vascularization, innervation, functions, aging.	Oral, multimedia presentation and drawings	-	-	2
9	The oral cavity V: Dentin: microscopic structure, ultrastructure, chemical composition, function, types of dentin, low mineralization areas.	Oral, multimedia presentation and drawings	-	-	2
10	The oral cavity VI: Enamel: general features, structure, chemical composition, low mineralization areas, aging.	Oral, multimedia presentation and drawings	-	-	2
11	The oral cavity VII: Cementum: general features, chemical composition, function, microscopic structure, cementogenesis. Alveolar bone: anatomical and histological structure. Periodontal ligament: general features, structure, vascularization, innervation, functions.	Oral, multimedia presentation and drawings	-	-	2
12	The oral cavity VIII: Tooth development I: tooth bud phase, cap phase, dental follicle. Root formation.	Oral, multimedia presentation and drawings	-	-	2

13	The oral cavity IX: Tooth development II: Dentinogenesis: formation of dentin, odontoblasts (structure and ultrastructure). Amelogenesis: enamel formation, ameloblasts (structure and function), amelogenesis	Oral, multimedia presentation and drawings	-	-	2
14	Endocrine system: Pituitary gland, Thyroid, Parathyroid, Adrenal gland: structure, function.	Oral, multimedia presentation and drawings	-	-	2

Bibliography
Bibliography
1. Power-point presentations.
2. Laura Chinezu, Simona-Tunde Pataki, Adela Nechifor-Boilă, Adrian Năznean, Angela Borda (editor): “Histology of the tissues” Editura University Press Tîrgu-Mureş 2017, 191 pg, ISBN 978-973-169-505-1
3. Michael H. Ross - Histology: A Text and Atlas. With Correlated Cell and Molecular Biology, Ed: Wolters Kluwer/ Lipponcott Williams&Wilkins, Eight Edition, 2022.
4. Daniel J. Chiego: Oral Histology and Embryology- A clinical Approach, Ed 6, Elsevier, 2025

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction, microscope, histology techniques.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
2	Epithelia: simple columnar epithelia, stratified squamous non-keratinized epithelium, compound tubuloacinar gland.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
3	Connective tissue: mesenchymal tissue, loose connective tissue, spongy bone.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
4	Striated muscle, Cardiovascular system: capillary, Palatine tonsil.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
5	Oral cavity I: Oral mucosa, Lip.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
6	Oral cavity II: Tongue, general structure, lingual papillae, Taste bud	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
7	Oral cavity III: Salivary glands: sublingual gland, parotid gland	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
8	Oral cavity IV: Salivary glands: submaxillary (submandibular) gland	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
9	Oral cavity V: Tooth, dried and polished	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
10	Oral cavity VI: Tooth, decalcified	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
11	Oral cavity VII: Paradontium	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
12	Oral cavity VIII: Tooth development, Dental follicle, Dental Bud	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2

13	Endocrine system: Thyroid, Adrenal gland.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2
14	Slide revision. Evaluation of acquired knowledges.	Practical microscope demonstrations, study by e-learning and demonstrative drawings related to the normal structure of tissue and organs	-	-	2

Bibliography
Bibliography
1. Borda Angela, Emoke Fulop, Gliga Camelia, Loghin Andrada, Marcu Simona, Moldovan Cosmin. Histology Practical Works Guide, Editura University Press, Tîrgu Mureș, 2013
2. Power point presentations

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- Assimilating basic notions of tissue and organ cytology and histology as a basis for subsequent understanding of their physiology and pathology
- Assimilating notions regarding histology techniques and microscopic study of tissues and organs
- Acquiring the ability to recognize a tissue, organ or histological stain, and to perform differential diagnosis between various tissues and organs

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-Knowledges about the normal structure Knowledges about the relation between structure, function and pathology	-Assessment of acquired knowledges	20
- practical activities	-Recognition of various tissues and organs under the microscope.	-Assessment of acquired knowledges by examining histological slides	10
Final evaluation			
- theoretical final exam	Knowledges about the normal structure Knowledges about the relation between structure, function and pathology	Examination – written examination consisting of multiple choice questions.	50
- practical final exam	Recognition of various tissues and organs under the microscope. Recognition of staining and ability to the describe the structures	Recognition of tissues and/or organs on histological slides by using optical microscope, description of general structure and of specific structure, differential diagnosis	20

Minimal performance standards:
A grade of minimum 5 both in theory and in practical examination. Basic knowledge of the structures that were studied is required.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Nechifor-Boila Adela-Corina	30 minute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Hygiene			
2.2 Course coordinator: Șef l dr Ferencz Jozsef-Loránd			
2.3 Practical activities coordinator(s): Șef l dr Ferencz Jozsef-Loránd			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 6	3.2 lecture: 2	3.3 practical activities: 4
3.4 Total hours in curriculum: 42	3.5 lectures: 14	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 4		
- examinations: 2		
- other activities: 3		
3.8 Total hours of individual study: 33		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -Room with screen for video projection, wireless network and interactive system
5.2 for practical activities: -According to the labor protection norms and the guide of good laboratory practices.

6. Specific competencies acquired

6.1 professional competencies: -To describe the basic concepts, theories specific to environmental and food hygiene - To assess the risks associated with environmental factors (water, air, habitat) and food - To describe the methods and measures to prevent the diseases associated with environmental hazards and unsafe food - To carry out projects and to demonstrate the ability to deliver health information and health education classes on different topics, to promote general wellbeing and healthy behaviors among the general population
6.2 transversal competencies: Abilities to obtain, critically evaluate and apply health-related information in various contexts - Skills regarding research methods and their application - Written and oral communication, public speaking, and presentation - Collaborative information seeking, evaluation, and decision making - Awareness and observance of professional deontological norms

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-To understand the impact of environmental and behavioral factors on human health
- To promote a preventative and patient centered medical thinking and practice
- To develop a comprehensive vision of medicine by raising awareness regarding the environmental and populational aspects of health and disease (hygiene, environmental health, epidemiology, public health)

7.2 Specific objectives:
-To apply standard methods for the detection, quantitative and qualitative assessment of environmental factors that influence human health
- To conduct basic nutritional evaluation and quantitative and qualitative food assessments
- To describe and apply the main strategies and measures for the prevention of diseases associated with environmental factors and food

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in hygiene and environmental health – Importance, definition and objectives of hygiene and environmental health. The WHO definition of health. Health determinants. Environmental risk – Risk assessment, management and communication. Environmental toxicology and epidemiology basics.	Oral and multimedia presentation	-	Chronic bronchitis and emphysema, Skin cancer, Substance abuse, Depression, Respiratory tract infection, Skin infections/ infestations, Malaria, Malnutrition, Chronic lung disease, Thyroid disorders, Disorders of calcium and vitamin D metabolism	2
2	Air quality – Normal air composition. The sources and the effects of major air pollutants. Air quality standards and pollution prevention measures.	Oral and multimedia presentation	-	Dizziness, Headache, Tiredness, Chronic bronchitis and emphysema, Respiratory tract infection, Chronic lung disease	2
3	Water quality – Water intake and loss. Water sources and their characteristics. The water self-purification process. Sources of water pollution. Infectious and non-infectious water borne diseases. Drinking water standards. Drinking water treatment and public water supply systems. Wastewater.	Oral and multimedia presentation	-	Cyanosis, Loose stools, Abdominal pain, Vomiting, Electrolyte and water balance	2
4	Urban and built environment – the health impact of housing and urban life. Environmental noise - sources, effects and control of noise pollution. Solid waste management.Exposure to radio-frequency electromagnetic fields (mobile phones)	Oral and multimedia presentation.	-	Dizziness, Headache, Pruritus, Hearing loss, Sleep disturbance, Skin cancer, Depression	2
5	Food quality – Food - health relationship. Macronutrients: proteins, fats, carbohydrates, dietary fibers. Micronutrients: Vitamins, minerals. Sources, daily requirements, deficiencies.	Oral and multimedia presentation	-	Weight gain, Weight loss, Constipation, Malnutrition, Thyroid disorders, Disorders of calcium and vitamin D metabolism, Oral disorders (incl. Caries), Disorders of uric acid metabolism, Disorders of lipid metabolism	2
6	Food quality – Food borne diseases. Physical, chemical and microbiological contamination of food.	Oral and multimedia presentation	-	Headache, Loose stools, Abdominal pain, Vomiting	2
7	Promoting healthy nutrition – Food guides. Food groups: meat, fish, and meat products; eggs, milk, dairy products, grains, grain products, fruits, vegetables, legumes, and nuts. Processed foods. Sugar products, alcoholic and non-alcoholic beverages.	Oral and multimedia presentation	-	Weight gain, Weight loss, Constipation, Malnutrition, Disorders of calcium and vitamin D metabolism, Oral disorders (incl. Caries)	2

	Sources and nutritional value.				

Bibliography
Mandatory bibliography:
- Tarcea M.: Environmental Hygiene, Course for English students, under edition, 2012
- Nădășan V. Hygiene – Environmental Health for Medical Students. Editura University Press, 2022.
Support bibliography:
- Frumkin H, Ed. Environmental Health: From Global to Local. San Francisco: Jossey Bass, 2005.
Optional
- Friis RH. Essentials of Environmental Health. Jones & Bartlett Publishers 2011.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Physical properties of the air – standards and assessment methods	Oral, multimedia presentation, practical activities	-	Dizziness, Headache, Pruritus, Hearing loss, Sleep disturbance, Allergic disorders	2
2	Air pollution assessment: PM2.5, dusts and gases. Air quality monitoring.	Oral, multimedia presentation, practical activities	-	-Chronic bronchitis and emphysema, Chronic lung disease	2
3	Indoor air polution. Microbiological contamination of the air and surfaces.	Oral, multimedia presentation, practical activities. CBL1	-	Chronic bronchitis and emphysema, Respiratory tract infection, Chronic lung disease	2
4	Tobacco smoke as an indoor pollutant. The brief advice to quit smoking.	Oral, multimedia presentation, practical activities	-	Chronic bronchitis and emphysema, Respiratory tract infection, Chronic lung disease	2
5	Assessment of natural and artificial lighting conditions, and community noise.	Oral, multimedia presentation, practical activities	-	Tiredness, Headache, Hearing loss, Learning disorders	2
6	Drinking water quality: sensory characteristics, physical and chemical parameters.	Oral, multimedia presentation, practical activities.	-	Loose stools, Abdominal pain, Vomiting, Electrolyte and water balance, Acid based disturbance	2
7	Drinking water chemical quality standards: organic pollutants, nitrites, nitrates. Microbiological analysis of drinking water. Assessment of drinking water treatment efficiency.	Oral, multimedia presentation, practical activities. CBL2	-	Cyanosis, Loose stools, Abdominal pain, Vomiting, Electrolyte and water balance, Acid-based disturbance	2
8	Nutritional assessment: BMI, percentage of body fat. Assessment of caloric and nutrient intake.	Oral, multimedia presentation, practical activities	-	Weight gain, Weight loss, Constipation, Malnutrition, Thyroid disorders, Disorders of calcium and vitamin D metabolism, Oral disorders (incl. Caries), Disorders of uric acid metabolism, Disorders of lipid metabolism	2
9	Assessment of animal foods quality: meat, milk, eggs.	Oral, multimedia presentation, practical activities	-	Loose stools, Vomiting, Abdominal pain	2
10	Assessment of plant foods quality: fruits and vegetables. Assessment of canned food products, fatty foods, beverages.	Oral, multimedia presentation, practical activities	-	Loose stools, Vomiting, Abdominal pain	2
11	Parasitological and microbiological analysis of food. The HACCP system.	Oral, multimedia presentation, practical activities.	-	Loose stools, Vomiting, Abdominal pain	2
12	Nonionizing radiation – Sources, health effects and risks of exposure to UV radiation. Assessing the evidence regarding the effects of radio frequency radiation and microwaves.	Oral, multimedia presentation, practical activities	-	Visual impairment, Headache, Vomiting, Burns, Skin cancer	2

13	Ionizing radiation – Basic rules for radioprotection. Radiation monitoring. Estimating general and medical irradiation.	Oral, multimedia presentation, practical activities	-	Skin cancer, Bone malignancy, Childhood tumours, Immunodeficiency, Malformations of cardiovascular system, Malformations of lip/palate, Malformations of spine/CNS	2
14	Child and adolescent hygiene – Personal and school hygiene. Prevention of risk behaviors in children and adolescents: smoking, alcohol, drugs. Recovery	Oral, multimedia presentation, practical activities	-	Tiredness, Normal child development, Child abuse, Substance abuse, Learning disorders, Disorders of puberty, Sexually transmitted disease, Hair disorders, Infectious diseases of childhood	2

Bibliography

- Ábrám Z., Tarcea M., Finta H. et al – Hygiene Practical laboratory Guide, under edition, UMF Târgu Mureş, 2012
- Health risk assessment of air pollution – general principles. Copenhagen: WHO Regional Office for Europe; 2016.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-To evaluate, analyze and interpret environmental (water, air, radiation, noise, soil, waste) and behavioral risk factors
- To develop individual and community programs for the prevention of diseases associated with environmental and behavioral factors
- To develop the skills needed to conduct health education activities and promote health at the individual and community level

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Assessment of knowledge and ability to apply it individually and in a team	Referat	10
- practical activities	Assessment of knowledge and ability to apply it individually and in a team	CBL	20
Final evaluation			
- theoretical final exam	Assessment of knowledge gained during the course	Multiple choice test	50
- practical final exam	Assessment of knowledge gained during the practical activities	Multiple choice test	20

Minimal performance standards:
To describe the determinants of health and their influence on the human organism, the optimal parameters of air and water quality. To develop and implement strategies and measures to prevent air and waterborne diseases, radiation and noise associated illnesses. To describe and promote the principles of healthy nutrition and food safety. To describe the most important behavioral risk factors in children and adolescents and promote health-promoting behaviors.
- Minimum requirements for admission to the final theoretical exam: course attendance is mandatory. Students missing more than 20% of the course will not be admitted to the final exam. Students undertake a multiple choice test that evaluates knowledge taught during the course. A grade of 5 is required to pass the test.
- Minimum requirements for admission to the final practical exam: practical activities attendance is mandatory. Students missing more than 20% of the practical activities will not be admitted to the final exam. Students undertake a multiple choice test that evaluates knowledge taught during the practical activities. A grade of 5 is required to pass the test.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef l dr Ferencz Jozsef-Loránd	30 minutes after each class / practical activity

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical terminology			
2.2 Course coordinator: Conf dr Varga Andreea			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 0		
- examinations: 2		
- other activities: 5		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: not applicable
4.2 competency: not applicable

5. Conditions

5.1 for lectures: not applicable
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: - Learning to pronounce, spell, and define medical terms used in today's health care settings - Learning to combine prefixes, suffixes, and word roots to create complex medical terms - Learning to understand medical terms by breaking them into their component parts and learning the meaning of the parts - Learning to construct medical terms from component parts to express given definitions
6.2 transversal competencies: - Familiarizing with the specialized vocabulary used by dental medicine and health care practitioners - Developing a repertoire of useful medical terms - Understanding and developing an accurate communication between practitioners of the life sciences
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the

managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Providing knowledge of basic medical terminology

7.2 Specific objectives:
- providing principles used to create medical terms
- providing medical vocabulary including anatomy, physiology, systems, diagnostic testing and treatments
- providing knowledge to correctly pronounce medical terms
- providing knowledge to define common medical terms
- providing knowledge to relate common medical terms to human anatomy and physiology, conditions, diagnostic tests and examinations, and treatments
- providing knowledge to identify the medical terminology in medical record reports

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Concepts of Medical Terminology. Word structures. Medical Word Elements - Word Roots, Combining Forms. Suffixes and Prefixes. Singular and Plural Endings. Adjectives. Look-Alike Sound-Alike. Medical, Dental Professions Dictionary Use. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
2	Body Structure. Levels of Organization. Directional and Positional Terms. Body Cavities, Regions, and Quadrants. Medical Imaging Terms. General Laboratory Terms. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
3	The Integumentary System. Integumentary System Word Parts. Anatomy and Physiology. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	TBL/PBL Audio materials usage.	Learning Exercises.	not applicable	1
4	The Musculoskeletal System. Common Word Parts Associated with the Musculoskeletal System. Anatomy and Physiology of the Skeletal System. Anatomy and Physiology of the Muscular System. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
5	The Nervous System. The Special Senses. Nervous System Word Parts. Anatomy and Physiology. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations. Word Parts Associated with Special Senses. Anatomy and Physiology of the Eye, Ear, Taste, Smell, and Touch. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
6	The Respiratory System. Respiratory System word parts. Anatomy and Physiology. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
7	The Cardiovascular System. Anatomy and Physiology. Functions of the Cardiovascular System. Structures of the Cardiovascular System. Medical Specialties Related to the Cardiovascular System. Pathology of the Cardiovascular System. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
8	Hematology. The Lymphatic and Immune Systems. Word Parts. Anatomy and Physiology. Medical Specialties Related to Blood, Lymphatic and Immune Systems. Functions and Structures of the Blood, Lymphatic, and Immune Systems. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises	not applicable	1
9	The Digestive System. Digestive System Word Parts. Anatomy and Physiology. Medical Specialties Related to the Digestive System. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1

10	The Urinary System. Urinary System Word Parts. Anatomy and Physiology. Functions and Structures of the Urinary System. The Excretion of Urine. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	TBL/PBL Audio materials usage.	Learning Exercises	not applicable	1
11	The Endocrine System. Endocrine System Word Parts. Anatomy and Physiology. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
12	The Male Reproductive System. The Female Reproductive System. Male. Female Reproductive System Word Parts. Anatomy and Physiology. Conditions. Diagnostic Tests and Examinations. Treatments. Abbreviations.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
13	Review. Matching. Identification. Word-Building Challenge. Extension Activities.	Interactive teaching. PowerPoint presentation. Audio materials usage.	Learning Exercises.	not applicable	1
14	Medical Terminology Colloquium	written test.	not applicable	not applicable	1

Bibliography

1. MEDICAL TERMINOLOGY, CONNECTING THROUGH LANGUAGE. Paradigm Publishing. Ebony S. Lawrence, 2017
2. MEDICAL TERMINOLOGY SYSTEMS: A BODY SYSTEMS APPROACH. 8th Edition, Barbara A. Gylys, Mary Ellen Wedding, 2017
3. MEDICAL TERMINOLOGY FOR HEALTH PROFESSIONS, 7th Edition Ann Ehrlich, Carol L. Schroeder, DVD-ROM, 2013

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- Familiarization with the specialized vocabulary used by dental medicine and health care practitioners
- Possession of a repertoire of useful medical terms
- Understanding and developing an accurate communication between practitioners of the life sciences

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Active participation during lectures and exercises performed	Collaborativ evaluation	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	- knowledge of the bibliographic material - knowledge to define common medical terms - knowledge to identify medical terminology in medical record reports	- written examination - exercises on the curriculum topics	70
- practical final exam	not applicable	not applicable	0

Minimal performance standards:
- knowledge of specialized terminology and ability to use this terminology properly
- minimum grade of 5.0 obtained at the theoretical examination

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Varga Andreea	Monday 14.00-15.00

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Teeth and dental arches morphology			
2.2 Course coordinator: Prof dr Székely Melinda-Gyöngyi			
2.3 Practical activities coordinator(s): Șef l. dr. Borș Andreea			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 2	3.3 practical activities: 6
3.4 Total hours in curriculum: 112	3.5 lectures: 28	3.6 practical activities: 84
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 0		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 6		
- examinations: 6		
- other activities: 0		
3.8 Total hours of individual study: 38		
3.9 Total hours: 150		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: Curricular reform
4.2 competency: English language examination certificate (B2 or C1)

5. Conditions

5.1 for lectures: Multimedia equipment
5.2 for practical activities: Laboratory for dental technicians, specific tables for practical work, instruments for model plaster and wax carving, dental materials (model plaster, dental stone, wax, acrylic models) for on-site practical work. Multimedia equipment for online practical work.

6. Specific competencies acquired

6.1 professional competencies: - Understanding the terms used to describe the morphology of human primary and permanent dentition. - The discipline provides dental students with basic knowledge required when answering dental anatomy questions on the examinations. - Practical work by the plaster and wax modeling of teeth have the value of developing skills to accurately visualize and reproduce the subtle outline of each tooth.
6.2 transversal competencies: - Aquisition of skills and abilities necessary for dental practice. - This discipline provides and introduction in dentistry through the knowledge regarding the functional morphology of teeth and dental arches, and with respect to masticatory function. - All clinical disciplines in dental medicine are based on the terminology learned throughout this praeclinical discipline.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
To know the morphology (anatomy) of teeth and dental arches which will be applied in conservative dental restorations (C2) prosthetic restorations (C4) and are necessary in diagnostics and treatments of dental anomalies (C3).

7.2 Specific objectives:
- To learn the human tooth morphology, the functional connection between the teeth and dental arches in masticatory function.
- To know the shape and function of all components of the stomatognathic system as an interrelation between form and function.
- To reproduce each tooth morphology accurately through model plaster and wax modeling.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The dentition. Terminology used for describing tooth morphology: crowns and roots.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
2	Primary functional morphology of permanent anterior teeth, class traits (common morphological features). Individual morphological characteristics of the maxillary first incisor.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
3	Individual morphological characteristics of the upper lateral incisor and the lower incisors.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
4	Tooth identification (numbering) systems.	Test + multimedia	Evaluation (5% of final grade)	-	2
5	Individual morphological characteristics of the upper and lower canines. Traits to distinguish maxillary from mandibular permanent anterior teeth.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
6	Primary functional morphology of permanent posterior teeth, class traits.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
7	Individual morphological characteristics of the upper and lower premolars.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
8	Individual morphological characteristics of the upper molars.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
9	Individual morphological characteristics of the lower molars.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
10	Traits to compare and to distinguish all permanent teeth: maxillary and mandibular teeth; anterior and posterior teeth.	Test + multimedia	Evaluation (5% of final grade)	-	2
11	Morphology of primary (deciduous) teeth. Class and type traits (common and different) of primary teeth compared to permanent teeth.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
12	Dental arches: form, dimension, axial position, inter arch relationship of teeth (basic terms).	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
13	The teeth role in mastication: correlations between primary functional tooth morphology and chewing (basic terms).	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2
14	Secondary functional morphology of teeth and dental arches (basic terms). Recapitulation.	Oral and power point presentation, multimedia.	Course of 2 hours in English language.	-	2

Bibliography
Bibliography
References (compulsory):
1. 'Morphology of teeth and dental arches' on BlackBoard and E-learning Platform, Website of the UMFST G.E. Palade of Tg.Mures
2. Scheid R. C., Weiss Gabriela: Woelfel's Dental Anatomy. 8th edition. Lippincott Williams&Wilkins, Philadelphia, 2012.
3. Székely M., Borș A.: Morphology of Teeth and Dental Arches – Course for Students. University Press, UMFST Tg.Mureş, 2019.
References (facultative):
1. Bereșescu G.: Dinţii umani permanenţi. Editura University Press, Tîrgu-Mureş, 2011.
4. Székely M.: A fogak és fogívek funkcionális morfológiája – ediţia a doua. Editura University Press, Tîrgu-Mureş, 2009.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Presentation of the discipline and the dental laboratories. Inner rules of the discipline and also rules of the workplace safety are presented.	Oral presentation and printed documents.	English language used, students sign to confirm that they were informed.	-	6
2	Morphology of anterior teeth: individual modeling of the upper first incisor from model plaster on a scale of 1/2.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
3	Morphology of anterior teeth: individual modeling of the upper second incisor from model plaster on a scale of 1/2.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
4	Morphology of anterior teeth: individual modeling of the lower first incisor from model plaster on a scale of 1/2.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
5	Morphology of anterior teeth: individual modeling of the upper canine from model plaster on a scale of 1/2. Knowledge assessment.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
6	Morphology of posterior teeth: individual modeling of the upper first premolar from model plaster on a scale of 1/2.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
7	Morphology of posterior teeth: individual modeling of the lower second premolar from model plaster on a scale of 1/2.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
8	Morphology of posterior teeth: individual modeling of the upper first molar from model plaster on a scale of 1/2.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling,	-	6

			Laboratory Report.		
9	Morphology of posterior teeth: individual modeling of the lower first molar from model plaster on a scale of 1/2. Knowledge assessment.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
10	Morphology of anterior teeth: individual modeling from wax.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
11	Morphology of posterior teeth: individual modeling of premolar teeth from wax.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
12	Morphology of posterior teeth: individual modeling of upper molar teeth from wax.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
13	Morphology of posterior teeth: individual modeling of lower molar teeth from wax.	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6
14	Modeling a tooth for a higher grade or recovery of an absence. Recapitulation	Practical demonstration performed by the dental technicians, presentation of intermediary phases and models.	Students work under the supervision of university staff and dental technicians. Students present their notes and schematic drawing of the tooth and receive grade for the performed individual modeling, Laboratory Report.	-	6

Bibliography
Bibliography
Bratu D., Leretter M.A., Colojoară Carmen, Romînu M.: Dinţii umani permanenţi – morfologie, desen şi modelaj. Editura Signata, Timişoara, 1991.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

1. This discipline is primarily intended as a guide for dental students to master the details of tooth morphology which will be useful in the dental office in conservative and prosthodontic treatments.
2. The future activity of the dentist is based on the theoretical and practical knowledge and skills acquired in this discipline.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Test based theoretical knowledge.	Grade obtained on test individually.	10
- practical activities	Practical knowledge related to theoretical knowledge.	Laboratory Report (grades for practical works, and also for the complete laboratory report and presence) and tests through summative evaluation.	20
Final evaluation			
- theoretical final exam	Theoretical knowledge in the domain of courses.	Theoretical exam by test: multiple choice + short redactional questions.	40

- practical final exam	Practical knowledge and skills joint with theory.	Practical exam including response to a question.	30

Minimal performance standards:
Minimal performance standards:
- Necessary knowledge for achieving the passing grade 5 (five) for every evaluation criteria. The presence for the practical exam is conditioned by the minimum participation at 80% of the laboratory sessions and the achievement of the schedule of practical activities during the semester and also notes and schematic drawing of teeth are required.
- Attendance on practical work is compulsory, absence must be recuperated. No more than 20% of absence from practical work and courses are accepted. Attendance on Test courses is compulsory.
- Knowledge required for achieving the minimum grade 5 for the practical exam is that the student performs model plaster or wax modeling respecting all morphological details at a minimal level. Knowledge required for achieving the minimum grade 5 for the theoretical exam: the student has to mark half of all the correct answers on the multiple choice test.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Székely Melinda-Gyöngyi	After every course 30 minutes.

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Biochemistry of oral cavity			
2.2 Course coordinator: Prof dr Tero-Vescan Amelia			
2.3 Practical activities coordinator(s): Conf Dr Eniko Nemes Nagy			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 3		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Corelarea stării de boală cu procesele biochimice la nivel molecular implicate în dezechilibrele care pot afecta sănătatea țesuturilor dentare Conduita terapeutică conservativă a structurilor odontalo-parodontale în concordanță cu aspectele biochimice care pot influența structurile sus numite Diagnosticul și terapia interceptivă a anomaliilor aparatului dentomaxilar ținând cont de eventualele deficite enzimatice și vitaminice în dezvoltarea aparatului dento-maxilar. Restaurarea protetică a arcadelor dentare folosind materialele dentare cele mai potrivite in corelație cu particularitățile biochimice individuale ale fiecărui pacient

6.2 transversal competencies: Identificarea obiectivelor de realizat, a resurselor disponibile, condițiilor de finalizare a acestora, etapelor de lucru, timpilor de lucru, termenelor de realizare aferente și riscurilor aferente Identificarea rolurilor și responsabilităților într-o echipă pluridisciplinară în care cunoștințele legate de metabolismul biochimic pot da informații cruciale asupra tratamentului și tehnicilor aplicate și aplicarea de tehnici de relaționare și munca eficientă în cadrul echipei și în relație cu pacientul Utilizarea eficienta a surselor informationale si a resurselor de comunicare si formare profesionala asistata
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Obiectivul disciplinei este formarea unei culturi generale medicale a studenţilor. De asemenea se urmareşte prezentarea principalelor căi metabolice din celule vii, cu specificări legate de metabolismul celulelor şi ţesuturilor dentare şi peridentare. Un alt obiectiv general al acestui curs este prezentarea metabolismului bacterian în stânsă legătură cu procesul carios.
7.2 Specific objectives: Cunoașterea particularităților metabolismului biochimic la nivelul cavității orale. Cunoașterea proceselor degradative în timpul formării cariilor dentare

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Carbohydrates: monosaccharides: isomerism, derivatives. Disaccharides. Polysaccharides and storage forms. Carbohydrate digestion. Glycoproteins, glycosaminoglycans, proteoglycans. Glycolysis and gluconeogenesis. Metabolism of fructose and galactose	oral presentation	-	-	2
2	Other glucose metabolism pathways: the pentose phosphate cycle, the glucuronic acid pathway. Glycogen metabolism. Glycogenosis.	oral presentation	-	-	2
3	Lipid metabolism: representatives. Beta-oxidation of fatty acids: mechanism, energy balance. De novo biosynthesis of fatty acids. Elongation of the chain. Metabolism of eicosanoids.	oral presentation	-	-	2
4	Triglyceride metabolism. Phospholipid metabolism. Metabolism of sphingolipids. Digestion and transport of lipids in the body.	oral presentation	-	-	2
5	Metabolism of ketone bodies Cholesterol metabolism. Cholesterol transformation pathways in the body.	oral presentation	-	-	2
6	Nucleotide metabolism: regulation, role, pathology. Heme metabolism. Amino acid metabolism and the ureogenetic cycle	oral presentation	-	-	2
7	Metabolism of nucleic acids: replication, transcription and translation. The formation of dental caries. Dental plaque. Saliva composition	oral presentation	-	-	2

Bibliography

David L Nelson, Michael M Cox - Lehninger Principles of Biochemistry, 8th Edition
Jeremy M. Berg, Lubert Stryer, John Tymoczko, Gregory Gatto - Biochemistry 9th Edition
Thomas M. Devlin - Textbook of Biochemistry with Clinical Correlations, 6th Edition
Tero-Vescan A, Ősz BE, Imre S – Principii de Biochimie Medicală, Ed University Press Tîrgu Mureş, 2018

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The influence of substrate concentration on the speed of the enzymatic reaction. The influence of pH, temperature and some ions on the speed of the enzymatic reaction	practical determination	-	-	2

2	Determination of amylase activity	practical determination	-	-	2
3	Determination of transaminase activity	practical determination	-	-	2
4	Determination of serum triglyceride. Determination of beta-lipopriteins	practical determination	-	-	2
5	Determination of total and HDL cholesterol	practical determination	-	-	2
6	Determination of creatinine by Jaffe method. Determination of serum ureea	practical determination	-	-	2
7	Determination of uric acid	practical determination	-	-	2

Bibliography
Oşan A, Nagy E, Tero-Vescan A - Biochimie practică, Ed University Press Tîrgu Mureş, 2008

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Cunoașterea aspectelor generale privind structura biomoleculelor în relație cu rolul lor biologic. Cunoașterea căilor metabolice si rolul lor în dezvoltarea unor patologii

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	MCQ	10
- practical activities	quzzes and lab reports	MCQ	20
Final evaluation			
- theoretical final exam	multiple choice quiz	test	70
- practical final exam	-	-	0

Minimal performance standards:
Knowledge of the structures of carbohydrates, lipids and amino acids and the main metabolic pathways

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Tero-Vescan Amelia	marti 10-12

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Anatomy and embriology			
2.2 Course coordinator: Șef l dr Nechifor-Boila Ioan-Alin			
2.3 Practical activities coordinator(s): Șef lucr dr Vlad Vunvulea			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 10	3.2 lecture: 4	3.3 practical activities: 6
3.4 Total hours in curriculum: 70	3.5 lectures: 28	3.6 practical activities: 42
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 8		
- other activities: 0		
3.8 Total hours of individual study: 30		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: Not applicable
4.2 competency: basic knowledge in biology, a fair command of the English language, basic understanding and communication skills

5. Conditions

5.1 for lectures: A blackboard of min. 5 m2, colored chalks, projecting device, inclusive an adequate software for presenting static and motion pictures
5.2 for practical activities: Anatomical specimens, human corpse

6. Specific competencies acquired

6.1 professional competencies: -Describing and interpreting fundamental notions of the morphology and functioning of the dentomaxillary apparatus, integration of these in concepts/situations meant to apply solutions with the aim of formulating hypotheses and to correctly interpret signs, symptoms and paraclinical modifications for building a morphological and a clinical diagnosis, developing of novel professional competences in the general and the specific dentistry healthcare.
6.2 transversal competencies: -Acquiring skills and techniques which enable identification of objectives to be fulfilled, of resources available, of the conditions to match, of the work phases, of the deadlines and afferent risks according to a minimal standard: implementation of projects under coordination for solving certain problems specific of the field
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches.

Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The student becomes acquiesced with the principles of organization, development and functions of the dentomaxillary apparatus generally, and with the specific human aspects particularly. He becomes able to observe and to anticipate the topographic relations between the components of the human dentomaxillary apparatus and to interpret them in a functional context. The student will gain practical and detailed knowledge about the development of the dentomaxillary apparatus and the oral cavity, parts of the body that yet are to be studied which represent the area of their medical activity. The student will comprehend the interrelations between the various components and will be able to make distinction their variations falling within the normal limits versus the pathological phenomena and will also acquire the ability to communicate about his the observations and share his experience with others.

7.2 Specific objectives:
Learning the functional anatomy of the dentomaxillary apparatus, its components, the philogenesis and ontogenesis of the face and of the neck, of the regional anatomy, radiologic anatomy, anthropometry and biochronology. From a functional point of view, emphasis is set on the biomechanics of the motions in the TMJ, of the mastication and of the deglutition. The student will be able for a theoretical and a practical orientation in the oral cavity, especially in the entourage of the dentomaxillary arches. He will develop a vision about the shape and content of the oral cavity with a clear notion of the normal within, both morphologically and functionally, which in turn will serve as a reference when the task will be the restoration of normal relations through his therapeutical activity. The student will also develop an appropriate and detailed vocabulary used in all of the branches of the science he has chosen. The acquired knowledge will serve as a basis for the further studies and the specific sciences in dentistry.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General neuroanatomy. The functional anatomy of the spinal cord.	oral presentation PPT	NA	Malformations ov the cardiovascular system. Malformations of the lip and palate. Malformations of the neuraxis. CCT. Degenerative disorders of the neuraxis HIC	2
2	The organization of the ascending systems. The thalamus. The organization of the efferent descending systems. The basal nuclei. The cerebellum	oral presentation PPT	NA	Malformations ov the cardiovascular system. Malformations of the lip and palate. Malformations of the neuraxis. CCT. Degenerative disorders of the neuraxis HIC	2
3	The cranial nerves and their nuclei. The anatomy of the trigeminal system.	oral presentation PPT	NA	Disorders of the cranial nerves	2
4	The organization of sensorial systems. The metathalamus.	oral presentation PPT	NA	Impaired vision. Blindness. Deafness	2
5	The cerebral cortex and cortical fields. The limbic system	oral presentation, PPT	NA	Agression.Violence. Psychosexual disorders Depression. Cerebrovascular pathologies. HIC	2
6	The organization of the autonomic nervous system. The hypothalamus	oral presentation, PPT	NA	Sleep disorders. Psychosexual disorders	2
7	Application of the knowledge on clinical cases	revision	NA	NA	2
8	The functional anatomy of the pharynx and larynx	oral presentation, PPT	NA	Disfagia. Feeding disorders.Cardiac arrest	2
9	The anatomy of the nose, paranasal cavities. Development of the skull base	oral presentation, PPT	NA	Infections of the airways.	2
10	The orbital region and its content. The lacrimal apparatus Development of the skull vault and its anomalies	oral presentation, PPT	NA	Visual impairment. Blindness. Red eye. HIC. Degenerative disorders of the neuraxis. Diabetes	2
11	The anatomy of the temporal bone. The tympanic cavity	oral presentation, PPT	NA	Deafness	2
12	The descriptive anatomy of the TMJ. The infra temporal and pterygopalatine regions	oral presentation, PPT	NA	Degenerative disorders of the neuraxis	2

13	Cephalo-cervical and cervico-thoracal vasculo-nervous passageways	oral presentation, PPT	NA	Trauma of the NS	2
14	Application of the knowledge on clinical cases	revision	NA	NA	2

Bibliography
1. Ioan Alin Nechifor-Boila, Zoltan Lorinczi, Klara Branzaniuc - Neuroanatomy.
2. Denes Lorand, Papp Zsuzsanna, Topographical Anatomy of the Head and Neck.
3. Gray's Anatomy for students 2nd edition

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The spinal cord, the brainstem, the fourth ventricle. The cerebellum and the diencephalon.	Ppt presentation, lab specimens	NA	NA	3
2	The basal nuclei and the third ventricle. The the lobes and the surface of the cerebral cortex	Ppt presentation, lab specimens	NA	NA	3
3	The interhemispheric matter and the lateral ventricles. The sectional anatomy of the brain	Ppt presentation, lab specimens	NA	NA	3
4	SEMINAR: The central nervous system	Ppt presentation, lab specimens	NA	NA	3
5	The muscles of the neck. The suboccipital region	Ppt presentation, lab specimens	NA	NA	3
6	The arteries of the neck. The veins and lymphatics of the neck. The omotracheal region. The cervical plexus. The sterno-cleido-mastoid region.	Ppt presentation, lab specimens	NA	NA	3
7	The cranial nerves I-XII	Ppt presentation, lab specimens	NA	NA	3
8	The lateral cervical region. The region of the carotic triangle. The prevertebral region and the lesser supraclavicular fossa. The submental region.	Ppt presentation, lab specimens	NA	NA	3
9	Descriptive anatomy of the pharynx, larynx and and cervical esophagus. The tongue. SEMINAR: test on the cranial nerves	Ppt presentation, lab specimens	NA	NA	3
10	Muscles of the head, arteries, veins and lymphatics of the head. The submandibular region. The oral and the mental regions	Ppt presentation, lab specimens	NA	NA	3
11	The nasal, the palpebral and zygomatic regions. The retrocapsular compartment of the orbit. The vascular supply of the brain. The epicranial regions. The meningeal sheats	Ppt presentation, lab specimens	NA	NA	3
12	The region of the inner skull base. The sublingual region. The inner ear.	Ppt presentation, lab specimens	NA	NA	3
13	The topographic anatomy of the TMJ. Masticatory muscles and their relations to the TMJ. The motions of the mandible.	Ppt presentation, lab specimens	NA	NA	3
14	The relations of the maxillary nerve within the pterygopalatine region. . The relations of the mandibular nerve within the infratemporal region. The peripharyngeal spaces.	Ppt presentation, lab specimens	NA	NA	3

Bibliography
1.Ioan Alin Nechifor-Boila, Zoltan Lorinczi, Klara Branzaniuc - Neuroanatomy.
2.Denes Lorand, Papp Zsuzsanna, Topographical Anatomy of the Head and Neck.
3. Gray's Anatomy for students, 2nd edition

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Anatomy creates the basis of fundamental knowledge in medicine and is essential for understanding further disciplines

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Seminar nervi cranieni	Seminar	15
- practical activities	Seminar SNC	seminar	15

Final evaluation			
- theoretical final exam	Examen	Examen grila	50
- practical final exam	Examen practic	Examen	20
Minimal performance standards: Nu este cazul			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Nechifor-Boila Ioan-Alin	15 minutes after each lecture

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Ethics and academic integrity			
2.2 Course coordinator: Conf dr Sălcudean Andreea			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 6		
- examinations: 6		
- other activities: 6		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: - theoretical and practical aspects specific to the debated issues - developing the capacity for analysis and synthesis, using terms specific to the topic discussed
6.2 transversal competencies: - be aware of the importance of academic ethics and integrity - identify forms of lack of academic honesty - know the consequences and sanctions of plagiarism or other forms of dishonesty - identify potential social effects of lack of academic integrity
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Individual development of knowledge regarding ethics and academic integrity
7.2 Specific objectives: - presentation of the fundamental concepts specific to the field of ethics and academic integrity; - knowledge and understanding of academic responsibilities and rights - promoting ethical behaviors and discouraging practices that lack integrity among students - identifying forms of lack of academic honesty - awareness of the consequences and sanctions of plagiarism or other forms of dishonesty - awareness of the social effects of lack of academic integrity

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Ethics and academic integrity - terms and definitions, responsibilities and academic rights	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2
2	Intellectual property and copyright	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2
3	Lack of academic integrity, examples of dishonest behavior	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2
4	Plagiarism. Forms of plagiarism	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2
5	Identification of plagiarism. Consequences and sanctions of plagiarism	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2
6	Other academic dishonesty	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2
7	The social effects of lack of academic integrity	lecture, problematization; interactive course supported by powerpoint presentation	-	not correlated with ICS	2

Bibliography

1. Fish, R., Hura, G. 2013 - Students‘perceptions of plagiarism, în Journal of the Scholarship of Teaching and Learning, 13 (5), pp. 33 – 45.
2.Ives, B. et al. 2016 - Patterns and predict ors of academic dishonesty in Romanian university students, în Higher Education, 74 (5), pp. 815 – 831.
3.McCabe, D.L. 2005 - It takes a village: Academic d ishonesty and educational opportunity, în Liberal Education, 91, pp. 26–32.
4.Park, C. 2003 - In Other (People‘s) Words: plagiarism by university students-literature a nd lessons, în Assessment & Evaluation in Higher Education, 28 (5), pp. 471 – 488.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The approached topic is updated, taking into account the social or professional context of the future graduate.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	- Conceptual and practical learning on ethics and academic integrity - Knowledge of discipline-specific terminology	TBL and tests (10% TBL + 20% ongoing tests)	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	- Conceptual and practical learning on ethics and academic integrity - Knowledge of discipline-specific terminology	Test	70
- practical final exam	-	-	0

Minimal performance standards:
Fulfillment of all school obligations according to the regulations in force. Acquiring knowledge about ethics and academic integrity.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Sălcudean Andreea	luni 15-15,30

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Romanian language			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Asist dr Rațiu Bogdan			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture:	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 0	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: videoproiector

6. Specific competencies acquired

6.1 professional competencies: Studentul va prezenta, la nivel începător, următoarele abilităţi: -citirea corectă şi fluentă, precum şi înţelegerea conţinutului şi ideilor generale ale unui text simplu -înţelegerea mesajelor receptate pe cale auditivă -vorbirea cu respectarea regulilor gramaticale şi de pronunţie -cunoaşterea şi utilizarea corectă a unui vocabular de bază
6.2 transversal competencies: Utilizarea limbii române ca mijloc de comunicare cu alţi vorbitori ai acelei limbi, în situaţii generale.
6.3 related to the study program:

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Cunoașterea limbii române la nivel mediu pentru a putea înțelege mesajul unui text scris sau audiat.

7.2 Specific objectives:
La finalul cursului, studentul va prezenta abilități de comunicare, formulare de întrebări și răspunsuri pe temele studiate.

8.1 Content of seminar, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Cine suntem, cum arătăm. Familia. Pluralul substantivelor	Prelegere. Exerciții. Audio. Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
2	Anunțuri: închirierea unui apartament. Verbul: indicativul prezent conj. I	Prelegere. Exerciții. Audio. Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
3	O zi liberă. Activități pentru timpul liber	Prelegere. Exerciții. Audio. Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
4	Agenda pentru vacanță. Sporturi, hobbyuri. Verbe conj I-II	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
5	Mâncarea și băutura. Obiecte din bucătărie	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
6	Lista de cumpărături. Verbele conj IV, neregulate, a-i plăcea, dativ cu nume proprii.	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
7	La restaurant. Meniu, obiceiuri culinare Forme accentuate de dativ. Dialog la restaurant	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
8	Magazine, produse alimentare, la piaţă, la brutărie, verbe conjugarea III	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
9	Vacanțe. Destinații de vacanță. (indicativ prezent-ea)Planuri de vacanță	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
10	Cazare. Călătorii, mijloace de transport. Adverbe de timp, frecvență	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
11	O zi din viața mea. Programul zilnic. Descrierea programului zilnic, conectori temporali	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
12	Igiena personală. Diateza reflexivă	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
13	Igiena personală. Îmbrăcăminte și încălțăminte.	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2
14	Culori. Calități fizice și psihice	Repetarea. Comunicare și relaționare. Conversația, jocul de rol, rezolvarea unor exerciții	-	-	2

Bibliography
Platon,Elena ,Sonea,Ioana ,Vilcu,Dina Manual de limba română ca limbă străină(RLS),Casa Cărţii de Ştiinţă,2012
Bălănescu,Olga, Limba română pentru străini,Editura Ariadna, Bucureşti,2006
Hedeşan,Otilia(coordonator),Jebelean,Elena, Leucutia Florentina, Musat, Nicoleta, Percec,Dana, Popa,Corina
Bun venit in România!Manual de limba română şi de orientare culturală ,Imprimeria MIRTON,Timişoara, ,2008
Kohn,Daniela, Puls.Manual de limba română pentru străini .Curs A1-A2,Polirom,Iaşi,2009
Geană,Ionuţ, Limba română pentru străini,Editura Univers, Bucureşti ,2014
Mandelbrojt-Sweeney, M., Limba engleză pentru medici şi asistente, Polirom, Bucureşti, 2006

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0

- practical activities	Abilitatea de a intelege si completa exercitii de multiple choice, potrivire, folosirea corecta a numarului, articolului verbelor invatate	Test scris/Quiz la finalul fiecărui modul, test care cuprinde exercitii de vocabular și gramatică	50
Final evaluation			
- theoretical final exam	Abilităţile de citire, vorbire, receptarea și transmiterea de mesaje pe cale orală	Verificare orală - extragerea unui bilet care cuprinde citirea unui text, raspuns la intrebari, joc de rol	50
- practical final exam	-	-	0
Minimal performance standards: Să se poată prezenta, să răspundă la întrebări legate de familie, casă, interese,timp, să poată formula întrebări și cere informații folosind un vocabular de bază, fără greşeli la nivelul discursului si al gramaticii care să împiedice comunicarea.			

11. Appointment timetable (for students)

Asist dr Rațiu Bogdan	30 de minute după curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M3
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Allergology. Imunology and clinical immunology			
2.2 Course coordinator: Șef l dr Ureche Corina			
2.3 Practical activities coordinator(s): Lecturer Sular Floredana			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 22		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 4		
- other activities: 1		
3.8 Total hours of individual study: 47		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: NA
4.2 competency: NA

5. Conditions

5.1 for lectures: Lecture hall with appropriate capacity and video projection equipment
5.2 for practical activities: Laboratory equipment and materials. Access to medical data base and laboratory test reports.

6. Specific competencies acquired

6.1 professional competencies: - Description of the basic concepts of normal and pathological immunity of the human body and identification of allergic conditions. - Integration of basic concepts into situations applicable to the human body in order to explain signs and symptoms. - Description of fundamental concepts, theories, and notions of pathophysiology, by systems and mechanisms of action. - Establishment of care techniques required by the presence of signs and symptoms of disease. - Establishment of therapeutic principles that modify pathophysiological mechanisms in order to alleviate disease symptoms. - Utilization of the concepts acquired within the discipline for further scientific research.
6.2 transversal competencies: Creating a paper/report/clinical case with the identification of objectives to be achieved, available resources, conditions for their completion, work stages, work times, deadlines for completion, and risks associated with various pathophysiological mechanisms. - Identification of roles and responsibilities within a multidisciplinary team and application of relationship and

efficient work techniques within the team and in relation to the patient.
- Efficient use of information sources and communication and assisted professional training resources (Internet portals, specialized software applications, PUBMED databases, online courses, etc.) both in Romanian and in an international language.
- Development of medical thinking and use of scientific information in the context of interdisciplinarity.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Familiarization with the basic elements of normal and pathological immunology, specifically concerning allergic pathology.

7.2 Specific objectives:
Application of the notions of general immunology and specifically of allergology to the specifics of dental pathology.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction: Non-specific and specific defense, cellular and humoral: Cellular elements of the non-specific immune system. Phagocytosis. The complement system.	Lecture+PPT presentation	NA	Immunisation.Immunodeficiency	2
2	Concepts of antigen and antibody: Physical, chemical, and biological properties of antigens. Antigens. Immunoglobulins: structure, properties, nomenclature, biosynthesis. Major histocompatibility systems. Immune cells and the lymphoid system.	Lecture+PPT presentation	NA	Immunisation.Immunodeficiency	2
3	Specific immune response – overview: Recognition and processing of antigens. Pathological immune reactions, hypersensitivity.	Lecture+PPT presentation	NA	Immunisation.Immunodeficiency	2
4	Allergy. Allergens. Diagnosis of allergic diseases.	Lecture+PPT presentation	NA	Allergic disorders	2
5	Respiratory and skin allergic diseases.	Lecture+PPT presentation	NA	Allergic disorders.Asthma	2
6	Digestive and systemic allergic diseases (foods, medications). Anaphylaxis. First aid principles in allergies.	Lecture+PPT presentation	NA	Allergic disorders	2
7	Normal and pathological immunity in oro-dental pathology. Inherited and acquired immunodeficiencies.	Lecture+PPT presentation	NA	Immunodeficiency.Oral disorders	2

Bibliography
1. Abbas A.-Basic Immunology: Functions and Disorders of the Immune System, Sixth Edition, Elsevier 2020.
2.Gavin Spickett-Oxford Handbook of Clinical Immunology and Allergy,third Edition,Oxford University Press,2013

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Influence of the pre-analytical phase on the immunological test results. Blood and body fluids collection	Practical demonstrations, case studies	The major risk in laboratory work and the laboratory safety precautions will be presented. The safety precaution acknowlegement will be signed by the students. The students will be introduced to the correct blood sampling techniques and The major risk in laboratory work and the laboratory safety precautions will be presented. The safety precaution acknowlegement will be signed by the students. The students will be	Anemia, thromboembolic disease, Coagulation disorders	2

			introduced to the correct blood sampling techniques and presented the pre-analitical conditions that can interfere with the immunological assays		
2	Assessment of the non-specific humoral immunity in clinical practice – CRP, hsCRP, procalcitonin, IL-6, complement factors (C3, C4, C1 INH).	Practical demonstrations, case studies	Current techniques for investigation in the modern laboratory will be presented.	Immunization, Immunodeficiency	2
3	Assessment of the adaptive humoral immunity: Classification of the immune tehhniques based on the antigen-antibody reaction. Assessment of immunoglobulins in biological fluids in different pathologies (TORCH screening, HIV infection, Syphylis infection, chronic and acute HBV infection)	Practical demonstrations, case studies	Current techniques for investigation in the modern laboratory will be presented	Immunization, Immunodeficiency, HIV	2
4	Assessment of the innate cellular immune response – Complete blood count, the peripheral smear - quantitative and qualitative assessment of peripheral blood cells; phagocytosis tests, evaluation of the chemotactic and oxidative burst activity of monocytes and granulocytes.	Practical demonstrations, case studies, CBL test.	Current techniques for investigation in the modern laboratory will be presented	Immunization, Immunodeficiency	2
5	Assessment of the adaptive cellular immunity. Flow cytometry.	Practical demonstrations, case studies.	Current techniques for investigation in the modern laboratory will be presented	Immunization, Immunodeficiency, HIV	2
6	Laboratory testing in allergies. Total IgE and specific IgE testing. Laboratory diagnosis of food allergies, food intolerance and celiac disease	Practical demonstrations, case studies	Current techniques for investigation in the modern laboratory will be presented	Drug reactions, Allergic disorders, Asthma, Shock	2
7	Recovery activities	Essays, discussions	The same topics of laboratory testing methods will be discussed.	Immunization, Immunodeficiency	2

Bibliography

1. Dobreanu M. et al.- Practical Compendium of Clinical Biochemistry and Immunology, University Press, 2014
Dobreanu Minodora et al. Compendium of practical work. University Press 2014.
Support bibliography:
1. Mary L. Turgeon, Linne & Ringsrud's Clinical Laboratory Science - The basics and routine techniques, 5th Ed., MOSBY- ELSEVIER 2007
2. Christine Dorresteyn Stevens -Clinical Immunology and serology - a LABORATORY perspective, 2nd Ed., FA Davis, Philadelphia, 2003

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Introducing terms of allergology and immunology for dentistrs.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Theoretical knowledge necessary for understanding the principles of the laboratory methods. Correlation of the knowledge acquired during the lecture with practical aspects	Practical evaluation throughout the semester + CBL (15% + 15%)	30
Final evaluation			

- theoretical final exam	Theoretical final exam	Multiple choice test	50
- practical final exam	Knowledge necessary to understand the principles of laboratory methods. Correlation of the knowledge acquired during the practical activities with the practical aspects.	Multiple choice test	20

Minimal performance standards:
Minimal performance standards:
Minimal performance standards for passing the final theoretical evaluation
Minimum 50% attendance at lectures. A minimum score of 50% achieved on the written test.
Minimal performance standards for passing the final practical activity evaluation :
12.Antigen-antibody reaction. Assessment of immune complexes: classification of immune methods of analysis.
13. Immune techniques on solid phase: ELISA, chemiluminiscence, electrochemiluminescence, solid phase immunochromatography.
14. Complete blood count and differential –its components and their reference ranges
15. Principle, parameters and interpretation of the complete blood count. MGG peripheral blood smear.
Phagocytosis test - endocytosis and quantification of oxygen reactive species.
17. Assessment of CRP (latex agglutination, turbidimetry) and other acute phase reactants, quantification of C3, C4, C1, INH (turbidimetry, nephelometry).
18. Assessment of immunoglobulin concentration in different biological fluids - immunogram (turbidimetry, nephelometry).
19. Peripheral blood lymphogram. Peripheral lymphocyte immunophenotyping: T, B, NK – flow cytometry analysis

11. Must seen clinical situation list

NA

12. Clinical / practical abilities

NA

13. Appointment timetable (for students)

Şef l dr Ureche Corina	30 minutes after each lecture/ practical activity

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Health promotion			
2.2 Course coordinator: Conf dr Nădășan Valentin			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 0		
- examinations: 2		
- other activities: 8		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Room with projector/electronic display
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: After participating in the health promotion course, the student will be able to: • define health and illness, health education and health literacy; • list the main determinants of health and distinguish between modifiable and non-modifiable risk factors; • to evaluate the level of health literacy in patients and healthy people; • to use plain language in communication with patients and healthy people; • to evaluate the degree of accessibility of health education / promotion materials; • to define the fundamental components of the interpersonal communication process; • apply effective communication skills in the relationship with patients and healthy people; • to list the factors that shape the behaviors with an impact on the state of health; • describe the essential elements of two theoretical models of behavior change; • list and formulate the basic principles of health education in the most important chronic non-communicable diseases (prevention of cardiovascular diseases, prevention of cancer diseases, prevention of nutritional and metabolic diseases, prevention of smoking, alcohol and drug use, stress control and violence prevention) • to assist patients and healthy people in order to stop risky behaviors and to adopt behaviors favorable to health; • apply health counseling microskills in relation to patients and healthy people;

• list the stages of designing and implementing a health education program
6.2 transversal competencies: After participating in the health promotion course, the student will be able to: • obtain information about health and disease from scientifically valid sources; • assess the quality of health and disease information using scientific quality criteria; • to assist patients and healthy people in finding sources of quality medical information; • identify the moments favorable to learning and show a proactive attitude in the relationship with patients and healthy people in order to detect and early remove modifiable risk factors; • identify potential partners from the local community and involve them in the organization, implementation, and evaluation of health education programs; • identify and describe at least three tools from the field of information and communication technology useful in online health education and promotion.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Highlighting the importance of preventive medicine, explaining the role of behavior as a major determinant of health status and presenting the main skills and methods by which dentists can contribute to the prevention of risk behaviors and the adoption of a healthy lifestyle through health education and promotion at the individual level and at group level.
7.2 Specific objectives: • Defining health, determinants of health, health education, health promotion and health literacy. • Presentation of the main modifiable risk factors in chronic non-communicable diseases and interventions to change risk behaviors with healthy ones. • Presentation of the methods and skills needed for health education at the individual and group level.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Introduction to health education. Definitions and Terminology. The culture of health.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular Pathology, Chronic Pulmonary Pathology	2
2	2. Information in the medical field - sources, risks, evaluation criteria.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular Pathology, Chronic Pulmonary Pathology	2
3	3. Communication in health education and promotion. Principles and Techniques of Effective Communication in Health Education and promotion.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular Pathology, Chronic Pulmonary Pathology	2
4	4. Behavior change. Theories, models, determinants, ethical requirements.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular Pathology, Chronic Pulmonary Pathology	2
5	5. Patient health education. Domains, responsibilities, competencies.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular Pathology, Chronic Pulmonary Pathology	2
6	6. Health education and promotion programs. Types, contexts, design, implementation, evaluation.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular	2

				Pathology, Chronic Pulmonary Pathology	
7	7. Health education and promotion in the computerized society. The potential and risks of the Internet as a health information medium.	Oral and multimedia presentation	-	Substance Abuse, Infant Feeding, Sexually Transmitted Diseases, Childhood Infectious Diseases, Skin Cancer, Diabetes Mellitus, Hypertension, Ischemic Heart Pathology, Cerebrovascular Pathology, Chronic Pulmonary Pathology	2

Bibliography

1. Şcoala Naţională de Sănătate Publică şi Management Sanitar. Promovarea sănătăţii şi educaţie pentru sănătate. Bucureşti : Public H Press, 2006.
2. *** Education for Health - A manual on health education in primary care. World Health Organization, Geneva, 1988.
3. *** Health Education: Theoretical Concepts, Effective Strategies and Core Competencies. World Health Organization, 2012.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The knowledge, attitudes, and skills acquired within the discipline will have an important contribution in the training of doctors aware of their role as health educators both at the individual level, in the daily activity in dental health care institutions and at the group level, through their involvement in organizing health education and promotion programs for the benefit of the community.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	depending on the specifics of the discipline	project	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	depending on the specifics of the discipline	Multiple choice questions	70
- practical final exam	-	-	0

Minimal performance standards:
• To state the definitions of health, health education, health promotion, health literacy;
• List the main determinants of health and explain the role of behaviors in maintaining health;
• List the basic principles of effective communication in the relationship with patients and healthy people;
• Enumeration and description of factors that influence behaviors with an impact on health;
• Enumeration and description of the content of the stages of design and implementation of a health education and promotion program;

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Nădășan Valentin	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Healthcare informatics and biostatistics			
2.2 Course coordinator: Conf dr Olah Peter			
2.3 Practical activities coordinator(s): Conf dr Olah Peter			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 44		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: Not applicable
4.2 competency: Not applicable

5. Conditions

5.1 for lectures: Not applicable
5.2 for practical activities: Not applicable

6. Specific competencies acquired

6.1 professional competencies: -The student must demonstrate the ability to understand and to acquire IT specific terms, respectively glossary of key terms used in medical informatics -The student must demonstrate the ability to understand and use themain hardware (PC) and software used in computer science and medical informatics -The student must know the main branches and areas of interest inthe field of medical informatics -The student must demonstrate the ability to use the latest onlinedocumentation tools by understanding the specific architecture of the current Internet, or Web services, and an adequate knowledge of different types of tools for indexing and retrieval on the Internet. - The student must be able to apply the knowledge gained in practice, regarding all stages of documentation (online), organization and retrieval of information in medical databases and / or spreadsheet programs, writing / editing and presentation of scientific papers format imposed in the biomedical field
6.2 transversal competencies: -Familiarity with specific technologies of the Information Society, therules of ethics and conduct online security risks associated with managing information in digital media -Familiarity with the use of e-learning platforms synchronous and asynchronous, respectively test solutions online

'adaptive Assesment server' used by most test centers internationally
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: The progress of modern medicine becomes increasingly dependent of the ways the computer assists the medical field. Therefore, the main goal of discipline is to familiarize students in the biomedical field with the specific skills requirements of the 'digital age' and with IT vocabulary with key technologies related to computer assisted practice and biomedical research.
7.2 Specific objectives: -Demonstrate students ability to understand and use the main tools hardware (PC) and software used in computer science and medical informatics -Learning important aspects of using the services of indexing and searching online information -Acquisition of practical skills to use advanced solutions for editing office documents required format, manage and organize information exported from medical databases in spreadsheet programs, preparing electronic presentations

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introductory Guide. Medical informatics objectives	Oral + multimedia presentation	n/a	n/a	2
2	Medical informatics fields	Oral + multimedia presentation	n/a	n/a	2
3	Data, Information, Knowledge	Oral + multimedia presentation	n/a	n/a	2
4	Architecture of a digital computer. The hardware architecture of a automated computer system	Oral + multimedia presentation	n/a	n/a	2
5	Architecture of a digital computer. The software architecture of a automated computer system	Oral + multimedia presentation	n/a	n/a	2
6	Computer Networks – introductory guide	Oral + multimedia presentation	n/a	n/a	2
7	The Internet – introductory guide	Oral + multimedia presentation	n/a	n/a	2
8	Online documentation. Searching for information on the Internet (I) - Introduction, types of tools and services for searching information on the Internet	Oral + multimedia presentation	n/a	n/a	2
9	Online documentation. Searching for information on the Internet (II) Ways to use search engines (Google) and directory services (Yahoo Directories) to search for information in the biomedical field. Automated medical documentation services (Medline)	Oral + multimedia presentation	n/a	n/a	2
10	Online documentation. Searching for information on the Internet (III) Evaluation of quality of information published on the Internet / World Wide Web.	Oral + multimedia presentation	n/a	n/a	2
11	Office applications in the biomedical field: Word processing software. Desktop Publishing (DTP). Advanced text editors.	Oral + multimedia presentation	n/a	n/a	2
12	Office applications in biomedical field: spreadsheet software (MS Excel, OO Calc). Software for electronic presentations. Software for organizing activity. Suite of office applications (MS Office, Lotus Smart Suite, OpenOffice).	Oral + multimedia presentation	n/a	n/a	2
13	Biomedical databases.	Oral + multimedia presentation	n/a	n/a	2

14	Biomedical simulation and modeling.	Oral + multimedia presentation	n/a	n/a	2

Bibliography
1. Tigan S., Achimaş A., Drugan T.: Curs de Informatică şi Statistică Medicală, ed. SRIMA, Cluj-Napoca, 2001
2.Măruşteri M., Buraga S, Acostăchioaie D.: Primii paşi în Linux (carte + CD-ROM cu ROSLIMS LinuxLive CD), Ed. Polirom Iaşi, 2006, carte disponibila online https://www.slideshare.net/busaco/m-mruteri-s buraga-d-acostchioaie-primii-pai-n-linux
3.Măruşteri M.: Documentare online, manual disponibil online pe serverele UMFST Tg. Mures http://www.umftgm.ro/info/doconline_ROV2.pdf
4.Marius Măruşteri – Documentare online – prezent si perspective, disponibil online pe serverele UMFS Tg. Mures https://www.umfst.ro/info/english/doconline.pdf
5.Data.Information.Knowledge - material didactic disponibil online pe serverele UMFST Tg. Mures https://www.umfst.ro/info/english/Date_info_know.pdf
6.Blachman N. – Googleguide, disponibil online la http://www.googleguide.com/contents/
7.Gari D Clifford, Joaquin A Blaya, Rachel Hall-Clifford and Hamish SF Fraser: Medical informationsystems: A foundation for healthcare technologies in developing countries, Biomedical Engineering Online, 2008 https://biomedical-engineering-online.biomedcentral.com/articles/10.1186/1475-925X-7-18

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Basic knowledge of using computers	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
2	File Managers. (Windows Explorer): General Concepts. Files. Folders/ Directories	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
3	Utilization of Office software in biopharmaceutical field	Practical demostrations. Synchronous/ asynchronous e-learning methods.	Electronic Medical Records (EMR)	n/a	2
4	Advanced text editors. MS Word (I): General concepts. Page formatting; paper, fonts, text formatting, paragraph formatting	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
5	Advanced text editors. MS Word (II): characteristic elements of MS Word text editor: how to select text; operations with blocks, operations with files	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
6	Advanced text editors. MS Word (III): OLE technology (Object Linking and Embedding) – linking and embedding objects in a Word file. Mixing text and image in a Word file.	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
7	Advanced text editors. MS Word (IV) – creating and editing tables	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
8	Advanced text editors. MS Word (V) – the equation editor	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
9	Spreadsheet software (MS Excel, OO Calc). MS Excel (I) – General concepts ; creating workbook; sheets and cells formatting and editing.	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	Electronic Medical Records (EMR)	2
10	Spreadsheet software MS Excel (II): using objects, editing formulas, using absolute and relative adresses.	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
11	Spreadsheet software MS Excel (III): using simple and complexe functions	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
12	Spreadsheet software MS Excel (IV): Diagrams /Charts	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2

13	Electronic presentation software (MS Powerpoint, OO Impress). MS Powerpoint. General concepts. Creating and using slides. Using objects in slides. Animations and trasitions.	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	n/a	2
14	Online searching strategies. Tips on finding information on The Internet – introductory guide, tools and services for online searching; Online search services: Search engines (Google); Web Directories (Yahoo Directories);	Practical demostrations. Synchronous/ asynchronous e-learning methods.	n/a	Medical Online searching strategies	2

Bibliography

1. Tigan S., Achimaş A., Drugan T.: Curs de Informatică şi Statistică Medicală, ed. SRIMA, Cluj-Napoca, 2001
2.Măruşteri M., Buraga S, Acostăchioaie D.: Primii paşi în Linux (carte + CD-ROM cu ROSLIMS LinuxLive CD), Ed. Polirom Iaşi, 2006, carte disponibila online https://www.slideshare.net/busaco/m-mruteri-s buraga-d-acostchioaie-primii-pai-n-linux
3.Măruşteri M.: Documentare online, manual disponibil online pe serverele UMFST Tg. Mures http://www.umftgm.ro/info/doconline_ROV2.pdf
4.Marius Măruşteri – Documentare online – prezent si perspective, disponibil online pe serverele UMFS Tg. Mures https://www.umfst.ro/info/english/doconline.pdf
5.Data.Information.Knowledge - material didactic disponibil online pe serverele UMFST Tg. Mures https://www.umfst.ro/info/english/Date_info_know.pdf
6.Blachman N. – Googleguide, disponibil online la http://www.googleguide.com/contents/

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Correlation between theoretical and practical notions Capacity of performing practical work in the field	Multiple choice test (TBL)	10
- practical activities	Correlation between theoretical and practical notions Capacity of performing practical work in the field	Practical skills tests during the semester, to test student's ability to properly write an electronic document in a specific/imposed format	25
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts. Knowledge of bibliographical references	Multiple choice test	40
- practical final exam	Correlation between theoretical and practical notions. Capacity of performing practical work	Practical exam at the end of semester.	25

Minimal performance standards:
Understanding basic glossary of specialized terms in information technology and medical informatics specific terms.
Ability to proper use the online documentation tools and solutions
Ability to properly use the advanced solutions to edit documents, using a pre-defined format
Basic understanding of biostatistical terms

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Olah Peter	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Epidemiology			
2.2 Course coordinator: Șef l dr Golea Cristina			
2.3 Practical activities coordinator(s): sef l dr Golea Cristina			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 10		
- examinations: 2		
- other activities: 5		
3.8 Total hours of individual study: 47		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Prezenta la curs este de minim 80%.
5.2 for practical activities: Prezența la lucrările practice este obligatorie, fiind acceptat un maxim de 15% din totalul absențelor. - Este admisă recuperarea în limita a 15% din numărul total al absențelor în regim cu plată în presesiune (excepție cazurile medicale care vor solicita individual aprobarea Decanatului).

6. Specific competencies acquired

6.1 professional competencies: Competencies acquired: 1.to identify determinants for disease that include individual, social/contextual, and structural determinants of morbidity and mortality trends within and across populations. 2.Identify which chronic, infectious, and degenerative diseases contribute the most morbidity within and across populations. 3.Describe the trends in mortality due to the most common infectious, chronic and degenerative diseases within and across populations. 4.Identify the appropriate analytic methods for calculating key measures of morbidity (i.e. prevalence, incidence), mortality (e.g. mortality rates, etc) and measures of association (e.g. risk ratio, rate ratio, odds ratio, etc.).

6.2 transversal competencies:
Competencies acquired:
1. Develop and apply epidemiological reasoning and methods in addressing, analyzing and solving problems in public health, health care and biomedical, clinical and population-based research.
2.Understand the patterns of disease in human populations and apply to the control of health problems.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
students will develop the ability to understand the role of epidemiology in the field of public health and also use epidemiological methods to understand and apply epidemiological methods.

7.2 Specific objectives:
Students will develop the ability to:
1.Understand and apply epidemiological criteria needed to establish causal relationships.
2 Describe, calculate use epidemiological measures to define and quantify health problems in and across defined populations.
3. Describe the range of epidemiologic study designs used to examine the health status of a population and be able to evaluate the strengths and limitations of each.
4. Understand and apply key ethical issues to the conduct of epidemiological and other scientific investigations.
5. Critically read and evaluate epidemiologic studies in the medical or public health literature.
6. Understand the concept of screening for health determinants and diseases.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Epidemiology –preventive medicine science (objectives . study fields. historical data) Disease prevention and control (primordial, primary, secondary and tertiary prevention)	Oral and multimedia presentation	-	Paleative care, Transfusion of blood products, Pre-operative care, Post operative care, Fever, Drug reactions. Contraception	2
2	Clinical epidemiology (definitions, objectives. health and disease)	Oral and multimedia presentation	-	Paleative care, Transfusion of blood products, Pre-operative care, Post operative care, Fever, Drug reactions. Contraception	2
3	Causality	Oral and multimedia presentation	-	Paleative care, Transfusion of blood products, Pre-operative care, Post operative care, Fever, Drug reactions. Contraception	2
4	Epidemiological process for communicable and non-communicable diseases I: definition, structure, infectious process, epidemic site, site of infection, sources of pathogenic agents for communicable diseases/ risk factor sources for non-communicable diseases, ways and routes of transmission, receptivity/resistance, immunity, vulnerability to risk factors.	Oral and multimedia presentation	-	Infectious disease of childhood, Malaria, Drug reactions, cerebrovascular disease, Immunization, Immunodeficiency	2
5	Epidemiological process for communicable and non-communicable diseases II: favoring factors, populational manifestation for communicable and non-communicable diseases	Oral and multimedia presentation	-	Infectious disease of childhood, Malaria, Drug reactions, cerebrovascular disease, Immunization, Immunodeficiency	2
6	Epidemiology of oro-dental diseases	Oral and multimedia presentation	-	Paleative care, Pre-operative care, Post operative care,	2
7	Epidemiological surveillance in dental practice	Oral and multimedia presentation	-	Paleative care, Pre-operative care, Post operative care,	2

Bibliography
1. Gordis L. Epidemiology, 5th edition. 2014. ISBN 9781455742516. Available online:https://studentconsult.inkling.com/store/book/gordis-epidemiology-5th/
2. Bonita R, Beaglehole R, Kjellström T. Basic epidemiology, 2nd edition. World Health Organization, 2006. Available online:http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf

3. .Last J.M.: A Dictionary of Epidemiology, 4th ed., Oxford University Press, New York, 2000
4.Merrill R. M.: Principles of Epidemiology, Workbook, Jones&Bartlett Learning, Sudbury, 2011
5.Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
6.Ganti Latha, Lebowitz D, Rosario J, Vera A. Step-up to USMLE Step2 CK, 5th edition. 2020

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Epidemiological surveillance	Theoretical and practical presentations Practical exercise	-	Immunization, Tuberculosis, Sexually transmitted diseases Infectious disease of childhood	2
2	Epidemiological rates. Epidemiological investigation. Epidemiological analysis. Epidemiological assessment.	Theoretical and practical presentations Practical exercise	-	HIV Sexually transmitted diseases Infectious disease of childhood	2
3	.Epidemiological studies. Sampling	Theoretical and practical presentations Practical exercise	-	Carcinoma of the cervix/uterus/ovary, Malformations of cardiovascular system Drug effect on fetus	2
4	Standard precautions. Hand hygiene	Theoretical and practical presentations Practical exercise	-	Immunization, Pre-operative care, post operative care,	2
5	Prevention and management of professional exposure of health-care workers	Theoretical and practical presentations Practical exercise	-	Immunization, Pre-operative care, post operative care,	2
6	Decontamination and sterilization (methods, procedures and products) part 1	Theoretical and practical presentations Practical exercise	-	Infectious disease of childhood Pre-operative care, post operative care, Transfusion of blood products	2
7	Decontamination and sterilization (methods, procedures and products) part 2	Theoretical and practical presentations Practical exercise	-	Infectious disease of childhood Pre-operative care, post operative care, Transfusion of blood products	2

Bibliography

1.Bonita R, Beaglehole R, Kjellström T. Basic epidemiology, 2nd edition. World Health Organization, 2006. Available online:http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf
2.Gordis L. Epidemiology, 5th edition. 2014. ISBN 9781455742516. Available online:https://studentconsult.inkling.com/store/book/gordis-epidemiology-5th/
3.Last J.M.: A Dictionary of Epidemiology, 4th ed., Oxford University Press, New York, 2000
4.Merrill R. M.: Principles of Epidemiology, Workbook, Jones & Bartlett Learning, Sudbury, 2011

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Identificarea rolurilor și responsabilităților într-o echipă pluridisciplinară și aplicarea de tehnici de relaționare și muncă eficientă în cadrul echipei și în relație cu pacientul.
Utilizarea eficientă a surselor informaționale și a resurselor de comunicare și formare profesională asistată (portaluri Internet, aplicații software de specialitate, baze de date, cursuri on-line etc.).

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	theoretical concepts	simple and multiple choice test	15
- practical activities	practical abilities	simple and multiple choice test	15
Final evaluation			
- theoretical final exam	theoretical concepts	simple and multiple choice test	35
- practical final exam	practical abilities	simple and multiple choice test	35

Minimal performance standards:
By the end of this course students will develop the ability to use epidemiological concepts and methods to examine and describe the health status of a population, to define and control health problems, gather, process, and present information to different audiences in-person, through information technologies, or through media channels.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Sef l dr Golea Cristina	monday (luni) 12-14

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Genetics			
2.2 Course coordinator: Șef l dr Bogliș Alina			
2.3 Practical activities coordinator(s): Asist drd Balla Beata Magdolna, Asist drd Crișan Adriana			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 16		
- supplemental documentation at the library, from specialized information portals and in the field: 16		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 47		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: N/A
4.2 competency: N/A

5. Conditions

5.1 for lectures: N/A
5.2 for practical activities: N/A

6. Specific competencies acquired

6.1 professional competencies: Description of basic terms, mechanisms, concepts, and theories of genetics (DNA, RNA, gene, genome, chromosomes, gene expression, variability, recombination, mutations, inheritance patterns) involved in the production of physiological traits and disorders Identification of a genetic disorder, approaches to diagnosis Formulating hypotheses and the correct interpretation of clinical signs and symptoms. Understanding genetic counseling, the role of a medical family tree. Identification of the inheritance mechanism of genetic diseases, estimation of the recurrence risk in genetic diseases. Genetic counseling. Implementing new approaches to the process of diagnosis and management of genetic diseases in relation to knowledge and technical progress in the field of molecular biology. Initiation into scientific research activities in the field of genetics
6.2 transversal competencies: Understanding the need for continuous training in the field of genetics and molecular biology in the era of genetization of medicine: efficient use of resources and learning techniques for personal and professional development, information sources and communication

resources, up-to-date specialized publications in genetic, genetic database. Understanding and familiarization with the specific roles and activities in the domain of medical genetics in a team of different specialists.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Acquiring the concepts of medical genetics with applications in dentistry.
7.2 Specific objectives: Understanding the role of genetic factors in the development of physiological traits and genetic diseases with involvement in the oro-maxilo-facial domain. Management of the patient and family affected by a genetic disease – from diagnosis to therapy and prevention

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in genetics. Heredity and variation. Human genetics, medical genetics, clinical genetics. Molecular genetics, cytogenetics, classical genetics. The short history of genetics, genome projects. Genetic databases. The role of genetics in disease development. The role of genetics in disease development. Genomic medicine. Primary, secondary and tertiary structure of DNA.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
2	Chromatin and chromosomes. Physical (UV absorbtion)and chemical characteristics of DNA (denatiration, renaturation, hybridisation).DNA replication	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
3	The human genome. Non-coding DNA. Repetitive sequences. Transposable elements.The genes: definition, structure, classification, characteristics, gene families	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
4	Gene expression: transcription, mRNA processing, translation. Genetic code.Regulation of gene expression.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
5	Genetic variability. Recombination.DNA lesions. Repair mechanisms. Mutations.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
6	Genetic inheritance mechanisms: Monogenic inheritance.Non-mendelian inheritance.	Oral+multimedia presentation	-	Malformations of lip/palate, chromosomal disorders, Monogenic diseases	2
7	Multifactorial inheritance, Congenital anomalies. Dysmorphology and teratogenesis.Teeth anomalies and oral lesions- genetics	Oral+multimedia presentation	-	Malformations of lip/palate, chromosomal disorders, Monogenic diseases	2

Bibliography

Mandatory bibliography:

1. Cohn Ronald Doron, Scherer Stephen W, Hamosh, Ada.Thompson & Thompson Genetics and Genomics in Medicine, 9th edition. Elsevier, 2023
2. Peter D Turnpenny & Sian Ellard. Emery's Elements of Medical Genetics and Genomics, Sixteenth Edition. Elsevier, 2022
3. Tom Strachan, Andrew Read. Human Molecular Genetics. CRC Press, 2019. ISBN: 9780815345893

Supplementary bibliography:

1. Medical genetics - Courses - PowerPoint presentation
2. Csép K. Textbook of Genetics – Courses, University of Medicine and Pharmacy

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Human chromosomes. Morphology and classification of metaphase chromosomes.The genetic material in the cell cycle. Errors of distribution of the genetic material during cell division.	Oral presentation, Power Point presentation,	microscopy	Chromosomal disorders	2
2	The human karyotype. Karyotype preparation.Indications of karyotyping.	Oral presentation, Power Point presentation,	individual exercixe, karyotyping	Chromosomal disorders	2
3	Mutation of the number of chromosomes (Down, Patau, Turner and Klinefelter syndrome. Structural chromosome mutations. Syndrome produced by structural chromosomal anomalies (Cri du chat, DiGeorge,Prader-Willi syndrome)	Oral presentation, Power Point presentation,	Recognition of different karyotypes, presentation of clinical cases	Chromosomal disorders	2
4	The medical family tree. Symbols used for representing the medical family tree. Patterns of inheritance. Autosomal inheritance	Oral presentation, Power Point presentation,	Problem solving,representation of family tree. Calculation of recurrence risks in the offspring,	Monogenic diseases,	2
5	Patterns of inheritance. X-linked inheritance. Y linked inheritance.	Oral presentation, Power Point presentation,	Problem solving. Calculation of recurrence risks in the offspring	Monogenic diseases,	2
6	Molecular cytogenetics. Principles and methods of molecular analysis: PCR, RFLP, sequencing	Oral presentation, Power Point presentation,	Interpretation of molecular test results	Chromosomal disorders, Monogenic diseases,	2
7	Genetic counselling in oral-maxilar-facial syndromes. Genetic databases.	Oral presentation, Power Point presentation,	Problem solving,Calculation of recurrence risks in the offspring	Chromosomal disorders, Monogenic diseases	2

Bibliography
Mandatory bibliography:
1. Csép K, Bogliş A, Balla B, Bănescu C, Todoran Butilă A, Tripon F. Medical genetics practical activities for students. University Press, Tg Mures. 2021
2. Cohn Ronald Doron, Scherer Stephen W, Hamosh, Ada.Thompson & Thompson Genetics and Genomics in Medicine, 9th edition. Elsevier, 2023
Supplementary bibliography:
1. Medical genetics - Courses - PowerPoint presentation
2. Csép Katalin. Genetics Textbook – Practical sessions. University of Medicine and Pharmacy, 2010
3. Jones KL, Jones MC, del Campo M. Smith's Recognizable patterns of human malformations. Elsevier, 2013

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Recognizing the oro-maxilo-facial disorders produced by genetic factors. Identification of the inheritance mechanism of genetic diseases,and estimation of the recurrence risk in genetic diseases.
Management of the patient and family affected by a genetic disease – from diagnosis to therapy and prevention

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	According to the specifics of the domain - efficient use of medical genetics in the clinical practice	Written and MCQ tests, practical activities	30
Final evaluation			
- theoretical final exam	According to the specifics of the domain - knowledge of theoretical basis of human genetics	Summative evaluation - UNIX	50
- practical final exam	According to the specifics of the domain - efficient use of medical genetics in the clinical practice	Written exam	20

Minimal performance standards:
- Basic human and medical genetics knowledge, 5 at both the theoretical and practical exam.
- According to the university's regulations, the written theoretical exam consists of multiple-question tests with one correct answer and two correct answers.
- The correction of the tests is done according to the regulations.
- The final practical exam is mandatory, with the minimum passing grade being 5. The practical exam consists of two subjects from the practical works. Their correction is done by giving a score from 1 to 10 for each subject, with the grade for the practical exam representing the average of the two scores.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Bogliș Alina	Sef l dr Bogliș Alina - orele 12-14, luni si miercuri Asist drd Balla Beata Magdolna - orele 14-16, luni, marti, joi, vineri

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dental materials			
2.2 Course coordinator: Prof dr Székely Melinda-Gyöngyi			
2.3 Practical activities coordinator(s): Șef lucrăei dr. Borș Andreea			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 30		
- supplemental documentation at the library, from specialized information portals and in the field: 30		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 30		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 91		
3.9 Total hours: 175		
3.10 Credits: 7		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: English language examination certificate (B2 or C1).

5. Conditions

5.1 for lectures: Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: Laboratory with work tables, instruments, equipment, etc. necessary for preparing different dental materials used in dental offices and laboratories, presented at the course.

6. Specific competencies acquired

6.1 professional competencies: - The student, in addition to acquiring dental materials handling technique, will know their composition, physical, mechanical, chemical properties in order to understand the impact of dental materials that come in contact with oral tissues and will have the necessary knowledge for a proper and effective use of these materials in practice. -The student will know the possibilities for time resistance, good storage and keeping mode of the dental materials, the risks of inhaling chemicals used to manufacture prosthetic restorations, the biocompatibility of dental materials. -The future dentist should provide technical and material supplies in dental offices, sometimes of the dental laboratory too, so he or she has to know how to choose the right material from different dental materials on the market, he or she has to know which is the best and most suitable material and he or she has to identify especially the material that matches the requirements and demands of the patient, ensuring the optimum conditions to comply with the international norms.

6.2 transversal competencies:
-Cooperation and teamwork is today a complex element, requiring a permanent academic training. The student realizes that the professional activity he or she will perform it is a team work, the human factor being represented by: dentist, dental assistant and dental technician who must ensure the health and safety at work and the usage of modern technologies.
-Teamwork, passion for performance and commitment to helping patients equally bounds students to become increasingly efficient dental professionals in dental practice.
-The marketing and management of dental offices and dental laboratories through the knowledge of the current dental materials and the knowledge of equipping modern dental laboratories.
-Didactic activity in practical instruction or administration in the field of dental materials used in various fields of dentistry.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
To acquire the necessary knowledge for the proper and efficient use of materials in dental practice within prosthetic restorations (C4), conservative therapy (C2) and dental prophylaxis.

7.2 Specific objectives:
- To acquire the ability to understand different aspects of composition and properties of dental materials which have implications in dental practice.
- Application of theoretical knowledge in the use of dental materials in dental practice.
- Learning the techniques of preparation and handling of dental materials used in the dental office and the dental laboratory.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Classification, properties and requirements of dental materials. Generalities. Basic terminology.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
2	General and basic information about dental materials. Rigid and semi-rigid impression materials. Thermoplastic and buccoplastic impression materials.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
3	Elastic impression materials: reversible and irreversible hydrocolloids.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
4	Elastic impression materials: elastomeres. Disinfection of impressions. Optical impression.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
5	Non-metallic dental restorative materials.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
6	Materials used for pulp- and dentine protection and cavityl base materials. Dental adhesive systems.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
7	Dental luting cements. Temporary restauration materials.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
8	Dental materials for direct restorations. Dental amalgams.	Test. Oral+multimedia presentation	Evaluation (5% of final grade).	-	2
9	Laboratory dental materials: generalities, terminology. Dental materials for models and dies.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
10	Materials used to construct patterns.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
11	Materials for dental prosthetics: metals and alloys.	Test. Oral+multimedia presentation	Evaluation (5% of final grade).	-	2

12	Materials for dental prosthetics: synthetic polymers, acrylic resin.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
13	Materials for dental prosthetics: dental ceramic materials and zirconia.	Oral+multimedia presentation	Course of 2 hours in English language	-	2
14	Materials used to construct moulds: investment materials. Biocompatibility of dental materials.	Oral+multimedia presentation	Course of 2 hours in English language	-	2

Bibliography
Bibliography
References (compulsory):
1. 'Dental Materials' on BlackBoard and E-learning Platform, Website of the UMFST G.E. Palade of Tg.Mures
2. Schmalz G., Arenholt-Bindslev D.: Biocompatibility of Dental Materials. Springer-Verlag Berlin, Heidelberg, 2009.
3. Székely M., Borș A., Molnar-Varlam Cristina: Dental Materials – Course for Students. University Press, UMFST Tg.Mureş, 2019.
References (facultative):
1. McCabe J.F., Walls A.W.G.: Applied Dental Materials. Editura Blackwell Science, Oxford, 1998.
2. Von Fraunhofer J.A.: Dental Materials at a Glance. Wiley-Blackwell Publishing, Oxford, 2010.

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Presentation of the department, inner rules and evaluation methods. Rules of the workplace safety are presented, too.	Orally and written.	Students sign to confirm that they were informed.	-	4
2	Preparation techniques of rigid and semi-rigid impression materials. Impression trays.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
3	Preparation techniques of thermoplastic and buccoplastic impression materials.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
4	Preparation techniques of elastic impression materials: reversible and irreversible hydrocolloids. Hydroalginic impression.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
5	Preparation techniques of elastic impression materials. Combined impression techniques.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
6	Preparation techniques of classical dental cements. Practical knowledge assessment by test.	Practical demonstration and individual preparation. Test	4 hours, Laboratory Report + grade	-	4
7	Preparation techniques of modern dental cements.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
8	Preparation techniques of polymerizable materials: acrylates, composites.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
9	Preparation of Ag and Cu containing dental amalgams. Practical knowledge assessment by test.	Practical demonstration and individual preparation. Test	4 hours, Laboratory Report + grade	-	4
10	Preparation and handling of dental cast materials.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
11	Handling techniques of materials used for patterns, investments and casting.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
12	Handling techniques of materials used for dental prostethics: polymers.	Practical demonstration and individual preparation.	4 hours, Laboratory Report	-	4
13	Handling techniques of materials used for dental prostethics: dental ceramics and alloys.	Multimedia presentation.	4 hours, Laboratory Report	-	4
14	Recapitulation. Knowledge assessment by seminar.	Oral+multimedia+seminar	4 hours, Laboratory Report + grade	-	4

Bibliography
Reference:
1. Molnar-Varlam C.: Ghid practic de utilizare a materialelor dentare. Editura University Press, Târgu-Mureș, 2011.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- Dental materials science has been recorded an explosion of news that gave rise to new technologies that have to be known and applied by dental health professionals. Critical applying of dental materials in practice appeared after the dynamic development of modern techniques constantly changing and developing which represents a leading European requirement. -The dentists must correctly handle the materials they work with, must know the properties and possibilities of their resistance over time, the changes that they can produce, and the effects on the human body. -The dentist should be able to select the material that best suits to the given clinical situation, which meets the requirements of the patient, but that would be durable and cost effective.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Test based theoretical knowledge. Attendance to lectures according to the Regulations of the Discipline.	Grade obtained on test individually.	10
- practical activities	Practical knowledge related to theoretical knowledge.	Laboratory Report (grades for practical works, and also for the complete laboratory report and presence) and tests through summative evaluation.	20
Final evaluation			
- theoretical final exam	Theoretical knowledge in the domain of courses.	Exam test – multiple choice.	40
- practical final exam	Practical knowledge and skills joint with theory.	Practical exam including response to a question.	30
Minimal performance standards: Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of dental materials, to have no more than 20% unjustified or unrecovered absences from practical work and lectures, to prepare and manipulate the most representative materials used in the dental office and dental laboratory, respectively.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Székely Melinda-Gyöngyi	After every course 30 minutes.

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Microbiology (bacteriology)			
2.2 Course coordinator: Prof dr Man Adrian			
2.3 Practical activities coordinator(s): As. univ. Dr. Kis Szilard			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 6	3.2 lecture: 2	3.3 practical activities: 4
3.4 Total hours in curriculum: 42	3.5 lectures: 14	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 32		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 1		
- examinations: 4		
- other activities: 1		
3.8 Total hours of individual study: 58		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: 1. Suspicion/recognition of etiology in bacterial infections • Proper requesting of microbiological analyses required for diagnosis • Understanding of bacteriological test results and their appropriate use in the patient's treatment • Understanding of correct habits on judicious use of antimicrobials,based on the antimicrobial resistance • Knowledge of normal mouth bacterial flora • Knowledge of cariogenic and periodontal-pathogenic bacteria • Knowledge of the mechanisms by which bacteria cause the disease in the oral cavity 2) Knowledge and understanding of the concepts, basic theories, and methods of the specific area of specialization. Designing and deepening basic knowledge in dental medicine, with general medical coverage • Knowledge of nature and metabolic activity of microorganisms that can contaminate surfaces and dental instruments in the dental cabinet • Paying particular attention to microbiological and hygienic-sanitary control in various stages of treatment in dental offices, to prevent microbial contamination, to comply with the microbiological standards • Defining the principles of human antibiotherapy and specific decontamination. Learning decontamination procedures (asepsis, disinfection, sterilization, and antisepsis)

• Using the basic knowledge for explanation and interpretation of various types of concepts, situations, processes, projects, etc. associated with the microbiological field 3) The students will acquire skills regarding the applicability of decontamination methods, techniques for harvesting biological samples and pathological products, and diagnostic methods in bacteriology, parasitology, and virology. 4) The student will own theoretical knowledge related to infectious diseases, the causative agents of infectious diseases (structure, habitat, pathogenicity factors, etiology, etc.), the specific manifestations of maxilla-facial area, prevention, and treatment.
6.2 transversal competencies: • Oral and written communication skills • Teamwork abilities • Development of professional and ethical values • Solving clinical situations and taking correct therapeutic decisions • Responsible and fair execution of professional duties
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: To acquire knowledge about microbial biology, bacterial pathogenesis, and the prevention and treatment of bacterial infections.
7.2 Specific objectives: Knowledge about: • Morphology, physiology, and bacterial genetics • The means by which bacteria cause disease • The role of the immune system in the defense against bacterial infections • The diagnostic procedures used in bacterial infections • Factors that might influence the laboratory results • The main indications for bacteriological diagnosis • The mechanisms by which antimicrobial substances exert their effect and the mechanisms by which bacteria develop resistance to antibiotics • Basic principles of immunization • Bacteria involved in important human infections (morphology, caused diseases, pathogenesis, immunity, mode of transmission, prevention, and treatment) • The normal flora of the human body • The terms of colonization, infection, and carriage • The major medical problems caused by bacteria: factors that lead to the emergence and spread of antimicrobial resistance • Nosocomial infections, infections of immunosuppressed patients, • Bioterrorism • The mechanisms involved in dental caries, periodontal diseases

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The object and purpose of medical microbiology. Bacterial morphology. The structure of the bacteria.	Oral presentations. PPT	-	structure of microorganisms	2
2	The growth and multiplication of bacteria. Activity of physical, chemical and biological agents on bacteria. Pathogenesis of bacterial infections. Host defense mechanisms. Prevention of infectious diseases.	Oral presentations. PPT	-	Structure of microorganisms Antimicrobial therapy immunization immunodeficiency infection	2
3	Gram-positive cocci(Staphylococcus, Streptococcus, Enterococcus). Gram-negative rods (enterobacteria, Pseudomonas aeruginosa).	Oral presentations. PPT	-	Bullous/vesicular skin eruption, Loose stools, Vaginal discharge, Cardiac valve disease, Chronic renal disease, Endocarditis, Gastroenteritis, Infectious disease of childhood, meningitis, Oral disorders (inlcl. Caries), Otitis media, Respiratory tract infection, Septicaemia, Skin infections/infestations, Urinary tract infection, Disorders of pregnancy and deliver, Sexually transmitted diseases,	2

				Pregnancy loss.	
4	Gram-positive aerobic rods (Corynebacterium. Genus Bacillus). Spore-forming Gram-positive, anaerobic bacteria (Clostridium). Non-spore-forming anaerobic bacteria.	Oral presentations. PPT	-	Constipation, Dysphagia, Visual impairment, acne, Oral disorders (inlcl. Caries), Peripheral nerve disorders, peritonitis, septicemia	2
5	Fastidious bacteria: Neisseria, HACEK. Curved bacteria: Genus Campylobacter. Genus Helicobacter, Treponema pallidum. Borrelia burgdorferi. Bacteria that are not classified as Gram: Mycobacterium, Chlamydia.	Oral presentations. PPT	-	Loose stools, Vomiting, Acid based disturbance, Burns, Carcinoma of the stomach Cystic fibrosis, gastroenteritis, Peptic ulcer, peritonitis, Skin infections/ infestations meningitis, Respiratory tract infection, septicemia, Haemoptysis, meningitis, Peripheral nerve disorders, Sexually transmitted diseases, tuberculosis, Urinary tract infection	2
6	Normal flora of the human body. Normal flora of the oral cavity. Oral ecosystem. Characteristics of dental plaque biofilm.	Oral presentations. PPT	-	Normal flora	2
7	Microflora involved in periodontal disease. Etiology of dentoalveolar infections. Caries. Etiology of infections of the mouth and salivary glands.	Oral presentations. PPT	-	Oral disorders (inlcl. Caries)	2

Bibliography

- Winn W, Allen S, Janda W, Koneman E, Procop G, Schreckenberger P, Woods G: Koneman's Color Atlas and Textbook of Diagnostic Microbiology. Lippincott Williams & Wilkins, Philadelphia, 6th edition, 2006
- Philip D Marsh – Oral Microbiology
- Marsh and Martin's Oral Microbiology
- Lakshman Samaranayake - Essential microbiology for dentistry
- Xuedong Zhou - Atlas of Oral Microbiology-From Healthy Microflora to Disease

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Labor safety in the laboratory. Decontamination. The bacteriological diagnostic scheme. The harvesting and transport of pathological samples	Practical activities, oral presentation	-	Decontamination, disinfection, antisepsis, asepsis, sterilisation	2
2	Study of the bacterial morphology. Wet mount. Smears. Simple and Gram staining. Ziehl-Neelsen staining.	Practical activities, oral presentation	-	Structure of microorganisms	2
3	The cultivation of microorganisms. Culture media. Culture methods. Macroscopic aspects of bacterial culture. Bacterial identification based on biochemical and metabolism characteristics.	Practical activities, oral presentation	-	Identification of microorganisms	2
4	Identification of the bacteria by their antigenic structure: agglutination, ELISA, IF. Detection of nucleic acids - hybridization, gene amplification. Bacterial typing. Bacterial pathogenicity testing in vitro. Antibiotic susceptibility testing – Antibiogram	Practical activities, oral presentation	-	Identification of microorganisms,Antibiogram	2
5	Practical exam	exam	-	-	2
6	Laboratory diagnosis ofinfections caused by Staphylococcus, Streptococcus,	Practical activities, oral presentation	-	Bullous/vesicular skin eruption, Loose stools, Vaginal discharge, Cardiac valve disease, Chronic renal disease, endocarditis, gastroenteritis, Infectious disease of	2

	Enterococcus, Neisseria.			childhood, meningitis, Oral disorders (inlcl. Caries), otita media, respiratory tract infection, septicemia, Skin infections/infestations, Urinary tract infection, Disorders of pregnancy and deliver, Sexually transmitted diseases, Skin infections/infestations, Pregnancy loss	
7	Laboratory diagnosis of infections caused by enterobacteriaceae: Escherichia, Klebsiella, Proteus, Shigella, Salmonella, Yersinia.	Practical activities, oral presentation	-	gastroenteritis, Loose stools, peritonitis, Respiratory tract infection, Urinary tract infection, Skin infections/infestations	2
8	Laboratory diagnosis of infections caused by Pseudomonas, Treponema, Mycobacterium, Clostridium.	Practical activities, oral presentation	-	Constipation, Dysphagia, Visual impairment, acne, Oral disorders (inlcl.Caries), Peripheral nerve disorders, peritonitis, septicemia Haemoptysis, meningitis, Sexually transmitted diseases, tuberculosis, Urinary tractinfection, Respiratory tract infection, Skin infections/ infestations	2
9	Laboratory diagnosis of infections caused by endogenous anaerobic bacteria.	Practical activities, oral presentation	-	Oral disorders (inlcl. Caries)	2
10	Normal flora of the oral cavity. Quantitative assessment of lactobacilli in the mouth.	Practical activities, oral presentation	-	Oral disorders (inlcl. Caries)	2
11	Antimicrobial activity of dental materials and toothpaste.	Practical activities, oral presentation	-	Oral disorders (inlcl. Caries)	2
12	Microbial flora in periodontitis. Microbiology of dental caries.	Practical activities, oral presentation	-	Oral disorders (inlcl. Caries)	2
13	Review	Practical activities, oral presentation	-	-	2
14	Practical exam	Practical activities, oral presentation	-	-	2

Bibliography
1. Adrian Man, Anca Mare, Felicia Toma. Atlas de bacteriologie. University Press. 2019;213 pag. ISBN: 978-973-169-612-6
2.https://microbiologie.umfst.ro

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

By studying microbiology, students from the Dental Medicine Faculty understand the basic information about infections, including the route of transmission of the most important pathogens and the involvement of microorganisms in human disease. This serves to better prophylactic measures in their future practice.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Knowledge on microbiology diagnostic principles and antimicrobial therapy	oral exam	30
Final evaluation			
- theoretical final exam	Knowledge about the presented pathogens	test	70
- practical final exam	-	-	0

Minimal performance standards:
Minimum conditions for admission to final examination: 100% presence at practical classes
To promote the final evaluation: grade 5 (both for theory and practical exams)

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Man Adrian	30 de minute după fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Romanian language			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Asist dr Rațiu Bogdan			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Asist Ciortea Eduard			
2.4 Year of study: II	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture:	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 0	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: Not applicable
4.2 competency: Not applicable

5. Conditions

5.1 for lectures: -
5.2 for practical activities: Not applicable

6. Specific competencies acquired

6.1 professional competencies: Studentul va prezenta, la nivel începător-intermediar (A2), următoarele abilităţi: -citirea corectă şi fluentă, precum şi înţelegerea conţinutului şi ideilor generale ale unui text simplu -înţelegerea mesajelor receptate pe cale auditivă -vorbirea cu respectarea regulilor gramaticale şi de pronunţie -cunoaşterea şi utilizarea corectă a unui vocabular de bază și semi-specializat
6.2 transversal competencies: Utilizarea limbii române ca mijloc de comunicare cu alţi vorbitori ai acelei limbi, în situaţii generale și specifice
6.3 related to the study program:

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: The progress of modern medicine becomes increasingly dependent of the ways the computer assists the medical

field. Therefore, the main goal of discipline is to familiarize students in the biomedical field with the specific skills requirements of the 'digital age' and with IT vocabulary with key technologies related to computer assisted practice and biomedical research.
7.2 Specific objectives: Demonstrate student's ability to understand and use the main hardware (PC) and software tools used in computer science and medical informatics Learning important aspects of using the services of indexing and searching online information Acquisition of practical skills to use advanced solutions for editing office documents required format, manage and organize information exported from medical databases in spreadsheet programs, preparing electronic presentations

8.1 Content of seminar, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Alfabetul, particularitati ale scrierii in limba romana	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
2	Casa, încăperi, mobilier, activități	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
3	Activități pentru timpul liber	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
4	Mâncăruri și băuturi	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
5	La cumpărături	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
6	Vacanțe	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
7	O zi din viața mea	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4

Bibliography
Bibliography
1. Bălănescu,Olga, Limba română pentru străini,Editura Ariadna, Bucureşti,2006
2. Dafinoiu, C.V., Pascale, L.E., Limba română - manual pentru studenţii străini, Ed. Univ. Bucureşti, 2015
Hedeşan,Otilia(coordonator),Jebelean,Elena, Leucutia Florentina, Musat, Nicoleta, Percec,Dana, Popa,Corina Bun venit in România!Manual de limba română şi de orientare culturală ,Imprimeria MIRTON,Timişoara, ,2008
3. Kohn,Daniela, Puls.Manual de limba română pentru străini .Curs A1-A2,Polirom,Iaşi,2009
4. Geană,Ionuţ, Limba română pentru străini,Editura Univers, Bucureşti ,2014
5. Mandelbrojt-Sweeney, M., Limba engleză pentru medici şi asistente, Polirom, Bucureşti, 2006
6. Platon,Elena ,Sonea,Ioana ,Vilcu,Dina Manual de limba română ca limbă străină(RLS),Casa Cărţii de Ştiinţă,2012

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The knowledge acquired from the above-mentioned curricular content will provide the students with the proper understanding of the basic glossary of the field of Medical Informatics. The students will be familiar with a wide variety of terms, concepts and technologies, as well as with the trends that can be foreseen at the time of teaching as to how these concepts and technologies will evolve in the future. The curricula also develops a set of basic ITC practical skills needed in their future careers.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Correlation between theoretical and practical notions Capacity of performing practical work in the field	Multiple choice test (TBL)	5
- practical activities	Correlation between theoretical and practical notions Capacity of performing practical work in the field	Practical skills tests during the semester, to test student's ability to properly write an electronic document in a specific/imposed format	20
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts Knowledge of bibliographical references	Multiple choice test	45
- practical final exam	Correlation between theoretical and practical notions Capacity of performing practical work	Practical exam at the end of semester.	30

Minimal performance standards:
Understanding of the basic glossary of specialized terms in the field of Information Technology, respectively the terms specific to medical informatics.
Ability to effectively use online tools and documentation services.
Ability to effectively use advanced office solutions for writing / editing electronic documents in a required format.

11. Appointment timetable (for students)

Asist dr Rațiu Bogdan	Luni: 16.00-18.00
Asist Ciortea Eduard	30 de minute după fiecare activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Tobaccology			
2.2 Course coordinator: Șef l dr Germán-Salló Márta			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 3		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: mod de organizare frontal sau în condiții epidemiologice nefavorabile online
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Awareness of the fact that smoking is a chronic disease for which there are effective methods of treatment. Assessment/diagnosis of tobacco consumption and tobacco dependence Organizing the documentation of the smoking status in the medical records Delivering the minimal intervention counseling of persons assisted smoker Proper use of the available resources in anti-smoking counseling (specialized anti-smoking centers, quitline)
6.2 transversal competencies: Awareness of the role of the physician in smoking prevention and in the prevention for smoking related diseases Organizing a smoking prevention programs Acquiring knowledge about the psychology of lifestyle change Awareness of bio-psycho-social consequences of a widespread disease
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Correct diagnosis and treatment of the tobacco dependence disease

7.2 Specific objectives:
Recognition and measurement of nicotine dependence
Motivation for smoking cessation
Delivering the brief anti smoking advice
Knowledge of non-pharmacological and pharmacological methods for the treatment of nicotine dependence
Realizing the role of the physician in anti-smoking efforts

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	History of tobacco use. Information on smoking prevalence and trends of consumption indicators worldwide, at European and national levels. Psychosocial causes of smoking. The economical aspects of smoking.	prezentare multimedia	-	-	2
2	Informations on the health consequences of tobacco smoking. Chemical composition of tobacco smoke. Causal role of smoking in respiratory diseases, cardiovascular diseases, tumors, hematological, gynecological diseases. Effects of smoking in pregnancy. Environmental effects of smoking . Social and economic impact of smoking	prezentare multimedia	-	durere în piept, dispnee, patologie cardiacă ischemică	2
3	Recognition of tobacco use and dependence in general practice. Tobacco addiction industrial spread disease. The mechanism of of tobacco dependence. The natural history of tobacco dependence Fagerstrom Test for the evaluation of dependence level. Clinical diagnosis of tobacco dependence (carbon monoxide, cotinine, using biomarkers)	prezentare multimedia	-	-	2
4	Smoking cessation. Therapeutic education. Behaviouralsupport. Smoking cessation motivation. Brief advice on stopping tobacco use. Prevention of relapse.	prezentare multimedia	-	-	2
5	The role of the physician in tobacco control Cognitive - behavioral treatment of tobacco dependence. Nicotine replacement therapy (mechanism of action, clinical evidence of efficacy, indications, prescribing instructions, contraindications, adverse effects) treatment with bupropion, varenicline, Nonpharmacological interventions for smoking cessation	prezentare multimedia	-	-	2
6	Treatments recommended in special circumstances. Treatments recommended for pregnant women, under 18 years, Recommendations for smokers with respiratory and cardiovascular diseases, cancer or other comorbidities Recommendations for the prevention and management of weight gain following smoking cessation. Recommendations for preventing relapse. Group counseling for quitting smoking	prezentare multimedia	-	-	2
7	Smoking prevention at the population level. National tobacco control legislation. MPOWER strategy for global tobacco control. Governmental and non governmental institutions specialized in tobacco control	prezentare multimedia	-	-	2

Bibliography
2018 European Network for Smoking and Tobacco Prevention (ENSP) European Smoking cessation guidelines 2016
http://elearning-ensp.eu/assets/English%20version.pdf ENSP
Allen Carr's Easy Way To Stop Smoking

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Curricula disciplinei este alcătuită conform Standardelor europene de acreditare a serviciilor și programelor de formare profesională publicate în Ghidul European pentru renunțare la fumat redactat de ENSP European Network for Smoking and Tobacco Prevention
Course curriculum is designed according to the recommendations drafted in the European Standards for accreditation of training programs and services published European Guidelines for smoking cessation ENSP(European Network for Smoking and Tobacco Prevention)

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Însuşirea cunoştinţelor de bază şi capacitatea de a corela conceptele teoretice însuşite	test grilă, multiple choice	100
- practical final exam	-	-	0
Minimal performance standards: Nota minimă de trecere 5 minima grade Tobacco epidemic in Europe and the world; Factors that lead to tobacco use; Pharmacological basis of tobacco dependence; Health dangers of tobacco; Other consequences(economic, environmental ..)of tobacco smoking; Approaches to tobacco control; The role of the physician in tobacco control; Delivering the brief anti smoking intervention Assessment of smoking status Analysis of previous attempts a patient smoking cessation Motivating smoking cessation in a clinical context Knowledge of support services for smokers functional in Romania Knowledge of the indications and contraindications for the treatment of smoking addiction medications Knowledge of global strategies to control smoking Tobacco control legislation			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef l dr Germán-Salló Márta	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Historical impact of drug discoveries			
2.2 Course coordinator: Prof dr Brassai Attila-Miklos			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 0		
- supplemental documentation at the library, from specialized information portals and in the field: 11		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: According to the Internal rules and Regulations of the D.of Pharmacology and Clinical Pharmacology
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The interesting historical influences caused by certain drug discoveries
6.2 transversal competencies: Correlation between the medical use of medications and the effects behind
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Understanding the impact of pharmacological drug discoveries on the world's history

7.2 Specific objectives:
Correlation between the use of a medicine and the effects observed in the population

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The history of medicine shaped by drugs. Strong active substances in plants – common and famous poisonings.	MS Power Point, Case based interactive discussions	-	Drug reactions	2
2	. The art of discovery in medicine – penicillin and five more	MS Power Point, Case based interactive discussions	-	Drug reactions	2
3	The modern drug discovery cycle. Drug discovery in America: story of curare and others	MS Power Point, Case based interactive discussions	-	Drug reactions	2
4	The use of placebo in medicine. . James Lind and the citrus fruits in scurvy therapy	MS Power Point, Case based interactive discussions	-	Drug reactions	2
5	The opium war. Drug discovery in ancient Asia: India and Tibet	MS Power Point, Case based interactive discussions	-	Drug reactions	2
6	The “PILL”. Drug discovery in Europe: German and Greek traditional medicine	MS Power Point, Case based interactive discussions	-	Drug reactions	2
7	Clinical trials – then and now Regulatory affairs of drug discovery: US and Canada, UK, EU and Japan	MS Power Point, Case based interactive discussions	-	Drug reactions	2
Bibliography Bibliografie: 1. Thomas Hager - Ten Drugs; Abrams Press; 2019					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Project presentation	Oral presentation	50
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Knowledge regarding the overview of pharmacological implications of drug discovery	Written assignment/Oral exam	50
- practical final exam	-	-	0
Minimal performance standards: Passing grade: 5.00			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Brassai Attila-Miklos	35 de ninute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: How to read and publish statistical results in medical research			
2.2 Course coordinator: Conf dr Olah Peter			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 4		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 1		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: • The student will need to demonstrate the ability to organize and graph numerical and non-numerical data in a scientific study or experiment. • Demonstrating the ability to understand and present the statistical protocol in the Material and Method section of a scientific article • Demonstrating the ability to present the statistical results in the Results section of a scientific article and to interpret these results in the Discussions, respectively Conclusions sections of the article
6.2 transversal competencies: • Ability to critically evaluate the presentation of the statistical protocol and of the results in biomedical scientific articles
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the

managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
• In the current context of evidence-based medicine, Biostatistics has become one of the essential work tools for the practitioner or researcher in the biomedical field. The volume of specialized literature is constantly growing, and the selection of relevant information in this context is becoming more and more challenging. As such, the main objective of this discipline is to develop students' skills to critically read specialized literature and to eloquently publish the results of their own research, from the point of view of statistical protocols and statistical results.

7.2 Specific objectives:
• Developing students' ability to graphically represent numerical and non-numerical data, as well as to interpret such representations published in specialized literature
• Developing students' ability to present the statistical protocol used in the Material and Method section of a scientific article
• Developing students' ability to present the statistical results obtained in the Results section of a scientific article.
• Developing the students' ability to present the conclusions reached based on the statistical results in a scientific article

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Data types. Data organization. Primary data. Indexed data. Contingency tables.	Oral presentation, Powerpoint presentation, Video materials	-	Biological variability	2
2	Graphic representation of numerical and non-numerical data	Oral presentation, Powerpoint presentation, Video materials	-	-	2
3	Presentation of the statistical protocol in the Material and Method section of a scientific article	Oral presentation, Powerpoint presentation, Video materials	-	-	2
4	Presentation of statistical results in the Results section of a scientific article.	Oral presentation, Powerpoint presentation, Video materials	-	-	2
5	Presentation of conclusions based on statistical results in the card of a scientific article	Oral presentation, Powerpoint presentation, Video materials	-	Clinical trials	2
6	Correlations and regressions. The correlation coefficient. The coefficient of determination. Linear and non-linear regressions. Their importance in the biomedical field.	Oral presentation, Powerpoint presentation, Video materials	-	Clinical trials	2
7	VERIFICATION of accumulated theoretical knowledge	Grid test with Multiple Choice Questions	-	-	2

Bibliography
1. Bacârea Vladimir, Ghiga Dana, Măruşteri Marius, Oláh Péter, Petrişor Marius - A Primer in Research Methodology and Biostatistics, University Press Targu Mures, 2014
2. Motulsky Harvey, Intuitive Biostatistics: A Nonmathematical Guide to Statistical Thinking, Oxford University Press, 2013

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Adequate acquisition of the mentioned curricular content provides the student with the theoretical and practical framework for the critical reading of scientific articles in the biomedical field, as well as basic skills to correctly and eloquently present the protocols and results obtained in their own studies and research.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Understanding and integration of all theoretical concepts Knowledge of bibliographical references	Multiple choice test	100
- practical activities	-	-	0

Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	-	-	0

Minimal performance standards:
• The ability to organize and represent relevant data according to the needs of a scientific study or experiment
• The ability to correctly present the statistical protocol and its results in a scientific article
• The ability to formulate correct and pertinent conclusions based on statistical results

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Olah Peter	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Applied linguistics and communication skills in Romanian language			
2.2 Course coordinator: Lect dr Năznean Adrian			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: sală dotată cu echipamente multimedia
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: La sfarsitul cursurilor, studentul va putea sa: -foloseasca functiile specifice limbajului de specialitate (sa adreseze intrebari, formuleze opinii, sfaturi, sa convinga, sa explice, sa descrie situatii concrete specifice domeniului medicina dentara) -citeasca fluent si corect si sa inteleaga continutul unor texte de specialitate de dificultate medie/ avansata -sa inteleaga mesaje receptate pe cale auditiva legate de sfera profesionala -sa vorbeasca fluent si corect, folosind un vocabular variat si adecvat unor situatii specifice domeniului -sa scrie corect, conform regulilor gramaticale, folosind un stil si un vocabular adecvat continutului de idei -sa utilizeze un vocabular variat de termeni din domeniul de specialitate.
6.2 transversal competencies: Studentul va putea să: -utilizeze limba română ca mijloc de comunicare cu alți vorbitori ai aceleiași limbi în situații din domeniul medicinei dentare; - facă prezentări orale; - se documenteze și să structureze informații, să sintetizeze date obținute prin chestionare administrate unui grup

țintă pentru pregătirea și elaborarea de lucrări în domeniu, participarea la stagii; - se familiarizeze cu utilizarea unor platforme de comunicare virtuală și munca în grup.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Cunoaşterea limbii române la nivel avansat.
7.2 Specific objectives: Dezvoltarea celor patru abilităţi de bază: citirea, înţelegerea mesajelor receptate pe cale auditivă, comunicarea verbală, comunicarea scrisă precum şi familiarizarea cu vocabularul din domeniul de specialitate.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introducere în terminologia medicinei generale 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
2	Introducere în terminologia medicinei generale 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
3	Introducere în terminologia medicinei dentare 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
4	Introducere în terminologia medicinei dentare 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
5	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
6	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

7	Bolile dinților. Boli parodontale. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

Bibliography

Butiurcă, Doina, 2009, Fundamentele greco-latine ale terminologiei medicale, Revista Limba Română, Nr. 11-12
Frînculescu, Iulia Cristina, 2009, Limbajul medical românesc în sincronie şi diacronie, Revista UNITERM, nr.7/ 2009
Melnic V., 2003 , Mijloace de formare a terminologiei clinice medicale in limba romana, Revista Limba română, Nr. 2-3, anul XIII
Rusu, Valeriu, 1983 Mic dicţionar medical, vol. I, II, Iaşi
Ursa A., Marcean, N., 2018, Limba română medicală. Româna pentru obiective specifice, Limes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Corectitudinea structurilor folosite - Complexitatea limbajului - Adecvarea la registru, nivel de formalitate specifice situatiei	Întrebări cu complement multiplu, formare de cuvinte, potrivire de cuvinte, completare de spații	100
- practical final exam	-	-	0

Minimal performance standards:
Să poată interacționa cu pacientul în conducerea interviului medical, să știe să adreseze întrebări referitoare la anamneză, să poată oferi explicații, recomandări simple; să citească și să înţeleagă ideile principale ale unui text sau mesaj audio, să poată răspunde la întrebări pe baza lor fără greşeli mari la nivelul organizării discursului, să cunoască un număr satisfăcător de termeni specifici domeniului.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Lect dr Năznean Adrian	20 de minute după fiecare activitate practică sau curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Advanced digital skills			
2.2 Course coordinator: Prof dr Enăchescu Călin			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: knowledge of PC use, knowledge of Internet use

5. Conditions

5.1 for lectures: classroom with video projector and Internet
5.2 for practical activities: classroom with video projector and Internet

6. Specific competencies acquired

6.1 professional competencies: Elaboration and communication of plans and projects in the field of ensuring cyber security. Identifying cyber security dimensions. The use of cyber security techniques, mechanisms and procedures for the protection of personal and organizational data.
6.2 transversal competencies: Optimum management of professional tasks and learning to execute them on time, rigorously, efficiently and responsibly; Compliance with ethical rules specific to the field (eg: confidentiality) Application of team communication techniques; the development of empathic interpersonal communication skills and the assumption of specific roles in teamwork with the aim of making the group's activity more efficient and saving resources, including human resources Identifying and using effective learning methods and techniques; awareness of the extrinsic and intrinsic motivations of continuous learning.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The discipline underpins the field of cyber security – terminology, threats, vulnerabilities, risks, cyber attacks, protection and response measures to IT security incidents, disaster recovery measures.
Through the topics covered, the course raises the degree of preparation and awareness of students in the field of the urgent need to protect data, services and systems in the context of the Security by Design paradigm.

7.2 Specific objectives:
After completing the assignments, students will be able to understand the fundamental concepts of cyber security in the context of an increasingly digitized society.
The content is focused on the concrete presentation of the main topics in the field of cyber security adapted to the requirements necessary to protect data, IT systems and services, and the appropriate tools for developing cyber resilience capacities and increasing the level of culture in the field of cyber security.
Students will understand the risks related to the processing and storage of data in a virtual environment, the risks of using the Internet and interconnected computing systems, and will be able to identify and choose methods and mechanisms that provide an adequate degree of protection of personal IT data, systems and services and organizational.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to Cyber Security. The need for cyber security. Domains of cyber security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
2	Protection of data and personal privacy. Organizational protection. Behavioral approach to cyber security. Programmatic approach to cyber security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
3	Dimensions of cyber security. The CIA Triad (Confidentiality, Integrity, Availability). Cyber security guarantees.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
4	Cyber Threats, Vulnerabilities and Attacks – Concepts, Mechanisms and Techniques. Countermeasures against cyber threats. Understanding reactive, proactive and operational security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
5	Data encryption as a mechanism to provide data privacy. Access control. Data masking as a data security and protection mechanism.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
6	Data integrity. Types of data integrity checks.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
7	Availability of IT systems and services (The Five Nines concept). Responding to IT security incidents. Disaster recovery.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2

Bibliography
1. Augenbaum S., The Secret to Cybersecurity: A Simple Plan to Protect Your Family and Business fromCybercrime, Forefront Books, 2019.
2. Cisco Networking Academy, Cybersecurity Essentials, v1.1, https://www.netacad.com.
3. Evans L., Cybersecurity: What You Need to Know About Computer and Cyber Security, Social Engineering,The Internet of Things + An Essential Guide to Ethical Hacking for Beginners, Independently published, 2019.
4. Evans L., Cybersecurity: An Essential Guide to Computer and Cyber Security for Beginners, Including EthicalHacking, Risk Assessment, Social Engineering, Attack and Defense Strategies, and Cyberwarfare, Independentlypublished, 2018.
5. Kennedy G., Data Privacy Law: A Practical Guide to the GDPR, Bowker, 2019.
6. Stallings W., Cryptography and Network Security: Principles and Practice, 8th Edition, Pearson, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Corroboration of the contents of the discipline with the expectations of community representatives, professional associations and representative employers in the field related to the program:
Today's society has become totally dependent on technology, and especially on managing data in digital format. The role of cyber security, both for individuals and organizations, regardless of their business, is vital for data protection and for guaranteeing the functioning of IT services, systems and infrastructures. The inclusion of security procedures and policies within professional activities is no longer an end in itself, but an objective necessity. For this reason, the discipline is structured in a practical and pragmatic way to respond to these realities. Moreover, the entry into force of the GDPR legislation imposes strict measures regarding the protection of personal data in the European Union space, which determines the obligation of digital culturalization in the field of cyber security of every employee in every organization / company. In this context, the topics studied provide the set of information necessary for the understanding and application of the protection mechanisms of digital data and IT infrastructures.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Formative assessment to verify preparation throughout the semester. The ability to analyze and synthesize	TBL testing	30
- practical activities	Acquiring and understanding the treated issue	written test	50
Final evaluation			
- theoretical final exam	Summative evaluation to verify the preparation and understanding of the course topic. Knowledge of fundamental notions and concepts.	written test	20
- practical final exam	-	-	0

Minimal performance standards:
- Knowledge of the concepts, mechanisms and techniques that underpin the field of cyber security.
- Identifying the dimensions of cyber security.
- Designing basic sets of security procedures and policies at personal and organizational level.
- A minimum grade of 5 must be obtained for each evaluation and each exam.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Enăchescu Călin	30 de minute după fiecare curs / activitate practică

Head of departament | Course coordinator | Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Genetic hereditary factors in determining the scope of orofacial disorders			
2.2 Course coordinator: Șef l dr Bogliș Alina			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 1		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: minim 10 persoane
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Formularea de ipoteze si interpretarea corectă a semnelor, simptomelor clinice, a modificărilor paraclinice. Acordarea sfatului genetic, calcularea riscului de recurenta a bolilor genetice. Evaluarea corectă a riscului de îmbolnăvire, respectiv alegerea si aplicarea măsurilor adecvate de profilaxie în familie si în populatie în caz de boală genetică. Implementarea unor abordări noi privind procesul de stabilire a diagnosticului si managementului bolilor genetice în relatie cu progresul cunoasterii si cel tehnic din domeniul biologiei moleculare Initierea si derularea unei activităti de cercetare stiintifică în domeniul geneticii
6.2 transversal competencies: Constientizarea nevoii de formare continuă în domeniul geneticii si biologiei moleculare în era de genetizare a medicinei: utilizarea eficientă a resurselor si tehnicilor de învătare pentru dezvoltarea personală si profesională, a surselor informationale si a resurselor de comunicare, a literaturii de specialitate la zi, a bazelor de date

genetice si softuri de asistare a stabilirii diagnosticului în bolile genetice cu implicare in sfera oro-maxilo-faciala.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Însuşirea noţiunilor de genetică medicală cu aplicaţii în medicina dentara.
7.2 Specific objectives: Cunoaşterea rolului factorilor genetici în realizarea trăsăturilor fiziologice şi a bolilor genetice cu implicare in sfera oro-maxilofaciala.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Genetics of Orofacial Development. Elements of genetic semiology of the filtrum and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
2	Elements of genetic semiology of the lip and associated disorders. Genetic basis of cleft lip and palate.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
3	Elements of genetic semiology of the tongue and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
4	Genetics of tooth development. Classification of dental anomalies and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
5	Elements of genetic semiology of the maxilla and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
6	Chromosomal abnormalities associated with oro-facial syndromes	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
7	Congenital anomalies induced by teratogens. Genetic counseling in syndromes affecting craniofacial and dental structures.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases.	2

Bibliography
Mandatory bibliography:
1. Lyons Jones K., Crandall Jones M., Del Campo M. Smith's recognizable patterns of human malformation, 7th edition, Ed. Elsevier, 2013
Supplementary bibliography:
1. Medical genetics - Courses - PowerPoint presentation
2. Agnes Bloch-Zupan, Heddie Sedano, Crispian Scully. Dento/Oro/Craniofacial Anomalies and Genetics.Ed Elsevier, 2012.
3.Raoul Hennekam, Judith Allanson, and Ian Krantz. Gorlin's Syndromes of the Head and Neck, Editura: Oxford University Press. 2010

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Recunoaşterea şi abordarea factorului genetic în determinarea tulburarilor din sfera oro-maxilofaciala

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the specifics of the domain	test, proiecte in echipa- discutii.	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	According to the specifics of the domain	written exam	70
- practical final exam	-	-	0

Minimal performance standards:
Basic knowledge of medical genetics,
The minimum grade to pass the exam is 5 (this will result from the grades received for activities during the semester and at the final exam). The theoretical exam consists of a test with simple and multiple choices, according to the regulation.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Bogliș Alina	Șef l dr Bogliș Alina - orele 12-14, luni si miercuri

Head of departament | Course coordinator | Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Occupational diseases and work-related diseases in dentistry			
2.2 Course coordinator: Conf dr Moldovan Horațiu-Remus			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 2		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 2		
- examinations: 1		
- other activities: 2		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: Cunoștințe generale de anatomie, fiziologie și fiziopatologie
4.2 competency: nu este cazul

5. Conditions

5.1 for lectures: Sala de curs, suport IT, platformă digitală pentru predare on/line, în funcție de evoluția epidemiologică
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Cunoasterea noxelor profesionale fizice, chimice si biologice, precum si a suprasolicitarilor anumitor organe si/sau sisteme ale organismului in procesele de munca in domeniul stomatologiei. Cunoasterea unor efecte ale acestor noxe asupra organismului.
6.2 transversal competencies: Aplicare de masuri de preventie eficiente pentru prevenirea imbolnavirilor profesionale sau a imbolnavirilor cu factori profesionali contributori in domeniul stomatologiei.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Constientizarea, recunoasterea factorilor de risc profesionali la personalul din domeniul stomatologiei si a tehnicii dentare. Elaborarea unor planuri de preventie.
7.2 Specific objectives: Recunoasterea semnelor, simptomelor unei eventuale imbolnaviri profesionale.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Occupational risks and risks related to occupation in dentists, classification. Physical injury factors in dentistry: basic ergonomics concepts; occupational injuries caused by vibration and noise.	Oral/ multimedia	-	osteomuscular pain, dizziness, hearing loss, pain	2
2	Occupational physical risks in dentistry: different types of electromagnetic radiation (laser, UV, visible light) -, ionizing radiation (Rx) -, occupational injuries caused by electricity, accidents.	Oral/ multimedia	-	asthma, dyspnea, burns, cardiorespiratory arrest, pruritus	2
3	Occupational physical hazards: microclimate and occupational diseases caused by various dust. Classification of elementary dust particles: metals, other types of dust (organic substances, inorganic substances, composites). Lung self-cleaning process, prevention techniques.	Oral/ multimedia	-	asthma, acne, carcinoma, gastric ulcer, intoxication	2
4	Occupational diseases caused by inorganic particles in dentistry: pneumoconiosis, interstitial pneumonia. Harmful chemical factors in dentistry: diseases caused by irritating gases, vapors, organic solvents.	Oral/ multimedia	-	immunodeficiency, candidosis, osteomyelitis, otitis media, tuberculosis, endocarditis, sepsis, skin infections, respiratory infections	2
5	Latex allergy. Contact dermatitis caused by acrylates and metals. Occupational asthma: epidemiology, diagnosis, evolution.	Oral/ multimedia	-	dermatitis, intoxication	2
6	Occupational diseases caused by metal oxides (Ni, Cr, Co, Hg) in dentistry. Diseases caused by biological factors in dentistry (epidemiology, prevention procedures - vaccination programs recommended by the WHO): HIV, hepatitis B, C, TB, other common bacterial, fungal and viral infectious diseases.	Oral/ multimedia	-	intoxications, chronic liver disease, vision loss, anxiety, neurological diseases	2
7	TBL	Oral/ multimedia	-	intoxications, chronic liver disease, vision loss, anxiety, sleep disorders, immunodeficiency, candidiasis, osteomyelitis, otitis media, tuberculosis, endocarditis, sepsis, skin infections, respiratory infections	2

Bibliography

1. Encyclopaedia of Occupational Health and Safety, 2012, online http://www.iloencyclopaedia.org
2. H.G. 355/2007
3. H.G. 1169/201
4. A. Cocarla, Medicina ocupationala, vol I, II, 2009 Editura Medicala Universitara Iuliu-Hatieganu, Cluj Napoca
5. L. Szasz, Vandemecum de medicina muncii, Editura Universitas, Targu Mures, 2008

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	during the lectures	participation in debates during classes	10

- practical activities	-	-	0
Final evaluation			
- theoretical final exam	-final exam	-verification	90
- practical final exam	-	-	0
Minimal performance standards: - minimum presence for internship - 75% - patient examination and anamnesis - 25%			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Moldovan Horațiu-Remus	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Adhesive modern techniques in dentistry			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Signing in a minimum number of students (a group of 15-17 students). Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Acquiring theoretical knowledge on contemporary dental adhesive techniques covering various ramifications of adhesion and adhesives in the broad domain of dentistry, providing an important evidence base. A solid grasp of the principles, mechanics and techniques of bonding and modern adhesive systems is essential in dentistry. The course includes theoretical aspects of the concept of „adhesive dentistry" as it is apparent that adhesion and adhesives play important roles in modern clinical dentistry. Students will develop skills and confidence through the design and execution of minimally invasive indirect and direct adhesive techniques in order to achieve the best functional and aesthetic results, in point of view of achieving an appropriate treatment plan.
6.2 transversal competencies: The course will be delivered as a series of interactive meetings. For students to achieve a comprehensive, well-rounded education, integrated teamwork on several fronts is vital. Teamwork is necessary between students and between students and teachers. The more teamwork fundamentals exhibited, the more opportunity exists for students to learn the vital skills of compromise and collaboration in modern adhesive dentistry.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-The student has to understand the basic concepts on the techniques used in adhesive dentistry.
-The student will learn to develop skills to apply the gained knowledge with an appropriate correlation in various clinical situations in which it is possible to use these methods.

7.2 Specific objectives:
-The student will be able to describe the concepts and methods used in modern adhesive techniques.
-The student will acquire the ability to understand different aspects of composition and properties of various adhesive systems which have implications for major applications in dentistry.
-Applications of theoretical knowledge on various adhesive systems to their use in dental practice.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Adhesive techniques: from classic to modern. Explanation of the terms used, exemplifying.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
2	Fundamental concepts of enamel and dentin adhesion.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
3	Chemical and histological characters of enamel; adhesion to enamel. Chemical and histological characters of dentine; adhesion to dentin.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
4	Materials, methods and technique options for adhesive fixing.	Test	Two hours every week in english.	-	2
5	Adhesive bridges.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
6	Adhesive techniques used in pedodontics.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
7	Successful treatment plans in adhesive dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2

Bibliography
1. Bors A, Szekely M, Molnar-Varlam C. Tehnici adezive moderne in medicina dentara. Editura: University Press 2015.
2. Jorge Perdigao: Current perspectives on dental adhesion: (1) Dentin adhesion – not there yet, Japanese Dental Science Review, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-Course content is in accordance with the courses on the same topic listed in other universities with important achievements in theoretical and empirical evidence techniques in adhesive dentistry.
-Acquiring these modern restorative methods will be extremely useful for future dentists, adhesive techniques representing the greatest progress that restorative dentistry it registers itself.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course topics	Test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge within the course topic.	Colloquium written evaluation or project presentation.	70

- practical final exam	-	-	0
Minimal performance standards: Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of modern adhesive techniques used in dentistry, to have no more than 20% unjustified or unrecovered absences.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	30 minute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Diet principles in oral pathology			
2.2 Course coordinator: Prof dr Tarcea Monica			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: - nu e cazul
4.2 competency: - nu e cazul

5. Conditions

5.1 for lectures: minim 15 cursanti
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Descrierea noţiunilor de bază ale funcţionării organismului uman şi a mecanismelor generale de producere a bolilor. - Integrarea noţiunilor de bază în concepte/ situaţii care se aplică organismului uman cu scopul de a explica semne şi simptome. - Descrierea conceptelor, teoriilor şi noţiunilor fundamentale de fiziopatologie, pe sisteme şi mecanisme de acţiune. - Stabilirea tehnicilor de îngrijire impuse de existenţa unor semne şi simptome de boală. - Stabilirea principiilor terapeutice care modifică mecanismele fiziopatologice în vederea ameliorării simptomelor bolii. - Utilizarea noţiunilor dobândite în cadrul disciplinei pentru cercetarea ştiinţifică ulterioară
6.2 transversal competencies: Realizarea unei lucrări/referat/ caz clinic cu identificarea obiectivelor de realizat, a resurselor disponibile, condiţiilor de finalizare a acestora, etapelor de lucru,timpilor de lucru, termenelor de realizare aferente şi riscurilor aferente diverselor mecanisme fiziopatologice. - Identificarea rolurilor şi responsabilităţilor într-o echipa pluridisciplinară şi aplicarea de tehnici de relaţionare şi

muncă eficientă în cadrul echipei şi în relaţie cupacientul.
- Utilizarea eficientă a surselor informaţionale şi a resurselor de comunicare şi formare profesională asistată (portaluri Internet, aplicaţii software de specialitate,baze de date de tip PUBMED, cursuri on-line etc.) atât in limba romană, cât şi într-o limbă de circulaţie internaţională.
- Dezvoltarea gândirii medicale şi folosirea informaţiilor ştiinţifice în contextul interdisciplinarităţii

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Learning of basic diet principles and how to elaborate on specific diets recommended in various oral and dental illnesses.
- To monitor and evaluate the hazards related to nutrition, their effects on teeth and oral mucosa, and proper intervention to reduce and prevent the illnessesrelated to it and to promote the dental health status of the population.

7.2 Specific objectives:
- Analysis of main components of a healthy diet with a good impact on teeth
- Identification of general functions and major food sources for each nutrient necessary for dental and oral system
- To know the methodology of evaluation of food quality and food safety.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Definition and importance of nutrition in for a healthy dental status and prevention of chronic diseases. Healthy diet principles for mouth and teeth.	Oral presentation and multimedia	-	disorders of calcium and vitamin D metab	2
2	Dietary assessment. Digestion, absorbtion and metabolism of food and nutrients and dental impact.	Oral presentation and multimedia	-	eating disorders	2
3	Dietary reference and nutrients and caloric intakes for the body. Major food sources recommended in oral pathology and cooking technics	Oral presentation and multimedia	-	eating disorders	2
4	Diet recommendations during life cycle for healthy teeth: children, teenagers, adults, senior, athletes and pregnant women.	Oral presentation and multimedia	TBL	malabsorbtion	2
5	Diets and menus recommended in various oral and dental ilnesses like: caries, edentations, trush, granulomatosis, dermatosis, candidiasis or viral infections.	Oral presentation and multimedia	-	candidiosis	2
6	Diets and menus recommended in cancer	Oral presentation and multimedia	-	malnutrition	2
7	Diets and lifestyle practices recommended in diabetes, heavy metals poisoning, fluorosis or xerostomia	Oral presentation and multimedia	Final evaluation by Essay	xerostomiosis	2

Bibliography
1. Mahan LK, Escott-Stump S. - Krause's Food, Nutrition, and Diet Therapy. 14th ed. W.B. Saunders Co, Philadelphia, 2014.
Bibliografie suport:
2. Nnakwe NE. – Community Nutrition, Planning Health promotion and Disease Prevention, 3rd edition, Edit. Jones & Bartlett Learning, 2017

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Evaluation and analysis of food nutritional risk factors and proper implementation of dental health programs, preventive measures, and education training forthe population.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			

- lecture	TBL	test grila	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Verificare	Referat	60
- practical final exam	Studii de caz	Discutii, dezbateri	30
Minimal performance standards: - admitere la examenul practic doar daca nu depaseste 50% din absente nerecuperate - nota minima 5 la practic si teoretic			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Tarcea Monica	30 minute dupa fiecare curs sau LP

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dental materials in paediatric dentistry			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Signingin a minimum number of students (a group of 15-17 students). Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: -In addition to acquiring material handling modern techniques of dental materials used in restorative pediatric dentistry, the student will know the composition, the physical, mechanical and chemical properties of the dental materials in order to understand the impact of dental materials that come in contact with oral tissues and will have the necessary knowledge for a proper and effective use of these materials in practice. There is a specific use of the dental materials in pediatric dentistry, new restorative and therapeutic materials have been developed, and there are specific pedodontic materials that the student will endorse. -Future dentist should know that there are many variants of restoring coronary lesions in temporary and young permanent teeth and he or she should be able to choose a material from the variety of options on the market. They must know which material is better, more efficient and especially wich matchesthe requirements and demands of the small patients, ensuring the optimum conditions to comply with the international norms. In addition, the student will understand the orthodontic biomechanical ways and the materials from wich are manufactured the orthodontic brackets and devices for functional rehabilitation used in orthodontics.

6.2 transversal competencies:
-Collaboration and teamwork is today a complex, requiring permanent university training. The student realizes that the work they perform it is a teamwork and the human factor is: the dentist, the dental assistant and the dental technician who must ensure the health and safety at work and the use of modern technologies in pediatric and orthodontic practice.
-Teamwork, passion for performance and commitment to helping patients equally bounds students to become increasingly efficient dental professionals in dental practice.
-Marketing and dental practice management performance through knowledge of dental materials.
-Didactic activity in practical instruction or administration in the field of dental materials used in pedodontics and orthodontics.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-To acquire the necessary knowledge for the proper and efficient use of materials in pediatric dentistry and orthodontics.

7.2 Specific objectives:
-To acquire the ability to understand different aspects about the composition and properties of dental materials which have major implications in practice in pediatric dentistry and orthodontics.
-Understanding theoretical aspects on dental materials to be able to use in pediatric dentistry.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Generalities, conditions of materials used in pediatric dentistry. Profilactic materials: fluoride containing products.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
2	Pit and fissure sealants.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
3	Materials for pulpo-dentinal protection, cavity base materials for pediatric dentistry use.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
4	Restorative materials. Materials used for endodontic treatments in pediatric dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
5	Materials used for cementation of orthodontic appliances. Materials used for prosthodontic treatment in pediatric dentistry (crowns for children).	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
6	Materials used for different orthodontic appliances.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
7	Materials for mouthgards used in sport activities. Impression materials in pediatric dentistry. Generalities about reparation and reconditioning of appliances used in pediatric dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2

Bibliography
1. SC Leal, EM Takeshita: Pediatric Restorative Dentistry. Springer International Publishing, 2019.
2. Van Noort R: Introduction to Dental Materials. 4th ed. Mosby Elsevier Publishing, Edinburgh, 2016.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent

			of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course topics.	Test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge within the course topic	Colloquium written evaluation or project presentation.	70
- practical final exam	-	-	0
Minimal performance standards: Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of dental materials used in paediatric dentistry, to have no more than 20% unjustified or unrecovered absences.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	30 minute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Microbiology (virusology, parasitology)			
2.2 Course coordinator: Prof dr Man Adrian			
2.3 Practical activities coordinator(s): post vacant			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 6	3.2 lecture: 2	3.3 practical activities: 4
3.4 Total hours in curriculum: 42	3.5 lectures: 14	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 1		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 8		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: 1) Suspicion and recognition of the etiology of viral, parasitic and fungal infections • proper requesting of microbiological analyses required for diagnosis • understanding of microbiological results and their appropriate use in the patient's treatment • acquiring a basic knowledge of prevention and treatment of viral infections • knowledge of current issues regarding the re-emerging viral infections 2) Knowledge and understanding the concepts, basic theories and methods of the specific area of specialization. Designing and deepening of basic knowledge in dental medicine, with general medical coverage • Knowledge of nature of microorganisms that can contaminate surfaces and dental instruments in the dental cabinet • Paying particular attention to microbiological and hygienic-sanitary control in various stages of treatment in dental offices, to prevent microbial contamination, so to comply with the microbiological standards. • Defining the principles of decontamination. Learning decontamination procedures (asepsis, disinfection, sterilization and antisepsis) • Using the basic knowledge for explanation and interpretation of various types of concepts, situations, processes, projects, etc. associated to the microbiological field

3) The students will acquire skills regarding the applicability of decontamination methods, techniques for harvesting biological samples and pathological products, diagnostic methods in mycology, parasitology and virology. 4) The student will own theoretical knowledge related to infectious diseases, the causative agents of infectious diseases (structure, habitat, pathogenicity factors, etiology, etc.), the specific manifestations of maxillo-facial area, prevention, treatment.
6.2 transversal competencies: • Team work abilities • Oral and written communication skills • Development of professional and ethical values • Solving clinical situations and taking correct therapeutic decisions • Responsible and fair execution of professional duties
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: To acquire knowledge about microbial biology, bacterial pathogenesis, and the prevention and treatment of bacterial infections.
7.2 Specific objectives: Knowledge about o Morphology, physiology and genetics of viruses, parasites and fungi o the means by which the microbes cause disease o the role of immune system in the defense against viral / parasitic / fungal infections o the diagnostic procedures used in viral, parasitic and fungal infections, the factors with possible influence on the results o the main indications for performing microbiological diagnosis o the mechanisms of antimicrobial activity o epidemiology o the microorganisms - viruses, fungi, parasites - involved in important human infections (morphology, caused diseases, pathogenesis, immunity, mode of transmission, prevention and treatment) o the major medical problems caused by microorganisms (viruses, fungi and parasites): infections in immunosuppressed patients, the role of vaccination in preventing infections

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General characteristics of viruses. Architecture of virions. The chemical composition of the viruses.Replication of viruses. Viral genetics.	PPT presentation	-	Structure of microorganisms	2
2	Viroids, prions. Bacteriophage.Relations between virus and host cell. The pathology of viral infection.	PPT presentation	-	Structure of microorganisms, Infection, Antimicrobial therapy, Immunity, Immunodeficiency	2
3	DNA viruses: Adenoviridae, Herpesviridae, Paillomaviridae. RNA viruses: Orthomyxoviridae, Paramyxoviridae, Reoviridae	PPT presentation	-	Loose stools, gastroenteritis, Bullous/ vesicular skin eruption, Haematuria, Loose stools, Carcinoma of head and neck, Carcinoma of the cervix/uterus/ ovary, Infectious disease of childhood, Respiratory tract infection, Sexually transmitted diseases	2
4	Human immunodeficiency virus. Human hepatitis viruses.	PPT presentation	-	HIV, Hepatomegaly, Jaundice, Acute liver disease/failure, Chronic liver disease	2
5	Classification of parasites. Protozoology: Entamoeba, Trichomonas, Giardia, Toxoplasma. Flat worms: Taenia, Echinococcus.	PPT presentation	-	Loose stools, Vaginal discharge, Malabsorption, Pregnancy loss, Sexually transmitted diseases, Abdominal distension, Abdominal pain, Constipation, Hepatomegaly, Jaundice, Pruritus, Weight loss, Acute liver disease/failure, Allergic disorders, Anemia, Eating disorders, malaria, Skin ulcerations	2

6	Cylindrical worms: Ascaris lumbricoides, Enterobius vermicularis, Trichinella spiralis. Entomology.	PPT presentation	-	Loose stools, Vaginal discharge, Malabsorption, Pregnancy loss, Sexually transmitted diseases, Abdominal distension, Abdominal pain, Constipation, Hepatomegaly, Jaundice, Pruritus, Weight loss, Acute liver disease/failure, Allergic disorders	2
7	Mycology: generalities. Mycology: yeasts, filamentous fungi. Etiology of iatrogenic infections in relation to practice in dental offices	PPT presentation	-	Hair disorders, Skin infections/ infestations, Vaginal discharge, Candidiasis, meningitis, Respiratory tract infection, septicemia. Vaginal discharge, Candidiasis, meningitis, Respiratory tract infection, septicemia, Hair disorders, Skin infections/infestations. Decontamination, Infection control.	2

Bibliography

1. Brooks G.F., Butel, J. S., Morse, S.A.: Jawetz, Melnick, Adelberg's Medical Microbiology, 23 rd edition. 2006
2. Koneman: Color Atlas and Textbook of Diagnostic Microbiology, Lippincott, 2006
3. Murray, P.R., Rosenthal, K.S., Kobayashi, G.S., Pfaller, M.A.: Medical Microbiology, Fourth Edition. Mosby 2002.
4. Samaranayake, L: Essential Microbiology for Dentistry. Churchill Livingstone, Elsevier, 2006
5. Marsh, P.D., Martin, M.V.: Oral Microbiology Fifth edition.Churchill Livingstone, Elsevier, 2009
6. Xuedong Zhou, Yuqing Li: Atlas of Oral Microbiology: From Healthy Microflora to Disease, 1st edition, Elsevier, 2015
7. https://microbiologie.umfst.ro

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Labor safety in the virology-mycology-parasitology laboratory. Decontamination. The diagnostic scheme in viral diseases. The harvesting and transport of pathological samples	Practical activity, oral speech	-	Decontamination, Pathological products	2
2	Morphology and cultivation of viruses (cell cultures, inoculation of embryonated chicken egg, inoculation of laboratory animals).	Practical activity, oral speech	-	Structure of microorganisms, Identification of microorganisms	2
3	Diagnostic techniques in microbiology. Microscopic examination. Antigen-antibody assays. Methods for nucleic acids detection.	Practical activity, oral speech	-	Identification of microorganisms	2
4	Laboratory diagnosis of oropharyngeal viral diseases. Herpetic gingivostomatitis - HSV I and II, VZV, EBV, CMV. Herpangina and hand-foot-mouth disease - Coxsackie. Oral manifestations in Morbillivirus infection. Laboratory diagnosis of infections caused by papillomaviruses.	Practical activity, oral speech	-	Bullous/vesicular skin eruption, - Carcinoma of head and neck, Carcinoma of the cervix/uterus/ ovary, - Infectious disease of childhood, Respiratory tract infection, Sexually transmitted diseases,	2
5	Laboratory diagnosis of viral enteral diseases (rotavirus), respiratory diseases: Rhinovirus, Influenza virus and parainfluenza, respiratory syncytial virus, adenovirus, coronavirus.	Practical activity, oral speech	-	Gastroenteritis, Loose stools, Respiratory tract infection, Urinary tract infection	2
6	Laboratory diagnosis of viral hepatitis.	Practical activity, oral speech	-	Hepatomegaly, Jaundice, - Acute liver disease/failure, Chronic liver disease	2
7	Laboratory Diagnosis of HIV /AIDS	Practical activity, oral speech	-	HIV	2
8	Exam	Practical exam	-	-	2
9	Diagnostic scheme of parasitological infections. Diagnostic methods used in parasitology laboratory. Classification of parasites.	Practical activity, oral speech	-	Structure of microorganisms, Identification of microorganisms	2

10	Phylum Protozoa, Class Rhizopoda: Entamoeba spp., Trichomonas buccalis, Trichomonas vaginalis, Giardia lamblia, Toxoplasma gondii.	Practical activity, oral speech	-	Loose stools, Vaginal discharge, - Pregnancy loss, Sexually transmitted diseases	2
11	Phylum Helminthes – Nematodes: Ascaris, Enterobius, Trichinella spiralis. Phylum Helminthes – Cestodes: Echinococcus granulosus, Taenia saginata and Taenia solium	Practical activity, oral speech	-	Abdominal distension, Abdominal pain, Constipation, Hepatomegaly, Jaundice, Pruritus, Weight loss - Acute liver disease/failure, Allergic disorders, Anemia, Eating disorders	2
12	Mycology: Laboratory diagnosis of infections caused by yeasts and filamentous fungi	Practical activity, oral speech	-	Vaginal discharge, - Candidiasis, - meningitis, Respiratory tract infection, septicemia, Skin infections/infestations,	2
13	Review. Recovery of missed classes.	Practical activity, oral speech	-	-	2
14	Exam	Practical exam	-	-	2
Bibliography e-learning Blackboard					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Given the increasing number of patients with invasive and / or immunosuppressive interventions, which are vulnerable to bacterial infections, and the emergence or re-emergence of some bacteria, it is essential to prepare future doctors in the field of microbiology. This ensures the acquirement of good knowledge on the viruses, fungi, parasites responsible for infections, and on the principles of diagnosis, treatment and prophylaxis.
• Particular attention is paid to microbiological and hygienic-sanitary control during the treatments conducted in dental offices, in order to prevent microbial contamination and to comply to the microbiological standards.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Knowledge on microbiology diagnostic principles and antimicrobial therapy	exam	30
Final evaluation			
- theoretical final exam	Knowledge about the presented pathogens	Test	70
- practical final exam	-	-	0
Minimal performance standards: - Minimum conditions for admission to final examination: 100% presence at practical classes - To promote the final evaluation: grade 5 (both for theory and practical exams)			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Man Adrian	30 de minute după fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Preventive dentistry (1)			
2.2 Course coordinator: Șef l dr Berețescu Liana			
2.3 Practical activities coordinator(s): Sef l de Beresescu Liana, Sef l dr Bechir Farah, Sef l dr Tohati Adrian, Sef l dr Petcu Blanka			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 10	3.2 lecture: 4	3.3 practical activities: 6
3.4 Total hours in curriculum: 70	3.5 lectures: 28	3.6 practical activities: 42
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 18		
- supplemental documentation at the library, from specialized information portals and in the field: 18		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 18		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 55		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The student must be able to know the equipment, materials, the tools and techniques needed to implement oral hygiene optimum.
6.2 transversal competencies: The student must know the labor protection rules and the risks of possible nosocomial infections
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Appropriate appropriation by students of the notions of biochemistry and specific language. Transmission of specific knowledge to understand the relationship between biochemical flows and physiological and pathological phenomena in the human body. Developing the ability to apply the theoretical knowledge related to biochemical structures and metabolic pathways, to normal physiology and disease symptoms.
7.2 Specific objectives: Understanding the relationships between the molecular structure of bio-molecules and their biological activity. Acquisition of specific notions needed to correlate the processes of biochemical degradation with those of synthesis. Acquiring knowledge to understand the processes of energy release and degradation. Correlation of enzymatic aspects with disease symptoms. The notion of hormones correlated with the molecular structure of these and the receptors involved. The notions of molecular genetics correlated with structural and metabolic aspects.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The history and philosophy of dental prevention	oral presentation and multimedia	-	-	2
2	The preventions of infections transmission in dentistry	oral presentation and multimedia	-	-	2
3	Organization of the circuit of clinical activity in the dental office	oral presentation and multimedia	-	-	2
4	Saliva and its role in mentaining oral health.	oral presentation and multimedia	-	-	2
5	The dental plaque	oral presentation and multimedia	-	-	2
6	The role of the dental plaque in caries and periodontitis etiology	oral presentation and multimedia	-	-	2
7	Dental plaque highlighting. Health Index.	oral presentation and multimedia	-	-	2
8	The control of dental plaque by main mechanic methods	oral presentation and multimedia	-	-	2
9	The control of dental plaque by supplementary methods	oral presentation and multimedia	-	-	2
10	THE CHEMICAL CONTROL OF THE DENTAL PLAQUE	oral presentation and multimedia	-	-	2
11	Professional hygienisation	oral presentation and multimedia	-	-	2
12	Food hygiene	oral presentation and multimedia	-	-	2
13	Fluoride: generalities, metabolism and action	oral presentation and multimedia	-	-	2
14	General and local methods of fluoride use	oral presentation and multimedia	-	-	2

Bibliography
PREVENTIVE DENTISTRY NOTIONS. BERESESCU LIANA, PETCU BLANKA, FARAH BECHIR, 2019, University Press Tg Mures.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Labor protection training	oral presentation	-	-	3
2	Presentation of the discipline's internal regulations	oral presentation	-	-	3
3	General presentation of the office of dental Medicine	oral presentation	-	-	3
4	Dental plaque highlighting.	practical activities	-	-	3
5	Oral hygiene index	practical activities	-	-	3
6	Periodontal index	practical activities	-	-	3
7	Practical presentation of different brushing techniques	practical activities	-	-	3
8	The practical acquisition of different brushing techniques	CBL session	-	-	3
9	practical presentation of different complementary techniques	practical demonstration	-	-	3
10	The practical acquisition of various complementary techniques	CBL session	-	-	3

11	Demonstration of professional hygienisation techniques	practical demonstration	-	-	3
12	The acquisition of professional hygiene techniques	practical activities	-	-	3
13	Practical presentation of topical fluoridation	practical demonstration	-	-	3
14	Practical elements of food hygiene	practical activities	-	-	3

Bibliography
PREVENTIVE DENTISTRY NOTIONS. BERESESCU LIANA, PETCU BLANKA, FARAH BECHIR, 2019 Editura University Press Tg Mures

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Biochemistry is a fundamental discipline, considered to be a bridge between all the specializations with medical profile - Pharmacy, General Medicine, Dental Medicine or Nutrition, being a common specialized language among the specialists in the field.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	tests	Single/multiple choice test	15
- practical activities	practical activity, tests	tests	15
Final evaluation			
- theoretical final exam	notions accumulated through individual study and the ability to synthesize problems	Single/multiple choice test	50
- practical final exam	the accuracy of performing practical procedures	practical procedures	20
Minimal performance standards: performing a prophylaxis chart with the completion of all required indices and a professional dental cleaning			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Berețescu Liana	Wednesday 12-14

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Morphopathology			
2.2 Course coordinator: Șef l dr Turdean Sabin-Gligore			
2.3 Practical activities coordinator(s): Șef l dr Laura Banias, Șef l dr Sabin Turdean			
2.4 Year of study: II	2.5 Semester: 1-2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per year of didactic activities)

3.1 Hours per week: 8/4	3.2 lecture: 4/2	3.3 practical activities: 4/2
3.4 Total hours in curriculum: 84	3.5 lectures: 42	3.6 practical activities: 42
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 41		
3.9 Total hours: 125		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: English language certificate - Profex level C1

5. Conditions

5.1 for lectures: Lecture theatre with video projection, touchscreens, blackboard
5.2 for practical activities: video projection

6. Specific competencies acquired

6.1 professional competencies: Understanding the basic pathological aspects of the main lesions of the human body.
6.2 transversal competencies: The interactive collaboration of the student with the didactic staff.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Understanding the basis of the pathological processes and adapting them to systemic and oral pathology.

7.2 Specific objectives:
Knowing the basic morphological and clinical disorders.
Understanding the morphological changes in different disorders (micro- and macroscopic aspects).

8.1 Content of lecture, semester 1-2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
The first semester					
1	Disorders of circulation - part 1	PowerPoint presentation	-	Cerebrovascular disease, Pleural effusion, Peripheral vascular disease, Thromboembolic disease, Coagulation disease, Shock, Varicose veins, Oedema	2
2	Disorders of circulation - part 2	PowerPoint presentation	-	Cerebrovascular disease, Pleural effusion, Peripheral vascular disease, Thromboembolic disease, Coagulation disease, Shock, Varicose veins, Oedema	2
3	Disorders of cell and tissue metabolism, disorders of cellular proliferation and differentiation	PowerPoint presentation	-	Hypoglycaemia, Encephalopathy, Inborn errors of metabolism, Drug reactions, Electrolyte and water balance, Disorders of uric acid metabolism, Cystic fibrosis, Disorders of calcium and vitamin D metabolism, Disorders of lipid metabolism	2
4	Inflammation - part 1	PowerPoint presentation	-	asthma, allergic disorders, Immunisation, Tuberculosis, Immunodeficiency, HIV	2
5	Inflammation - part 2	PowerPoint presentation	-	asthma, allergic disorders, Immunisation, Tuberculosis, Immunodeficiency, HIV	2
6	Tumors - part 1	PowerPoint presentation	-	Bone malignancy, skin cancer, childhood tumors, Carcinoma of the colon and rectum, Lymphadenopathy, Carcinoma of the stomach, Brain tumor, Carcinoma of the kidney and bladder	2
7	Tumors - part 2	PowerPoint presentation	Test - multiple-choice questions	Bone malignancy, skin cancer, childhood tumors, Carcinoma of the colon and rectum, Lymphadenopathy, Carcinoma of the stomach, Brain tumor, Carcinoma of the kidney and bladder	2
8	Pathology of the cardiovascular system	PowerPoint presentation	-	Aortic aneurysm, Thromboembolic disease, Peripheral vascular disease, Varicose veins, Sexually transmitted diseases	2
9	Pathology of the cardiovascular system	PowerPoint presentation	-	Malformations of cardiovascular system, Cardiorespiratory arrest, Ischemic heart disease, Endocarditis, Chest pain	2
10	Pathology of the respiratory system	PowerPoint presentation	-	Otitis media, Pneumothorax, Chronic bronchitis and emphysema, Respiratory tract infection, Chronic lung disease, Carcinoma of the bronchus, Asthma	2
11	Pathology of the respiratory system	PowerPoint presentation	-	Chronic lung disease, Carcinoma of the bronchus, Asthma	2
12	Oral and maxillofacial pathology	PowerPoint presentation	-	Oral disorders (inlcl. Caries)	2
13	Oral and maxillofacial pathology	PowerPoint presentation	-	Otitis media	2
14	Oral and maxillofacial pathology	PowerPoint presentation	-	Malformations of lip/palate	2
15	Oral and maxillofacial pathology	PowerPoint presentation	-	Osteomyelitis	2
16	Oral and maxillofacial pathology	PowerPoint presentation	-	Carcinoma of head and neck	2
17	Pathology of the gastrointestinal tract	PowerPoint presentation	-	Carcinoma of the oesophagus, Peptic ulcer, Gastroenteritis, Carcinoma of the stomach, Inflammatory bowel disease, Appendicitis, Carcinoma of the colon and rectum, Intestinal obstruction, Peritonitis, Diverticular disease, Hernia	2

18	Pathology of the liver, gallbladder, and pancreas	PowerPoint presentation	-	Gall bladder disease, Disorders of pancreas, Carcinoma of the pancreas	2
19	Pathology of the kidney and urinary tract	PowerPoint presentation	-	Chronic renal disease, Carcinoma of the kidney and bladder	2
20	Pathology of the female genital system and pathology of the breast	PowerPoint presentation	-	Carcinoma of the cervix/uterus/ovary, Infertility, carcinoma of the breast	2
21	Pathology of the male genital system	PowerPoint presentation	-	Pathology of the male genital system	2

Bibliography

1. Powerpoint presentations.
2. Kumar V, Abbas AK, Aster JC. Robbins Basic Pathology. 10th ed. New York, Elsevier 2018.
3. Gurzu S, Jung I. Patologie specială pentru studenții Facultății de Asistență Medicală. University Press Tîrgu Mureș 2014. ISBN 978-973-169-312-5.
4. Gurzu S, Jung I. Patologie generală pentru studenții Facultății de Asistență Medicală. University Press Târgu Mureș 2013. ISBN 978-973-169-214-2.
5. Gurzu S, Jung I, Turdean S. Patologie stomatologică/Dental pathology - Ed. University Press 2018, ISBN: 78-973-169-520-4.
6. Banias L, Jung I, Gurzu S. PATOLOGIE GENERALĂ pentru studenții facultății de medicină dentară / GENERAL PATHOLOGY
for dental medicine students. University Press Tîrgu Mureș 2020. ISBN 978-973-169-668-3.

8.2 Content of laboratory, semester 1-2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
The first semester					
1	Disorders of circulation	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Oedema, Thromboembolic disease, Chronic liver disease, Shock, Cerebrovascular disease	2
2	Disorders of cell and tissue metabolism	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Gall bladder disease, Dysuria, Disorders of lipid metabolism, Chronic renal disease, Urinary tract obstruction, Disorders of prostate, Disorders of uric acid metabolism, Joint swelling	2
3	Inflammation	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Respiratory tract infection, Pericardial disease, Septicaemia, Meningitis	2
4	Inflammation	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Tuberculosis, Lymphadenopathy	2
5	Tumors	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Breast lump, Menstrual disorders, Drug reactions	2
6	Tumors	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Skin cancer, Skin ulcerations, Carcinoma of the bronchus, Breathlessness, Haemoptysis, Carcinoma of the colon and rectum, Lymphadenopathy, Carcinoma of the stomach, Brain tumor, Carcinoma of the kidney and bladder	2
7	Malformations	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Malformations of spine/CNS-central nervous system, Malformations of cardiovascular system	2

8	Pathology of the cardiovascular system	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Cardiorespiratory arrest, Ischemic heart disease, Endocarditis, Chest pain	2
9	Pathology of the cardiovascular system	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Aortic aneurysm, Thromboembolic disease, Peripheral vascular disease, Varicose veins, Sexually transmitted diseases	2
10	Pathology of the respiratory system	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Tuberculosis, Chronic bronchitis and emphysema, Chronic lung disease	2
11	Pathology of the respiratory system	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Carcinoma of the bronchus, Respiratory tract infection	2
12	Pathology of the digestive system and oral cavity	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Carcinoma of head and neck, Malformations of lip/palate, Oral disorders (inlcl. Caries)	2
13	Pathology of the digestive system and oral cavity	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Inflammatory bowel disease, Carcinoma of the stomach	2
14	Pathology of the digestive system and oral cavity	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Gall bladder disease, Disorders of pancreas, Carcinoma of the pancreas	2
15	Pathology of the kidney, urinary tract, and male genital system	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Chronic renal disease, Carcinoma of the kidney and bladder	2
16	Pathology of the kidney, urinary tract, and male genital system	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Disorders of prostate	2
17	Pathology of the female genital system and pathology of the breast	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Carcinoma of the cervix/uterus/ovary	2
18	Pathology of the female genital system and pathology of the breast	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	carcinoma of the breast, Breast lump	2
19	Pathology of the endocrine, nervous and locomotor systems	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations	-	Thyroid disorders	2

		(scanned slides).			
20	Pathology of the endocrine, nervous and locomotor systems	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Brain tumor, Bone malignancy	2
21	Revision	Power-point presentation, practical macroscopic (jars with organs immersed in formalin and pictures), and microscopic demonstrations (scanned slides).	-	Carcinoma of the cervix/uterus/ovary, Chronic renal disease, Carcinoma of the kidney and bladder, Gall bladder disease, Disorders of pancreas, Carcinoma of the pancreas, Thyroid disorders, Bone malignancy	2

Bibliography

1. Gurzu Simona, Jung Ioan. Introduction in histopathology. Ed - University Press, 2012.
2. Gurzu Simona, Jung Ioan, Sabin Turdean. Patologie stomatologică/Dental pathology - Ed. University Press 2018, ISBN: 78-973-169-520-4.
3. Powerpoint presentations.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Applicability of the lectures and practicals for obtaining abilities and competence specific for the speciality

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	To learn basic knowledges of presentations and materials from the given bibliography	MCQ test	25
- practical activities	To learn basic knowledges of presentations and materials from the given bibliography	Organ test on models	15
Final evaluation			
- theoretical final exam	To learn basic knowledges of presentations and materials from the given bibliography	MCQ test	40
- practical final exam	To learn basic knowledges of presentations and materials from the given bibliography	Practical evaluation on Anatomage table	20

Minimal performance standards:
Complex preparation of the students from the fundamentals of the structural and functional human anatomy, from the basic biomedical sciences in order to a full comprehension of the special medical sciences. A morphologic framework for performing clinical examinations and of basic clinical diagnoses, of surgical skills and imagery in establishing a positive and a differential diagnosis.
For passing the Anatomy II, the students have to get at least five at every sumative practical and theoretical evaluation.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Turdean Sabin-Gligore	30 min after each lecture/practical activity

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: F2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pharmacology			
2.2 Course coordinator: Șef l dr Jîtcă George			
2.3 Practical activities coordinator(s): Șef l dr Jîtcă George			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 19		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Definition and description of medicinal products from a pharmacokinetic, pharmacodynamic, and pharmaco-toxicological point of view.
6.2 transversal competencies: Responsible performance of professional duties, under conditions of limited autonomy and qualified assistance.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Ensuring and acquiring the basic notions of pharmacology for the biomedical training of the students of the

Faculty of Dental Medicine.
7.2 Specific objectives: Providing the important notions of pharmacodynamics and pharmacotherapy, taking into account the skills of the dentist.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introductory lecture. Basic concepts of pharmacokinetics.	Oral presentation + interactive discussion	-	-	2
2	Basic concepts of pharmacodynamics and pharmacotoxicology.	Oral presentation + interactive discussion	-	-	2
3	Parasympathetic nervous system: parasympathomimetic and parasympatholytic drugs. Sympathetic nervous system: sympathomimetics and sympatholytics drugs.	Oral presentation + interactive discussion	-	-	2
4	Medication of the cardiovascular system. Medicines for high blood pressure.	Oral presentation + interactive discussion	-	-	2
5	Blood medication: hemostatics, antihemorrhagic agents, anticoagulants, antiplatelet medications.	Oral presentation + interactive discussion	-	-	2
6	Pain management (I) - introductory concepts, antipyretic analgesics, opioid analgesics.	Oral presentation + interactive discussion	-	-	2
7	Pain management (II) - non-steroidal anti-inflammatory drugs.	Oral presentation + interactive discussion	-	-	2
8	Pain management (III) - steroid anti-inflammatory drugs. Treatment of trigeminal neuralgia.	Oral presentation + interactive discussion	-	-	2
9	General anesthetics. Local anesthetics.	Oral presentation + interactive discussion	-	-	2
10	Gastrointestinal medication (treatment for peptic ulcer). Allergy medications.	Oral presentation + interactive discussion	-	-	2
11	Antibiotics and antimicrobial chemotherapy.	Oral presentation + interactive discussion	-	-	2
12	Corrective pharmacological measures of super infections with conditionally pathogenic germs. Antibiotic therapy in special groups of patients.	Oral presentation + interactive discussion	-	-	2
13	Hormonal medication (antidiabetic drugs, osteoporosis treatment, contraceptives, thyroid and antithyroid drugs).	Oral presentation + interactive discussion	-	-	2
14	Dental management in the case of some groups of patients at risk: patients on anticoagulant treatment or under treatment with bisphosphonates; pregnancy and breastfeeding.	Oral presentation + interactive discussion	-	-	2

Bibliography
1. Lippincott - Illustrated Reviews. Wolters Kluwer, 2019.
2. Lecture support – pdf format

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Objectives of practical pharmacology activities.	Seminar	-	-	2
2	Pharmacography.	Discussions on given topics (clinical cases, problems).	-	-	2
3	The study of some pharmacokinetic aspects.	Discussions on given topics (clinical cases, problems).	-	-	2
4	The study of some pharmacodynamic aspects.	Discussions on given topics (clinical cases, problems).	-	-	2
5	Study of vegetative nervous system medication.	Discussions on given topics (clinical cases, problems).	-	-	2

6	Medication of the blood and the cardiovascular system in a clinical context.	Discussions on given topics (clinical cases, problems).	-	-	2
7	Pain management.	Discussions on given topics (clinical cases, problems).	-	-	2
8	Local and general anesthetics in a clinical context.	Discussions on given topics (clinical cases, problems).	-	-	2
9	Antiulcer and antiallergic agents in clinical context.	Discussions on given topics (clinical cases, problems).	-	-	2
10	Antibiotics and antimicrobial chemotherapy in a clinical context.	Discussions on given topics (clinical cases, problems).	-	-	2
11	Antimycotic medication in a clinical context.	Discussions on given topics (clinical cases, problems).	-	-	2
12	Clinical cases	Discussions on given topics (clinical cases, problems).	-	-	2
13	Recovery PA	Discussions on given topics (clinical cases, problems).	-	-	2
14	Practical activity exam	Discussions on given topics (clinical cases, problems).	-	-	2

Bibliography
1. Lippincott - Illustrated Reviews. Wolters Kluwer, 2019.
2. Lecture support – pdf format

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Identifying the disease state and establishing the correct diagnosis of the dental condition(s).
Conservative therapy of odonto-periodontal structures.
Diagnosis and interceptive therapy of anomalies of the dento-maxillary apparatus.
Prosthetic restoration of dental arches.
Identification of diagnostic and evolutionary peculiarities and examination of the patient with surgical conditions in the oro-maxillofacial sphere.
Management of the theoretical and legislative bases of the operational health systems in Romania as well as the managerial ones regarding the dental practice.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	The ability to use/apply the concepts presented in the lectures in clinical practice.	MCQ/Essay test/ Oral assessment	30
Final evaluation			
- theoretical final exam	Knowledge of all the concepts taught in the lectures.	MCQ	70
- practical final exam	-	-	0

Minimal performance standards:
Knowledge of the mechanism of action of drugs, dosage and therapeutic indications.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Jîtcă George	Friday, 10-12

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physiopathology			
2.2 Course coordinator: Șef l dr Gliga Florina-Ioana			
2.3 Practical activities coordinator(s): Șef l dr Gliga Florina-Ioana			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 19		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Identification in terms of efficiency and effectiveness of general health care needs, and treatment. • Description of functioning of human body and the general mechanisms of disease production. • Getting Integrating concepts / situations that apply to the human body in order to explain signs and symptoms. • Establishing treatment needs imposed by the existence of signs and symptoms of disease. • The practical importance of pathophysiology for understanding the of medical disciplines. • Using the acquired notions in scientific research. • Achieving a work / essay / case presentation - identifying targets.
6.2 transversal competencies: • Identify objectives to be achieved, the resources available, their closing conditions, work flow, working time, deadlines and related risks. • Identifying roles and responsibilities in a multidisciplinary team and applying effective techniques and working relationships within the team and the relationship with the patient. • Effective use of information sources and communication resources and training to assist (Internet portals, specialized software, databases, online courses, etc.)

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Presentation of the mechanisms of diseases which are important for the dental doctors in direct relation with theirspecific activity.
Establishing the relationship between the general pathology and that related to the oro-maxillofacial sphere:common elements, interactive particularities (generalization of a dental pathological process, localization of ageneral pathology at the oral -dental area)

7.2 Specific objectives:
Presentation of the etiopathology and pathophysiological mechanisms in general and special pathophysiology ofthe body systems.
Explaining the mechanisms of action of pharmacological substances from the pathophysiological point of view.
Theoretical and practical skills for positive and differential diagnosis in clinical conditions.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in pathophysiology. The concept of normal and disease. Tissue injury.	Oral presentation and multimedia	-	Aggression.Oral disorders (inlcl. Caries)	2
2	Pathophysiology of body's defense systems. Inflammatory syndrome. Leukocyte series. Particularities of the oral cavity	Oral presentation and multimedia	-	Immunodeficiency.Infectious disease.Lymphadenopathy	2
3	Acute and chronic infection. Particularities of the oral cavity.	Oral presentation and multimedia	-	Infectious disease.Lymphadenopathy	2
4	Pathophysiology of fever. Particularities of the oral cavity.	Oral presentation and multimedia	-	Migraine.Headache	2
5	Pathophysiology of blood. Erythrocyte series. Particularities of the oral cavity.	Oral presentation and multimedia	-	Anemia	2
6	Pathophysiology of blood. Hemostasis. Clotting disorders. Particularities of the oral cavity.	Oral presentation and multimedia	-	Coagulation disease	2
7	Pathophysiology of the cardiovascular system. Atherosclerosis. Hypertension.Applications in dental medicine.	Oral presentation and multimedia	-	Hypertension. Disorders of lipid metabolism.Cardiac conduction/rhythm disorder	2
8	Pathophysiology of the respiratory system. Applications in dental medicine.	Oral presentation and multimedia	-	Chronic bronchitis and emphysema.Respiratory tract infection. Asthma.	2
9	Pathophysiology of the digestive tract. Particularities of the oral cavity.	Oral presentation and multimedia	-	Dysphagia.Malabsorption.Peptic ulcer	2
10	Pathophysiology of nutrition and metabolic diseases. Particularities of the oral cavity.	Oral presentation and multimedia	-	Diabetes mellitus.Hypoglycaemia.Malnutrition	2

11	Pathophysiology of the endocrine system. Applications in dental medicine	Oral presentation and multimedia	-	Thyroid disorders.Pituitary disorders	2
12	Pathophysiology of the hydro-electrolytic balance. Calcium and fluoride balance. Vitamin D. Applications in dental medicine.	Oral presentation and multimedia	-	Electrolyte and water balance.Malabsorption.Osteoporosis.Disorders of calcium and vitamin D metabolism	2
13	Pathophysiology of the urinary system. Applications in dental medicine.	Oral presentation and multimedia	-	Chronic renal disease.Urinary tract infection.	2
14	Pathophysiology of pain. Applications in dental medicine.	Oral presentation and multimedia	-	PUO-pyrexia of unknown origin.Osteoarthrosis. Edema.Cranialnerve disorders	2

Bibliography

1.Goldman-Cecil Medicine, Twenty Sixth Edition,Elsevier , 2019
2.Essentials of Pathophysiology: Concepts of Altered Health States, Carol Mattson Porth, second edition, Lippincott William Wilkins, 2006
3. Paulev Poul-Erik, Textbook in Medical Physiology and Pathophysiology, Copenhagen Medical Publishers, 2000 Springhouse,
4. Professional guide to pathophysiology 2ed, Ed. Lippincott Williams and Wilkins, 2006
5. Bacârea Anca, Pathophysiology, Lecture guide, University Press Tîrgu Mureș, 2014
6. Robbins Basic Pathology, Tenth Edition, Elsevier, 2020.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Protection rules in the pathophysiology laboratory.	Lab practical activities,PPT presentation, discussions	-	-	2
2	Practical applications of the pathophysiology of inflammation in dental medicine. Investigation of the leukocyte series.	Lab practical applications, debates, CBL	-	Oral disorders (inlcl. Caries)	2
3	Practical applications of the pathophysiology of infection. Application in dental medicine.	Lab practical applications, debates, CBL	-	Immunodeficiency	2
4	Immunological investigations inthe physiopathology of febrile syndrome. Correlations with oral cavity pathology.	Lab practical applications, debates, CBL	-	Fever. PUO	2
5	Practical applications of the pathophysiology of erythrocyte series in dental medicine. Exploring anemic syndrome. Polycythemia	Lab practical applications, debates, CBL	-	Anemia	2
6	Practical applications of the pathophysiology of hemostasis in dental medicine.	Lab practical applications, debates, CBL	-	Coagulation disease	2
7	Practical applications of the pathophysiology of cardiovascular system in dental medicine. The blood pressure.The pulse. Vascular reactivity tests.	Lab practical applications, debates, CBL	-	Hypertension.Cardiac conduction/rhythm disorder	2
8	Practical applications of the pathophysiology of respiratory system in dental medicine	Lab practical applications, debates, CBL	-	Chronic bronchitis and emphysema.Respiratory tract infection.Asthma	2
9	Practical applications of the pathophysiology of digestive tract and metabolism in dental medicine	Lab practical applications, debates, CBL	-	Malabsorption.Peptic ulcer	2
10	Practical applications in dentistry of the pathophysiology of hyperglycemic and hypoglycaemic syndrome. Diabetes mellitus. Chronic and acute DM complications.	Lab practical applications, debates, CBL	-	Diabetes mellitus.Hypoglycaemia	2

11	Practical applications of the pathophysiology of endocrine pathology. Endocrine diseases involving the oral cavity. Practical applications in dental medicine.	Lab practical applications, debates, CBL	-	Thyroid disorders.Pituitary disorders	2
12	Electrolyte disturbances. Dental consequences of calcium and vitamin D disorders. Correlations between signs and lab tests based on pathophysiological mechanisms	Lab practical applications, debates, CBL	-	Electrolyte and water balance. Disorders of calcium and vitamin D metabolism	2
13	Practical applications of the pathophysiology of renal system in dental medicine.	Lab practical applications, debates, CBL	-	Urinary tract infection. Chronic renal disease	2
14	Interpretation of signs, symptoms and paraclinical data in pain of oforomaxillofacial origin.Applications in dentistry	Lab practical applications, debates, CBL	-	Osteoarthrosis. Edema.Cranial nerve disorders	2

Bibliography

1. Paulev Poul-Erik, Textbook in Medical Physiology and Pathophysiology, Copenhagen Medical Publishers, 2000
2. Silbernagl S., Lang F.,Color Atlas of Pathophysiology, Thieme, 2000
3. Springhouse, Professional guide to pathophysiology 2ed, Ed. Lippincott Williams and Wilkins, 2006
4. General Practice Notebook http:// .www.gpnotebook.co.uk/homepage.cfm, 2010
5. Robbins & Cotran Pathologic Basis of Disease, Tenth Edition, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL test	written test 10 %	10
- practical activities	Written practical activity test Case report - oral and multimedia individualpresentation	Written test 10% Case presentation 10%	20
Final evaluation			
- theoretical final exam	Final theoretical exam	UNIX evaluation	50
- practical final exam	Final practical exam	Written - practical test	20

Minimal performance standards:
The passing grade is the grade 5 for both theoretical and practical exam; the student is obliged to attend practical sessions, courses, recover all absences, to pass both theoretical and practical exams and to properly use the specialized terminology.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Gliga Florina-Ioana	30 minutes after every lecture or practical activity and/or Monday 12-14 and friday 12-14 depending on the schedule of the module

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Ergonomy			
2.2 Course coordinator: Șef l dr Benedek Csilla			
2.3 Practical activities coordinator(s): Sef lucr dr Benedek Csilla, sef lucr. dr. Vlasa Alexndru, asist. univ. dr Buka Imola Zsuzsa			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 6	3.2 lecture: 2	3.3 practical activities: 4
3.4 Total hours in curriculum: 42	3.5 lectures: 14	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 14		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 2		
- examinations: 7		
- other activities: 7		
3.8 Total hours of individual study: 58		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Video projector, computer (PC)
5.2 for practical activities: Treatment rooms, dental units, negatoscope

6. Specific competencies acquired

6.1 professional competencies: Knowledge of the terminology used in dental medicine, the notions of ergonomics and their applicability in dental practice Acquiring skills to evaluate the work environment, with identification optimization possibilities by applying the notions of ergonomics in dental practice Identification of risk factors and possible undesired consequences in dental practice
6.2 transversal competencies: Formation of correct work skills in the use of equipment and a the instrumentation for different specific medical interventions Developing teamwork skills Optimum and creative utilization of own potential in collective activities The need for individual study as the basis of personal autonomy and professional development

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Application of ergonomics notions, carrying out the activity in the dental office and the knowledge of the possibilities of its optimization

7.2 Specific objectives:
The knowledge of the organization criteria from ergonomic point of view of a private practice and the application of these criteria in the organization of the activity.
The development of evaluation abilities of the design of: private practice, medical devices, dental medical instruments, from ergonomic point of view.
The knowledge of the method of ergonomic organization of the medical activity in the private practice, in a strong partnership with the other staff.
Identification of the role and responsibility of the doctor-assistant team based on ergonomics principles.
Organization of the private practice in accordance with the dental medical therapies, which must be performed, and with the particularity of each patient, case.
The possibility to perform some dental medical treatments (examination, impressions) as a solo doctor, and in 4 hands work-variant. The knowledge of the risks and consequences of a wrongly organized practical activity from ergonomic point of view.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Ergonomics – definition, purpose, terminology, application directions	Oral presentation and multimedia	-	-	2
2	2. Ergonomic considerations in setting up a dental office	Oral presentation and multimedia	-	-	2
3	3. Ergonomic considerations regarding the endowments of the dental office – equipment, instruments	Oral presentation and multimedia	-	-	2
4	4. Positions and working positions recommended to the dentist and nursing. Patient positioning during dental treatments. Handling dental instruments.	Oral presentation and multimedia	-	-	2
5	5. Organization of the activity in dental medical practice from an ergonomic perspective	Oral presentation and multimedia	-	-	2
6	6. The dynamics of the activity in the doctor-nurse team based on ergonomic principles	Oral presentation and multimedia	-	-	2
7	7. Risk factors and professional effects in dental practice	Oral presentation and multimedia	-	-	2

Bibliography
Bibliography:
1. Stephen J. Stefanac, Samuel P. Nesbit: Diagnosis and treatment planning in dentistry, Third edition. St. Louis, Missouri : Elsevier, 2017
2. Bukhari Cs, Lazăr L, Buka IZ, Vlasa Al, Szabo I. Oral Diagnosis and Ergonomics notions. Editura University Press Tg. Mureş, 2019
Facultative bibliography:
1. Lazăr AP, Dako Timea, Lazăr L. Noțiuni de diagnostic în stomatologie. Editura University Press Tg. Mureş, 2022, 184p, ISBN 978-606-581-197-3, cod CNCSIS 210.
2. Anghel M. Noţiuni generale de ergonomie dentară. Timişoara: Editura Orizonturi Universitare,

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Presentation of methods of organization of the dental office and the analysis from ergonomic point of view of its arrangement	Multimedia presentations, practical demonstrations	-	-	2

2	2. Presentation of the equipment in the dental office	CBL	The material is offered to the students ahead of time, they carry out individual study beforehand	-	2
3	3. The ergonomic position of the doctor in the dental office	Multimedia presentations, practical demonstrations	-	-	2
4	4. The ergonomic position of the patient in the dental office	Multimedia presentations, practical demonstrations	-	-	2
5	5. Examples and exercises of positioning of the doctor and a the patient in the conditions adopting an ergonomic position	Multimedia presentations, practical demonstrations	-	-	2
6	6. Incorrect positions encountered in dental work - examples and discussions regarding the possible consequences undesirable	Multimedia presentations, practical demonstrations	-	-	2
7	7. Presentation of the dental instruments	CBL	The material is offered to the students ahead of time, they carry out individual study beforehand	-	2
8	8. Examples and comparative analyzes regarding the design and handling of dental instruments	Multimedia presentations, practical demonstrations	-	-	2
9	9. Examples and exercises of positioning of the doctor and a assistance based on ergonomic principles	Multimedia presentations, practical demonstrations	-	-	2
10	10. Examples regarding the dynamics of the acts in dental medicine optimized in terms of ergonomics.	Multimedia presentations, practical demonstrations	-	-	2
11	11. Work exercises with 4 hands in the doctor-nurse team	Multimedia presentations, practical demonstrations	-	-	2
12	12. Work exercises with 4 hands in the doctor-nurse team	Multimedia presentations, practical demonstrations	-	-	2
13	13. Debates regarding the consequences of the unergonomic dental activity	Multimedia presentations, practical demonstrations	-	-	2
14	14. Exercises for prevention and recovery in the case of musculoskeletal conditions (eg carpal tunnel syndrome).	Multimedia presentations, practical demonstrations	-	-	2

Bibliography
BibliographyŞ
1.Stephen J. Stefanac, Samuel P. Nesbit: Diagnosis and treatment planning in dentistry, Third edition. St. Louis, Missouri : Elsevier, 2017
2.Bukhari Cs, Lazăr L, Buka IZ, Vlasa Al, Szabo I. Oral Diagnosis and Ergonomics notions. Editura University Press Tg. Mureş, 2019
Bibliografie facultativă:
1.Lazăr AP, Dako Timea, Lazăr L. Noţiuni de diagnostic în stomatologie. Editura University Press Tg. Mureş, 2022, 184p, ISBN 978-606-581-197-3, cod CNCSIS 210.
2.Anghel M. Noţiuni generale de ergonomie dentară. Timişoara: Editura Orizonturi Universitare, 2005

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Ergonomics offers information about the methods of private practices organization (positioning of the furniture, of the medical devices, of the circuit of the doctor-patient-assistant, circuit of the medical instruments.
Based on the knowledge acquired it can be modeled the work position of the doctor and assistant. Tus, the dynamics of the carrying out of the dental medical treatments- optimized from ergonomic point of vie- will increase

the quality of the medical act and the quality of the life of the involved ones.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Attendance on PA, fulfilling of the minimum scale of activity, the marks obtained at CBL sessions	Arithmetic mean of the marks obtained at the assessment of the fulfillment of the evaluation criteria	30
Final evaluation			
- theoretical final exam	Acquirement of the knowledge of general aspects of carrying out the activity in the dental medical practice based on the application of the ergonomics notions.	Test	50
- practical final exam	The capability of the student to put in practice of the acquired knowledge	Practical demonstration	20
Minimal performance standards: - The accumulation of more than 3 absences on PA and more than 3 absences on the Course, will have as consequence the non-acceptance of the student to the final exam. The motivated (reasoned) absences will be recovered after a schedule established at the level of the Discipline. - Evaluation during the module: 1. PA Fulfillment of the minimal scale of PA and the obtaining of a mark 5 at CBL sessions. - 2. Final evaluation The minimum mark of promotion is 5 at both practical exam and final exam.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef l dr Benedek Csilla	Thuesdays 14-16

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical psychology			
2.2 Course coordinator: Conf dr Popa Octavian-Cosmin			
2.3 Practical activities coordinator(s): Conf dr Popa Octavian-Cosmin			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 15		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 47		
3.9 Total hours: 75		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: - Advanced abilities for collecting information from patients, using the clinical intake interview; - Practical knowledge related to the clinical psychological assessment used in different psychological and/or organic diseases; - Basic psychotherapeutic (Cognitive-Behavioral Therapy) skills regarding the treatment of depression, anxiety disorders and personality disorder; - General knowledge for applying mindfulness and relaxations techniques in medical settings.
6.2 transversal competencies: - To identify and establish a correct psycho-diagnosis for psychological disorders; - To develop an interdisciplinary approach for explaining the relations between psychological factors and different psychological and/or organic disorders/diseases. - To acquire a dialectic perspective used for understanding the etiopathogenesis of many disorders, integrating causes related to psychological factors. - To acquire communication skills based on humanistic and compassionate attitudes in relation to patients.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
An integrated understanding of physiological mechanisms connected with blood homeostasis and pulmonary system.

7.2 Specific objectives:
-The integration of functional aspects from molecule / cell level in models at organism level.
- Placing the body operating concepts in the context of clinical pathology
- Ability to conduct an experiment
- ability to understand and perform clinical functional tests.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The importance of medical psychology in the general field of medicine	Oral presentation, PowerPoint presentation	-	Without ICS correlation	2
2	The bio-psycho-social model in medical psychology	Oral presentation, PowerPoint presentation	-	Without ICS correlation	2
3	The relationship between genetics and psychological diseases. The implication of neuroscience in medical psychology	Oral presentation, PowerPoint presentation	-	Without ICS correlation	2
4	Psychological problems involved in mood disorders	Oral presentation, PowerPoint presentation	-	Without ICS correlation	2
5	Anxiety sensitivity. The distress-vulnerability model	Oral presentation, PowerPoint presentation	-	Without ICS correlation	2
6	Somatic and Somatoform psychological issues	TBL	-	Without ICS correlation	2
7	Cognitive-Behavioral Therapy (CBT) for depression, anxiety, and personality disorders. The Beckian approach	Oral presentation, PowerPoint presentation	-	Without ICS correlation	2

Bibliography
1. Popa, O.C., Lee, W., Rus, A.V. (2019) The new approaces and future orientation in medical psychology, Targu-Mures:University Press (in press).
2. Barkan, S.E. (2017). Health, Illness, and Society: An Introduction to Medical Sociology, London: Rowman & Littlefield.
3. Barlow, D., (2014). Clinical Handbook of Psychological Disorders, Fifth Edition: A Step-by-Step Treatment Manual, New York: The Guilford Press.
4. Barlow, D., et al. (2018). Unified Protocol for Transdiagnostic Treatment of Emotional Disorders: Therapist Guide (Treatments That Work), 2nd Edition, Oxford: The Oxford University Press.
5. Beck, J., (2011) Cognitive-Behavior Therapy. Basic and Beyond, 2nd Edition, New York: The Guilford Press.
6. Beck, A.T., Brad, A., A., (2009). Depression: Causes and Treatment, 2nd Edition, Philadelphia: University of Pennsylvania Press.
7. Cockerham, W.C. (2017). Medical Sociology, 14th Edition, New York: Taylor and Francis.
8. Labott, S., (2019). Health Psychology Consultation in the Inpatient Medical Setting, 1st Edition, Washington: American Psychological Association.
9. Morgan, J.E., Ricker, J.H., (2018). Textbook of Clinical Neuropsychology, 2nd Edition, New York: Taylor and Francis.

8.2 Content of seminar, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Overview of main instruments used in medical psychology. The psychological clinical interview	Demonstration, working in small groups	-	Without ICS correlation	2
2	Psychological clinical interview based on the bio-psycho-social model	Demonstration, working in small groups	-	Without ICS correlation	2
3	Clinical practical applications of neuroscience in medical psychology	Demonstration, video presentation, working in small groups	-	Without ICS correlation	2

4	The clinical assessment of psychological mood disorders	Applications and demonstration with students, working in small groups	-	Without ICS correlation	2
5	The clinical assessment of anxiety sensitivity and distress	Applications and demonstration with students, working in small groups	-	Without ICS correlation	2
6	The clinical assessment of somatoform and somatic psychological issues	Applications and demonstration with students, working in small groups	-	Without ICS correlation	2
7	Cognitive-behavioral therapy techniques used with patients with depression, anxiety and personality disorders	Demonstration with students, working in pairs of two students	-	Without ICS correlation	2

Bibliography
1. Popa, O.C., Lee, W., Rus, A.V. (2020) New approaches behavioral sciences, Tirgu-Mures:University Press.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Comprehension of specialized information	TBL session	10
- practical activities	Applications of medical psychology	Project	20
Final evaluation			
- theoretical final exam	The acquisition of knowledge in the field of medical psychology	Multiple choice test/ final theoretical project	40
- practical final exam	Understanding and applying medical psychology	Role-play/ final practical project	30

Minimal performance standards:
The examination will take place at the end of each semester, during the pre-examination period. The final grade will be calculated with the above formula. To participate at the final exam (theoretical and practical), students must meet the attendance requirements at lectures/ practical activities. Also, the students must understand and apply the specific methods of medical psychology, arguing each case logically, coherently and correctly.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Popa Octavian-Cosmin	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physical education			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Lect dr Steff Zakarias			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Șef l dr Țurcanu Dana-Simona			
2.4 Year of study: II	2.5 Semester: 1-2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per year of didactic activities)

3.1 Hours per week: 4	3.2 lecture:	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 0	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations:		
- other activities:		
3.8 Total hours of individual study: 0		
3.9 Total hours: 56		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: 4.1 curricular: good health - harmonious physical development - adequate physical qualities
4.2 competency: 4.2 competency: Knowledge of techniques learned in high school to develop body strength and physical qualities. - practice of sports (competitive/leisure)

5. Conditions

5.1 for lectures: -
5.2 for practical activities: 5.2 for practical activities: Sport gym, fitness gym, tennis courts, outdoor, swimming pool, football court

6. Specific competencies acquired

6.1 professional competencies: 6.1 professional competencies: - Making use of the information, methods and means specific to physical education and sports in order to optimize health and harmonious physical development - Building the skill of knowledge transmission referring to exercises to develop basic physical skills, qualities and muscle usage - Application of specific methods to develop physical qualities

6.2 transversal competencies: 6.2 transversal competencies: - Application of rule systems specific to the organization and practice of physical education and sports, as well as acquisition and application of adequate behavior in interpersonal relations and in groups - Using body language to express and understand ideas, feelings, general and physical aethethics of the body - Using electronic means to select information regarding elements that are characteristic to physical development - Active integration into various groups
6.3 related to the study program:

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: 7.1 General objective: Systemic and organized practice of physical exercise and favored sports
7.2 Specific objectives: 7.2 Specific objectives: 1) Continuous improvement of healthy condition, physical and mental vigour and harmonious body development ; 2) Raising of the general motricity level and aquirement of basical sport skills; 3) Participating at interuniversity's competiotions

8.1 Content of laboratory, semester 1-2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
The first semester					
1	Introductory lesson ; the requirements of a Physical Education class	explication, demonstration, repetition	-	-	2
2	Athletics – the school of running	explication, demonstration, repetition	-	-	2
3	Basketball – checking the initial level of acquiring the basic elements	explication, demonstration, repetition	-	-	2
4	Volleyball - checking the initial level of acquiring the basic elements	explication, demonstration, repetition	-	-	2
5	Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
6	Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
7	Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
8	Athletics – developing leg strength with different jumping exercises	explication, demonstration, repetition	-	-	2
9	Basketball - repeat the dribbling, ball catching and passing	explication, demonstration, repetition	-	-	2
10	Swimming – teaching the basic elements	explication, demonstration, repetition	-	-	2
11	Aquagym	explication, demonstration, repetition	-	-	2
12	The testing contain two tests which targets the physically skills, as long jump from standing position, testing the force of the abdominal strength (sit ups during 30 sec.), testing the back muscle strength (back extension during 30 sec.), speed running on 30m or the swimming test which means to swimm 25m pool length in one of the 4 main events of swimming	activity evaluation	-	-	2
13	Testing the students who where absent at the tests	activity evaluation	-	-	2
14	End of school year, conclusion of the school report; recommendations for the sporting activity during the holidays.	conclusion	-	-	2

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1. Badau D., Tanase T. ¬ Volei, teorie si metodica, Ed. OMNIA, Brasov, 2006
2. Carstea G. ¬ Teoria si metodica educatiei fizice, Ed. An¬Da, Bucuresti, 2000
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4. Macovei S. ¬ Stretching, Ed AFIS, Bucuresti, 2012
5. Neagu N ¬ Teoria si practica activitati motrice umane, Ed. University Press, Tg. Mures, 2010
6. Filipescu, D., Gherghişan, D., Bologa, M., ¬ Educaţie fizică în învăţământul superior medical, Editura UMF, 2001
7. Badau D. ¬ Metodica disciplinei sportive ¬ handbal, Ed. Universitatii Transilvania din Brasov, 2009
8. Badau A, Ungur R, Badau D. – Activitatile fizice acvatice indoor, Ed, Universitatii Transilvania Brasov, 2016

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- Development of the capacity to choose healthy life-style, by practicing sports, combining physical exercise with intellectual efforts, motion and rest, work and leisure.
- Availability to practice physical exercise independently
- Constant interest in sports as a phenomenon

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	the attendance on the lessons - control test of the 1st semester - control test for 2nd semester	Total attendances for the both of semester -finish all the control tests -effectuate two essay one in each semester for the students those exempt from physical education	100
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	Minimal performance standards: 1. Assist for at least 70% of the lessons, that means 20 attendences/year (including the exempted students) 2. The final examination contains 2 motor tests, at the student choice, as follow: long jump from standing position, testing the force of the abdominal strength (sit ups during 30 sec.), testing the back muscle strength (back extention during 30 sec.), speed running on 30m or the swimming test which means to swimm 25m pool length in one of the 4 main events of swimming. For the students who are exempted from effort, they need to realize a paperwork on the final of the semester, in domain of physical education, theme which is chosen by the own teacher. (they don't need to go to the physically tests.)	Total attendances for the both of semester -finish all the control tests -effectuate two essay one in each semester for the students those exempt from physical education	0

Minimal performance standards:
1. Assist for at least 70% of the lessons, that means 20 attendences/year (including the exempted students)
2. The final examination contains 2 motor tests, at the student choice, as follow: long jump from standing position, testing the force of the abdominal strength (sit ups during 30 sec.), testing the back muscle strength (back extention during 30 sec.), speed running on 30m or the swimming test which means to swimm 25m pool length in one of the 4 main events of swimming.
For the students who are exempted from effort, they need to realize a paperwork on the final of the semester, in domain of physical education, theme which is chosen by the own teacher. (they don't need to go to the physically tests.)

11. Appointment timetable (for students)

Lect dr Steff Zakarias	Monday 19-20
Șef l dr Țurcanu Dana-Simona	luni 16-17

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Romanian language			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Asist dr Rațiu Bogdan			
2.2 Course coordinator: -			
2.3 Practical activities coordinator(s): Asist Ciortea Eduard			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture:	3.3 practical activities: 4
3.4 Total hours in curriculum: 28	3.5 lectures: 0	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: Clasă echipată cu tablă și proiector

6. Specific competencies acquired

6.1 professional competencies: Studentul va prezenta, la nivel începător-intermediar (A2), următoarele abilităţi: -citirea corectă şi fluentă, precum şi înţelegerea conţinutului şi ideilor generale ale unui text simplu -înţelegerea mesajelor receptate pe cale auditivă -vorbirea cu respectarea regulilor gramaticale şi de pronunţie -cunoaşterea şi utilizarea corectă a unui vocabular de bază și semi-specializat
6.2 transversal competencies: Utilizarea limbii române ca mijloc de comunicare cu alţi vorbitori ai acelei limbi, în situaţii generale și specifice
6.3 related to the study program:

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Cunoașterea limbii române la nivel mediu pentru a putea înțelege mesajul unui text scris sau audiat.

7.2 Specific objectives:
La finalul cursului, studentul va prezenta abilități de comunicare, formulare de întrebări și răspunsuri pe teme precum: prezentare, casa, ocupație, interese, familie, pregătindu-se pentru introducerea limbajului specializat.

8.1 Content of seminar, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Vestimentație	Comunicare și relaționare interpersonală,conversație, explicații; PBL; TBL	-	-	4
2	Televiziune și presă scrisă	Comunicare și relaționare interpersonală,conversație, explicații; PBL; TBL	-	-	4
3	Ce știi să faci?	Comunicare și relaționare interpersonală,conversație, explicații; PBL; TBL	-	-	4
4	Sporturi și sportivi	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
5	Sărbători și aniversări	Comunicare și relaționare interpersonală,conversație, explicații; PBL; TBL	-	-	4
6	Stil de viață	Comunicare și relaționare interpersonală,conversație, explicații; PBL; TBL	-	-	4
7	Minte sănătoasă în corp sănătos	Comunicare și relaționare interpersonală,conversație, explicații; PBL; TBL	-	-	4

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1. Bălănescu,Olga, Limba română pentru străini,Editura Ariadna, Bucureşti,2006
2. Dafinoiu,CV, Pascale, LE, Limba română - manual pentru studenti straini,Ed.Univ.București, 2015
Hedeşan,Otilia(coordonator),Jebelean,Elena, Leucutia Florentina, Musat, Nicoleta, Percec,Dana, Popa,Corina Bun venit in România!Manual de limba română şi de orientare culturală ,Imprimeria MIRTON,Timişoara, ,2008
3. Kohn,Daniela, Puls.Manual de limba română pentru străini .Curs A1-A2,Polirom,Iaşi,2009
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5. Mandelbrojt-Sweeney, M., Limba engleză pentru medici şi asistente, Polirom, Bucureşti, 2006
6. Platon,Elena ,Sonea,Ioana ,Vilcu,Dina Manual de limba română ca limbă străină(RLS),Casa Cărţii de Ştiinţă,2012

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Abilităţile de citire, vorbire, receptarea și transmiterea de mesaje pe cale orală	Verificare orală - extragerea unui bilet care cuprinde citirea unui text, raspuns la intrebari, dialog	30
Final evaluation			
- theoretical final exam	Abilitatea de a intelege si completa exercitii de multiple choice, potrivire, folosirea corecta a numarului, articolului verbelor invatate	Test scris care cuprinde exercitii de vocabular si gramatica	40
- practical final exam	Abilităţile de citire, vorbire, receptarea și transmiterea de mesaje pe cale orală	Verificare orală - extragerea unui bilet care cuprinde citirea unui text, raspuns la intrebari, dialog	30

Minimal performance standards:
Să se poată prezenta, să răspundă la întrebări legate de familie, casă, interese,timp, să poată formula întrebări și cere informații folosind un vocabular de bază, o pronunție clară şi fără greşeli mari la nivelul organizării discursului şi al folosirii structurilor gramaticale necesare comunicării

11. Appointment timetable (for students)

Asist dr Rațiu Bogdan	30 de minut după fiecare curs
Asist Ciortea Eduard	30 de minute după fiecare activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Advanced digital skills			
2.2 Course coordinator: Prof dr Enăchescu Călin			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: knowledge of PC use, knowledge of Internet use

5. Conditions

5.1 for lectures: classroom with video projector and Internet
5.2 for practical activities: classroom with video projector and Internet

6. Specific competencies acquired

6.1 professional competencies: Elaboration and communication of plans and projects in the field of ensuring cyber security. Identifying cyber security dimensions. The use of cyber security techniques, mechanisms and procedures for the protection of personal and organizational data.
6.2 transversal competencies: Optimum management of professional tasks and learning to execute them on time, rigorously, efficiently and responsibly; Compliance with ethical rules specific to the field (eg: confidentiality) Application of team communication techniques; the development of empathic interpersonal communication skills and the assumption of specific roles in teamwork with the aim of making the group's activity more efficient and saving resources, including human resources Identifying and using effective learning methods and techniques; awareness of the extrinsic and intrinsic motivations of continuous learning.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The discipline underpins the field of cyber security – terminology, threats, vulnerabilities, risks, cyber attacks, protection and response measures to IT security incidents, disaster recovery measures.
Through the topics covered, the course raises the degree of preparation and awareness of students in the field of the urgent need to protect data, services and systems in the context of the Security by Design paradigm.

7.2 Specific objectives:
After completing the assignments, students will be able to understand the fundamental concepts of cyber security in the context of an increasingly digitized society.
The content is focused on the concrete presentation of the main topics in the field of cyber security adapted to the requirements necessary to protect data, IT systems and services, and the appropriate tools for developing cyber resilience capacities and increasing the level of culture in the field of cyber security.
Students will understand the risks related to the processing and storage of data in a virtual environment, the risks of using the Internet and interconnected computing systems, and will be able to identify and choose methods and mechanisms that provide an adequate degree of protection of personal IT data, systems and services and organizational.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to Cyber Security. The need for cyber security. Domains of cyber security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
2	Protection of data and personal privacy. Organizational protection. Behavioral approach to cyber security. Programmatic approach to cyber security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
3	Dimensions of cyber security. The CIA Triad (Confidentiality, Integrity, Availability). Cyber security guarantees.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
4	Cyber Threats, Vulnerabilities and Attacks – Concepts, Mechanisms and Techniques. Countermeasures against cyber threats. Understanding reactive, proactive and operational security.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
5	Data encryption as a mechanism to provide data privacy. Access control. Data masking as a data security and protection mechanism.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
6	Data integrity. Types of data integrity checks.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2
7	Availability of IT systems and services (The Five Nines concept). Responding to IT security incidents. Disaster recovery.	Problem-based learning (lecture / description of the problem, problematization / parameterization, identification of solutions, explanation / conversation, case studies, dissemination of results)	-	-	2

Bibliography
1. Augenbaum S., The Secret to Cybersecurity: A Simple Plan to Protect Your Family and Business fromCybercrime, Forefront Books, 2019.
2. Cisco Networking Academy, Cybersecurity Essentials, v1.1, https://www.netacad.com.
3. Evans L., Cybersecurity: What You Need to Know About Computer and Cyber Security, Social Engineering,The Internet of Things + An Essential Guide to Ethical Hacking for Beginners, Independently published, 2019.
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5. Kennedy G., Data Privacy Law: A Practical Guide to the GDPR, Bowker, 2019.
6. Stallings W., Cryptography and Network Security: Principles and Practice, 8th Edition, Pearson, 2020.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Identification of security risks and threats at personal and organizational level. The concept of exploit.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2
2	Types of attack. Analysis of a cyber attack.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2
3	Penetration testing and vulnerability scanning – methods of protecting and evaluating the security of an IT system / service / application or a communications infrastructure.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2
4	Symmetric and asymmetric encryption mechanisms. Digital data integrity. Infrastructures based on public keys.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2
5	IT security incident response methods and procedures.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2
6	Practical implementation of a set of security procedures and policies at personal and organizational level.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2
7	Security by Design – designing and implementing an IT security system architecture.	Project-based learning (exposure / description of the project problem, project management, parameterization of input data, examples, demonstrations and practical solutions, dissemination, analysis and collaborative interpretation of results)	-	-	2

Bibliography
1. Cisco Networking Academy, Cybersecurity Essentials, v1.1, https://www.netacad.com.
2. Clark K., Hacking, The Ultimate Comprehensive Step-By-Step Guide to the Basics of Ethical Hacking, 2019.
3. Neil I., CompTIA Security+ Certification Guide: Master IT security essentials and exam topics for CompTIASecurity+ SY0-501 certification, Packt Publishing, 2018.
4. Pillay R., Learn Penetration Testing: Understand the art of penetration testing and develop your white hathacker skills, Packt Publishing, 2019.
5. Stallings W., Cryptography and Network Security: Principles and Practice, 7th Edition, Pearson, 2016.
6. Walker M., CEH Certified Ethical Hacker All-in-One Exam Guide, Fourth Edition, 4th Edition, McGraw-HillEducation, 2019.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Corroboration of the contents of the discipline with the expectations of community representatives, professional associations and representative employers in the field related to the program: Today's society has become totally dependent on technology, and especially on managing data in digital format. The role of cyber security, both for individuals and organizations, regardless of their business, is vital for data protection and for guaranteeing the functioning of IT services, systems and infrastructures. The inclusion of security procedures and policies within professional activities is no longer an end in itself, but an objective necessity. For this reason, the discipline is structured in a practical and pragmatic way to respond to these realities. Moreover, the entry into force of the GDPR legislation imposes strict measures regarding the protection of personal data in the European Union space, which determines the obligation of digital culturalization in the field of cyber security of every employee in every organization / company. In this context, the topics studied provide the set of information necessary for the understanding and application of the protection mechanisms of digital data and IT infrastructures.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Formative assessment to verify preparation throughout the semester. The ability to analyze and synthesize	TBL testing	30
- practical activities	Acquiring and understanding the treated issue	written test	50
Final evaluation			
- theoretical final exam	Summative evaluation to verify the preparation and understanding of the course topic. Knowledge of fundamental notions and concepts.	written test	20
- practical final exam	-	-	0
Minimal performance standards: - Knowledge of the concepts, mechanisms and techniques that underpin the field of cyber security. - Identifying the dimensions of cyber security. - Designing basic sets of security procedures and policies at personal and organizational level. - A minimum grade of 5 must be obtained for each evaluation and each exam.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Enăchescu Călin	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: How to read and publish statistical results in medical research			
2.2 Course coordinator: Conf dr Olah Peter			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 4		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 1		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: • The student will need to demonstrate the ability to organize and graph numerical and non-numerical data in a scientific study or experiment. • Demonstrating the ability to understand and present the statistical protocol in the Material and Method section of a scientific article • Demonstrating the ability to present the statistical results in the Results section of a scientific article and to interpret these results in the Discussions, respectively Conclusions sections of the article
6.2 transversal competencies: • Ability to critically evaluate the presentation of the statistical protocol and of the results in biomedical scientific articles
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the

managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
• In the current context of evidence-based medicine, Biostatistics has become one of the essential work tools for the practitioner or researcher in the biomedical field. The volume of specialized literature is constantly growing, and the selection of relevant information in this context is becoming more and more challenging. As such, the main objective of this discipline is to develop students' skills to critically read specialized literature and to eloquently publish the results of their own research, from the point of view of statistical protocols and statistical results.

7.2 Specific objectives:
• Developing students' ability to graphically represent numerical and non-numerical data, as well as to interpret such representations published in specialized literature
• Developing students' ability to present the statistical protocol used in the Material and Method section of a scientific article
• Developing students' ability to present the statistical results obtained in the Results section of a scientific article.
• Developing the students' ability to present the conclusions reached based on the statistical results in a scientific article

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Data types. Data organization. Primary data. Indexed data. Contingency tables.	Oral presentation, Powerpoint presentation, Video materials	-	Biological variability	2
2	Graphic representation of numerical and non-numerical data	Oral presentation, Powerpoint presentation, Video materials	-	-	2
3	Presentation of the statistical protocol in the Material and Method section of a scientific article	Oral presentation, Powerpoint presentation, Video materials	-	-	2
4	Presentation of statistical results in the Results section of a scientific article.	Oral presentation, Powerpoint presentation, Video materials	-	-	2
5	Presentation of conclusions based on statistical results in the card of a scientific article	Oral presentation, Powerpoint presentation, Video materials	-	Clinical trials	2
6	Correlations and regressions. The correlation coefficient. The coefficient of determination. Linear and non-linear regressions. Their importance in the biomedical field.	Oral presentation, Powerpoint presentation, Video materials	-	Clinical trials	2
7	VERIFICATION of accumulated theoretical knowledge	Grid test with Multiple Choice Questions	-	-	2

Bibliography
1. Bacârea Vladimir, Ghiga Dana, Măruşteri Marius, Oláh Péter, Petrişor Marius - A Primer in Research Methodology and Biostatistics, University Press Targu Mures, 2014
2. Motulsky Harvey, Intuitive Biostatistics: A Nonmathematical Guide to Statistical Thinking, Oxford University Press, 2013

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Organization of data for their statistical processing. Primary data. Indexed data. Table calculation. Contingency tables.	Practical demonstrations. Synchronous eLearning methods. Collaborative activities in independent small groups	-	Biological variability	2
2	Graphic representation of numerical and non-numerical data	Practical demonstrations. Synchronous eLearning methods. Collaborative activities in independent small groups	-	-	2
3	Presentation of the statistical protocol in the Material and Method section of a scientific article	Practical demonstrations. Synchronous eLearning methods. Collaborative activities in independent small groups	-	-	2

4	Presentation of statistical results in the Results section of a scientific article.	Practical demonstrations. Synchronous eLearning methods. Collaborative activities in independent small groups	-	-	2
5	Presentation of conclusions based on statistical results in the card of a scientific article	Practical demonstrations. Synchronous eLearning methods. Collaborative activities in independent small groups	-	Clinical trials	2
6	Correlations and regressions. The correlation coefficient. The coefficient of determination. Linear and non-linear regressions. Their importance in the biomedical field.	Practical demonstrations. Synchronous eLearning methods. Collaborative activities in independent small groups	-	Clinical trials	2
7	TESTING individual ability to manipulate and represent data using MS Office 365 – Excel	Students will individually perform a set of specific tasks using MS Office 365 Excel. The performance will be graded.	-	-	2

Bibliography

1. Oláh Péter, Avram Călin, Mărușteri Marius, INTRODUCTION TO BIOSTATISTICS - Practical Applications, University Press Targu-Mures, 2016

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Adequate acquisition of the mentioned curricular content provides the student with the theoretical and practical framework for the critical reading of scientific articles in the biomedical field, as well as basic skills to correctly and eloquently present the protocols and results obtained in their own studies and research.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Understanding and integration of all theoretical concepts Knowledge of bibliographical references	Multiple choice test	100
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	-	-	0

Minimal performance standards:

- The ability to organize and represent relevant data according to the needs of a scientific study or experiment
- The ability to correctly present the statistical protocol and its results in a scientific article
- The ability to formulate correct and pertinent conclusions based on statistical results

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Olah Peter	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Historical impact of drug discoveries			
2.2 Course coordinator: Prof dr Brassai Attila-Miklos			
2.3 Practical activities coordinator(s): Prof Dr Brassai Attila			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 0		
- supplemental documentation at the library, from specialized information portals and in the field: 11		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: According to the Internal rules and Regulations of the D.of Pharmacology and Clinical Pharmacology
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The interesting historical influences caused by certain drug discoveries
6.2 transversal competencies: Correlation between the medical use of medications and the effects behind
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Understanding the impact of pharmacological drug discoveries on the world's history

7.2 Specific objectives:
Correlation between the use of a medicine and the effects observed in the population

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The history of medicine shaped by drugs. Strong active substances in plants – common and famous poisonings.	MS Power Point, Case based interactive discussions	-	Drug reactions	2
2	. The art of discovery in medicine – penicillin and five more	MS Power Point, Case based interactive discussions	-	Drug reactions	2
3	The modern drug discovery cycle. Drug discovery in America: story of curare and others	MS Power Point, Case based interactive discussions	-	Drug reactions	2
4	The use of placebo in medicine. . James Lind and the citrus fruits in scurvy therapy	MS Power Point, Case based interactive discussions	-	Drug reactions	2
5	The opium war. Drug discovery in ancient Asia: India and Tibet	MS Power Point, Case based interactive discussions	-	Drug reactions	2
6	The “PILL”. Drug discovery in Europe: German and Greek traditional medicine	MS Power Point, Case based interactive discussions	-	Drug reactions	2
7	Clinical trials – then and now Regulatory affairs of drug discovery: US and Canada, UK, EU and Japan	MS Power Point, Case based interactive discussions	-	Drug reactions	2
Bibliography Bibliografie: 1. Thomas Hager - Ten Drugs; Abrams Press; 2019					

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Milestones in drug discovery	MS Power Point	-	Drug reactions	2
2	Pharmacological birth control - history	MS Power Point	-	Drug reactions	2
3	Ones were diseases and therapies	MS Power Point	-	Drug reactions	2
4	Pharmacological use of Ginseng, Cannabis and Opium	MS Power Point	-	Drug reactions	2
5	Toxidromes and pharmacological poisons	MS Power Point	-	Drug reactions	2
6	Drug discovery and pharma-industry	MS Power Point	-	Drug reactions	2
7	Vaccines: from the beginnings to recent days	MS Power Point	-	Drug reactions	2
Bibliography Kumar and Clark’s Clinical Medicine, Elsevier publishing house, 10th edition, July 2020					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Project presentation	Oral presentation	50
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Knowledge regarding the overview of pharmacological implications of drug discovery	Written assignment/Oral exam	50
- practical final exam	-	-	0
Minimal performance standards: Passing grade: 5.00			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Brassai Attila-Miklos	35 de ninute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Tobaccology			
2.2 Course coordinator: Șef l dr Germán-Salló Márta			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 3		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: mod de organizare frontal sau în condiții epidemiologice nefavorabile online
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Awareness of the fact that smoking is a chronic disease for which there are effective methods of treatment. Assessment/diagnosis of tobacco consumption and tobacco dependence Organizing the documentation of the smoking status in the medical records Delivering the minimal intervention counseling of persons assisted smoker Proper use of the available resources in anti-smoking counseling (specialized anti-smoking centers, quitline)
6.2 transversal competencies: Awareness of the role of the physician in smoking prevention and in the prevention for smoking related diseases Organizing a smoking prevention programs Acquiring knowledge about the psychology of lifestyle change Awareness of bio-psycho-social consequences of a widespread disease
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Correct diagnosis and treatment of the tobacco dependence disease

7.2 Specific objectives:
Recognition and measurement of nicotine dependence
Motivation for smoking cessation
Delivering the brief anti smoking advice
Knowledge of non-pharmacological and pharmacological methods for the treatment of nicotine dependence
Realizing the role of the physician in anti-smoking efforts

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	History of tobacco use. Information on smoking prevalence and trends of consumption indicators worldwide, at European and national levels. Psychosocial causes of smoking. The economical aspects of smoking.	prezentare multimedia	-	-	2
2	Informations on the health consequences of tobacco smoking. Chemical composition of tobacco smoke. Causal role of smoking in respiratory diseases, cardiovascular diseases, tumors, hematological, gynecological diseases. Effects of smoking in pregnancy. Environmental effects of smoking . Social and economic impact of smoking	prezentare multimedia	-	durere în piept, dispnee, patologie cardiacă ischemică	2
3	Recognition of tobacco use and dependence in general practice. Tobacco addiction industrial spread disease. The mechanism of of tobacco dependence. The natural history of tobacco dependence Fagerstrom Test for the evaluation of dependence level. Clinical diagnosis of tobacco dependence (carbon monoxide, cotinine, using biomarkers)	prezentare multimedia	-	-	2
4	Smoking cessation. Therapeutic education. Behaviouralsupport. Smoking cessation motivation. Brief advice on stopping tobacco use. Prevention of relapse.	prezentare multimedia	-	-	2
5	The role of the physician in tobacco control Cognitive - behavioral treatment of tobacco dependence. Nicotine replacement therapy (mechanism of action, clinical evidence of efficacy, indications, prescribing instructions, contraindications, adverse effects) treatment with bupropion, varenicline, Nonpharmacological interventions for smoking cessation	prezentare multimedia	-	-	2
6	Treatments recommended in special circumstances. Treatments recommended for pregnant women, under 18 years, Recommendations for smokers with respiratory and cardiovascular diseases, cancer or other comorbidities Recommendations for the prevention and management of weight gain following smoking cessation. Recommendations for preventing relapse. Group counseling for quitting smoking	prezentare multimedia	-	-	2
7	Smoking prevention at the population level. National tobacco control legislation. MPOWER strategy for global tobacco control. Governmental and non governmental institutions specialized in tobacco control	prezentare multimedia	-	-	2

Bibliography
2018 European Network for Smoking and Tobacco Prevention (ENSP) European Smoking cessation guidelines 2016
http://elearning-ensp.eu/assets/English%20version.pdf ENSP
Allen Carr's Easy Way To Stop Smoking

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Cauzele psihosociale ale fumatului. Aspectele economice ale fumatului	CBL	-	Abuz de substanțe Reacții medicamentoase	2
2	Efectele fumatului asupra sistemului respirator, cardiovascular, bolile tumorale, tinale, hematologice, ginecologice	CBL	-	Patologie pulmonară cronică Carcinom bronșic Carcinom cervical/ uterin/ovarian Carcinom de colon și rect Carcinom renal și al vezicii urinare Carcinom esofagian Carcinom pancreatic Carcinom gastric	2

3	Istoricul natural al dependeței de tutun Testul Fagerstrom Diagnosticul clinic al dependeței de tutun, (monoxidul de carbon, cotinina, utilizarea biomarkerilor	CBL	-	Abuz de substanțe Reacții medicamentoase	2
4	Educația terapeutică. Terapie cognitiv comportamentală, Analiza încercărilor anterioare de renunțare la fumat	CBL	-	Abuz de substanțe Reacții medicamentoase	2
5	Terapia de substituție nicotinică, (mecanism de acțiune, dovezi clinice ale eficacității, indicații, instrucțiuni de prescriere, contraindicații, efecte adverse) tratamentul cu bupropion, vareniclină, Terapia nonfarmacologică	CBL	-	Reacții medicamentoase	2
6	Recomandări de tratament pentru prevenirea recidivei, Consilierea de grup pentru renunțarea la fumat	CBL	-	Abuz de substanțe Reacții medicamentoase	2
7	Programe naționale anti fumat. Strategia MPOWER pentru controlul fumatului la nivel mondial.	CBL	-	Abuz de substanțe Reacții medicamentoase	2

Bibliography
2018 European Network for Smoking and Tobacco Prevention (ENSP) European Smoking cessation guidelines 2016
http://elearning-ensp.eu/assets/English%20version.pdf ENSP
Allen Carr's Easy Way To Stop Smoking

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Curricula disciplinei este alcătuită conform Standardelor europene de acreditare a serviciilor și programelor de formare profesională publicate în Ghidul European pentru renunțare la fumat redactat de ENSP European Network for Smoking and Tobacco Prevention
Course curriculum is designed according to the recommendations drafted in the European Standards for accreditation of training programs and services published European Guidelines for smoking cessation ENSP(European Network for Smoking and Tobacco Prevention)

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Însuşirea cunoştinţelor de bază şi capacitatea de a corela conceptele teoretice însuşite	test grilă, multiple choice	100
- practical final exam	-	-	0

Minimal performance standards:
Nota minimă de trecere 5 minima grade
Tobacco epidemic in Europe and the world;
Factors that lead to tobacco use;
Pharmacological basis of tobacco dependence;
Health dangers of tobacco;
Other consequences(economic, environmental ..)of tobacco smoking;
Approaches to tobacco control;
The role of the physician in tobacco control;
Delivering the brief anti smoking intervention
Assessment of smoking status
Analysis of previous attempts a patient smoking cessation
Motivating smoking cessation in a clinical context
Knowledge of support services for smokers functional in Romania
Knowledge of the indications and contraindications for the treatment of smoking addiction medications
Knowledge of global strategies to control smoking
Tobacco control legislation

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Germán-Salló Márta	30 de minute după fiecare curs / activitate practică

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Applied linguistics and communication skills in Romanian language			
2.2 Course coordinator: Lect dr Năznean Adrian			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: sală dotată cu echipamente multimedia
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: La sfarsitul cursurilor, studentul va putea sa: -foloseasca functiile specifice limbajului de specialitate (sa adreseze intrebari, formuleze opinii, sfaturi, sa convinga, sa explice, sa descrie situatii concrete specifice domeniului medicina dentara) -citeasca fluent si corect si sa inteleaga continutul unor texte de specialitate de dificultate medie/ avansata -sa inteleaga mesaje receptate pe cale auditiva legate de sfera profesionala -sa vorbeasca fluent si corect, folosind un vocabular variat si adecvat unor situatii specifice domeniului -sa scrie corect, conform regulilor gramaticale, folosind un stil si un vocabular adecvat continutului de idei -sa utilizeze un vocabular variat de termeni din domeniul de specialitate.
6.2 transversal competencies: Studentul va putea să: -utilizeze limba română ca mijloc de comunicare cu alți vorbitori ai aceleiași limbi în situații din domeniul medicinei dentare; - facă prezentări orale; - se documenteze și să structureze informații, să sintetizeze date obținute prin chestionare administrate unui grup

țintă pentru pregătirea și elaborarea de lucrări în domeniu, participarea la stagii; - se familiarizeze cu utilizarea unor platforme de comunicare virtuală și munca în grup.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Cunoaşterea limbii române la nivel avansat.
7.2 Specific objectives: Dezvoltarea celor patru abilităţi de bază: citirea, înţelegerea mesajelor receptate pe cale auditivă, comunicarea verbală, comunicarea scrisă precum şi familiarizarea cu vocabularul din domeniul de specialitate.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introducere în terminologia medicinei generale 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
2	Introducere în terminologia medicinei generale 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
3	Introducere în terminologia medicinei dentare 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
4	Introducere în terminologia medicinei dentare 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
5	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
6	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

7	Bolile dinților. Boli parodontale. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

Bibliography

Butiurcă, Doina, 2009, Fundamentele greco-latine ale terminologiei medicale, Revista Limba Română, Nr. 11-12
Frînculescu, Iulia Cristina, 2009, Limbajul medical românesc în sincronie şi diacronie, Revista UNITERM, nr.7/ 2009
Melnic V., 2003 , Mijloace de formare a terminologiei clinice medicale in limba romana, Revista Limba română, Nr. 2-3, anul XIII
Rusu, Valeriu, 1983 Mic dicţionar medical, vol. I, II, Iaşi
Ursa A., Marcean, N., 2018, Limba română medicală. Româna pentru obiective specifice, Limes

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introducere în terminologia medicinei generale 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
2	Introducere în terminologia medicinei generale 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
3	Introducere în terminologia medicinei dentare 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
4	Introducere în terminologia medicinei dentare 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
5	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2
6	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

7	Bolile dinților. Boli parodontale. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversaţia (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciţii, rezolvarea unor sarcini în grup, interpretarea de roluri (ex. medic-pacient), rezolvarea unor sarcini pe baza unor mesaje scrise ori receptate pe cale auditivă (cu ajutorul mijloacelor tehnice corespunzătoare), elaborarea unor lucrări scrise, autoevaluarea	-	nu este cazul	2

Bibliography

Butiurcă, Doina, 2009, Fundamentele greco-latine ale terminologiei medicale, Revista Limba Română, Nr. 11-12
Frînculescu, Iulia Cristina, 2009, Limbajul medical românesc în sincronie şi diacronie, Revista UNITERM, nr.7/ 2009
Melnic V., 2003 , Mijloace de formare a terminologiei clinice medicale in limba romana, Revista Limba română, Nr. 2-3, anul XIII
Rusu, Valeriu, 1983 Mic dicţionar medical, vol. I, II, Iaşi
Ursa A., Marcean, N., 2018, Limba română medicală. Româna pentru obiective specifice, Limes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Corectitudinea structurilor folosite - Complexitatea limbajului - Adecvarea la registru, nivel de formalitate specifice situatiei	Întrebări cu complement multiplu, formare de cuvinte, potrivire de cuvinte, completare de spații	100
- practical final exam	-	-	0

Minimal performance standards:
Să poată interacționa cu pacientul în conducerea interviului medical, să știe să adreseze întrebări referitoare la anamneză, să poată oferi explicații, recomandări simple; să citească și să înţeleagă ideile principale ale unui text sau mesaj audio, să poată răspunde la întrebări pe baza lor fără greşeli mari la nivelul organizării discursului, să cunoască un număr satisfăcător de termeni specifici domeniului.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Lect dr Năznean Adrian	20 de minute după fiecare activitate practică sau curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Genetic hereditary factors in determining the scope of orofacial disorders			
2.2 Course coordinator: Șef l dr Bogliș Alina			
2.3 Practical activities coordinator(s): Șef l dr Bogliș Alina			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 1		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: minim 10 persoane
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Formularea de ipoteze si interpretarea corectă a semnelor, simptomelor clinice, a modificărilor paraclinice. Acordarea sfatului genetic, calcularea riscului de recurenta a bolilor genetice. Evaluarea corectă a riscului de îmbolnăvire, respectiv alegerea si aplicarea măsurilor adecvate de profilaxie în familie si în populatie în caz de boală genetică. Implementarea unor abordări noi privind procesul de stabilire a diagnosticului si managementului bolilor genetice în relatie cu progresul cunoasterii si cel tehnic din domeniul biologiei moleculare Initierea si derularea unei activităti de cercetare stiintifică în domeniul geneticii
6.2 transversal competencies: Constientizarea nevoii de formare continuă în domeniul geneticii si biologiei moleculare în era de genetizare a medicinei: utilizarea eficientă a resurselor si tehnicilor de învătare pentru dezvoltarea personală si profesională, a surselor informationale si a resurselor de comunicare, a literaturii de specialitate la zi, a bazelor de date

genetice si softuri de asistare a stabilirii diagnosticului în bolile genetice cu implicare in sfera oro-maxilo-faciala.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Însuşirea noţiunilor de genetică medicală cu aplicaţii în medicina dentara.

7.2 Specific objectives:
Cunoaşterea rolului factorilor genetici în realizarea trăsăturilor fiziologice şi a bolilor genetice cu implicare in sfera oro-maxilofaciala.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Genetics of Orofacial Development. Elements of genetic semiology of the filtrum and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
2	Elements of genetic semiology of the lip and associated disorders. Genetic basis of cleft lip and palate.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
3	Elements of genetic semiology of the tongue and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
4	Genetics of tooth development. Classification of dental anomalies and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
5	Elements of genetic semiology of the maxilla and associated disorders.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
6	Chromosomal abnormalities associated with oro-facial syndromes	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
7	Congenital anomalies induced by teratogens. Genetic counseling in syndromes affecting craniofacial and dental structures.	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases.	2

Bibliography
Mandatory bibliography:
1. Lyons Jones K., Crandall Jones M., Del Campo M. Smith's recognizable patterns of human malformation, 7th edition, Ed. Elsevier, 2013
Supplementary bibliography:
1. Medical genetics - Courses - PowerPoint presentation
2. Agnes Bloch-Zupan, Heddie Sedano, Crispian Scully. Dento/Oro/Craniofacial Anomalies and Genetics.Ed Elsevier, 2012.
3.Raoul Hennekam, Judith Allanson, and Ian Krantz. Gorlin's Syndromes of the Head and Neck, Editura: Oxford University Press. 2010

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Syndromes associated with filtrum abnormalities - case presentation	power point, discussion	-	Chromosomal disorders, Monogenic diseases-	2
2	Syndromes associated with lip abnormalities- case presentation	power point, discussion	-	Chromosomal disorders, Monogenic diseases	2
3	Syndromes associated with tongue abnormalities- case presentation	power point, discussion	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
4	Syndromes associated with teeth abnormalities - case presentation	power point, discussion	-	Chromosomal disorders, Monogenic diseases.	2
5	Syndromes associated with abnormality of the maxilla	power point, discussion	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
6	Chromosomal abnormalities associated with oro-facial syndromes	power point, discussion	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2

7	Genetic counseling - RR calculation	problem solving	-	Chromosomal disorders, Monogenic diseases.	2

Bibliography
Lyons Jones K., Crandall Jones M., Del Campo M. Smith's recognizable patterns of human malformation, 7th edition, Ed. Elsevier, 2013

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Recunoaşterea şi abordarea factorului genetic în determinarea tulburarilor din sfera oro-maxilofaciala

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the specifics of the domain	test, proiecte in echipa- discutii.	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	According to the specifics of the domain	written exam	70
- practical final exam	-	-	0

Minimal performance standards:
Basic knowledge of medical genetics,
The minimum grade to pass the exam is 5 (this will result from the grades received for activities during the semester and at the final exam). The theoretical exam consists of a test with simple and multiple choices, according to the regulation.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Bogliș Alina	Sef l dr Bogliș Alina - orele 12-14, luni si miercuri

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Occupational diseases and work-related diseases in dentistry			
2.2 Course coordinator: Conf dr Moldovan Horațiu-Remus			
2.3 Practical activities coordinator(s): Conf. Dr. Moldovan Horatiu-Remus			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 2		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 2		
- examinations: 1		
- other activities: 2		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: Cunoștințe generale de anatomie, fiziologie și fiziopatologie
4.2 competency: nu este cazul

5. Conditions

5.1 for lectures: Sala de curs, suport IT, platformă digitală pentru predare on/line, în funcție de evoluția epidemiologică
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Cunoasterea noxelor profesionale fizice, chimice si biologice, precum si a suprasolicitarilor anumitor organe si/sau sisteme ale organismului in procesele de munca in domeniul stomatologiei. Cunoasterea unor efecte ale acestor noxe asupra organismului.
6.2 transversal competencies: Aplicare de masuri de preventie eficiente pentru prevenirea imbolnavirilor profesionale sau a imbolnavirilor cu factori profesionali contributori in domeniul stomatologiei.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Constientizarea, recunoasterea factorilor de risc profesionali la personalul din domeniul stomatologiei si a tehnicii dentare. Elaborarea unor planuri de preventie.
7.2 Specific objectives: Recunoasterea semnelor, simptomelor unei eventuale imbolnaviri profesionale.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Occupational risks and risks related to occupation in dentists, classification. Physical injury factors in dentistry: basic ergonomics concepts; occupational injuries caused by vibration and noise.	Oral/ multimedia	-	osteomuscular pain, dizziness, hearing loss, pain	2
2	Occupational physical risks in dentistry: different types of electromagnetic radiation (laser, UV, visible light) -, ionizing radiation (Rx) -, occupational injuries caused by electricity, accidents.	Oral/ multimedia	-	asthma, dyspnea, burns, cardiorespiratory arrest, pruritus	2
3	Occupational physical hazards: microclimate and occupational diseases caused by various dust. Classification of elementary dust particles: metals, other types of dust (organic substances, inorganic substances, composites). Lung self-cleaning process, prevention techniques.	Oral/ multimedia	-	asthma, acne, carcinoma, gastric ulcer, intoxication	2
4	Occupational diseases caused by inorganic particles in dentistry: pneumoconiosis, interstitial pneumonia. Harmful chemical factors in dentistry: diseases caused by irritating gases, vapors, organic solvents.	Oral/ multimedia	-	immunodeficiency, candidosis, osteomyelitis, otitis media, tuberculosis, endocarditis, sepsis, skin infections, respiratory infections	2
5	Latex allergy. Contact dermatitis caused by acrylates and metals. Occupational asthma: epidemiology, diagnosis, evolution.	Oral/ multimedia	-	dermatitis, intoxication	2
6	Occupational diseases caused by metal oxides (Ni, Cr, Co, Hg) in dentistry. Diseases caused by biological factors in dentistry (epidemiology, prevention procedures - vaccination programs recommended by the WHO): HIV, hepatitis B, C, TB, other common bacterial, fungal and viral infectious diseases.	Oral/ multimedia	-	intoxications, chronic liver disease, vision loss, anxiety, neurological diseases	2
7	TBL	Oral/ multimedia	-	intoxications, chronic liver disease, vision loss, anxiety, sleep disorders, immunodeficiency, candidiasis, osteomyelitis, otitis media, tuberculosis, endocarditis, sepsis, skin infections, respiratory infections	2

Bibliography

1. Encyclopaedia of Occupational Health and Safety, 2012, online http://www.iloencyclopaedia.org
2. H.G. 355/2007
3. H.G. 1169/201
4. A. Cocarla, Medicina ocupationala, vol I, II, 2009 Editura Medicala Universitara Iuliu-Hatieganu, Cluj Napoca
5. L. Szasz, Vandemecum de medicina muncii, Editura Universitas, Targu Mures, 2008

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Diagnosis of occupational disease. Prophylactic measures.- Diagnostic elements in occupational diseases. Complete professional history. Necessary technical-organizational and medical measures.	Practical demonstrations, case presentations	no	Occupational disease. Prophylaxis	2

2	Functional investigation of the respiratory system in occupational medicine. Performing simple respiratory function tests and interpreting an analysis bulletin.	Practical demonstrations, case presentations	no	Respiratory function.Respiratory pathologies. Allergic disorders. Emissions.	2
3	Establishing a professional probability diagnosis following the anamnesis, clinical examination and performing ventilatory functional tests.Bronchomotor tests - Indication of tests in occupational medicine, contraindications. Working technique. Interpretation of results.	Practical demonstrations, case presentations	no	Respiratory function.Respiratory pathologies. Haemoptysis. Allergic disorders.	2
4	Audiometry in occupational medicine - Assessment of the effect of noise on the hearing aid. Tonal and liminal audiometry. Making and interpreting an audiogram.Assessment of industrial noise - Methodology for determining industrial noise.	Practical demonstrations, case presentations	no	Hearing.Hearing loss.Prophylaxis.	2
5	Synthesis paper: evaluation of a patient, oral presentation of the case.	Practical demonstrations, case presentations	Occupational disease. Prophylaxis.	Respiratory disease. Heart disease. Cyanosis. Haemoptysis. Hearing loss. Allergic disorders.	2
6	Case reports	Practical demonstrations, case presentations	no	Occupational disease. Prophylaxis.	2
7	Clinical scenarios	Practical demonstrations, case presentations	no	Occupational disease. Prophylaxis.	2

Bibliography
Bibliography
1.Cocarla A., Medicina ocupationala, vol I, II, 2009 Editura Medicala Universitara Iuliu-Hatieganu, Cluj Napoca
2.Szasz L., Vandemecum de medicina muncii, Editura Universitas, Targu Mures, 2008
3.*** Norme generale de protectia muncii, 2002, Bucuresti
4.Toma I., Practica Medicinii Muncii, Editura Sitech, Craiova, 2006

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	during the lectures	participation in debates during classes	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	-final exam	-verification	90
- practical final exam	-	-	0

Minimal performance standards:
- minimum presence for internship - 75%
- patient examination and anamnesis - 25%

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Moldovan Horațiu-Remus	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Adhesive modern techniques in dentistry			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Signing in a minimum number of students (a group of 15-17 students). Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Acquiring theoretical knowledge on contemporary dental adhesive techniques covering various ramifications of adhesion and adhesives in the broad domain of dentistry, providing an important evidence base. A solid grasp of the principles, mechanics and techniques of bonding and modern adhesive systems is essential in dentistry. The course includes theoretical aspects of the concept of „adhesive dentistry" as it is apparent that adhesion and adhesives play important roles in modern clinical dentistry. Students will develop skills and confidence through the design and execution of minimally invasive indirect and direct adhesive techniques in order to achieve the best functional and aesthetic results, in point of view of achieving an appropriate treatment plan.
6.2 transversal competencies: The course will be delivered as a series of interactive meetings. For students to achieve a comprehensive, well-rounded education, integrated teamwork on several fronts is vital. Teamwork is necessary between students and between students and teachers. The more teamwork fundamentals exhibited, the more opportunity exists for students to learn the vital skills of compromise and collaboration in modern adhesive dentistry.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-The student has to understand the basic concepts on the techniques used in adhesive dentistry.
-The student will learn to develop skills to apply the gained knowledge with an appropriate correlation in various clinical situations in which it is possible to use these methods.

7.2 Specific objectives:
-The student will be able to describe the concepts and methods used in modern adhesive techniques.
-The student will acquire the ability to understand different aspects of composition and properties of various adhesive systems which have implications for major applications in dentistry.
-Applications of theoretical knowledge on various adhesive systems to their use in dental practice.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Adhesive techniques: from classic to modern. Explanation of the terms used, exemplifying.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
2	Fundamental concepts of enamel and dentin adhesion.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
3	Chemical and histological characters of enamel; adhesion to enamel. Chemical and histological characters of dentine; adhesion to dentin.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
4	Materials, methods and technique options for adhesive fixing.	Test	Two hours every week in english.	-	2
5	Adhesive bridges.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
6	Adhesive techniques used in pedodontics.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
7	Successful treatment plans in adhesive dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2

Bibliography
1. Bors A, Szekely M, Molnar-Varlam C. Tehnici adezive moderne in medicina dentara. Editura: University Press 2015.
2. Jorge Perdigao: Current perspectives on dental adhesion: (1) Dentin adhesion – not there yet, Japanese Dental Science Review, 2020.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Adhesive techniques: from classic to modern. Explanation of the terms used, exemplifying.	Practical demonstration.	Students will proceed to adhesive techniques.	-	2
2	Fundamental concepts of enamel and dentin adhesion.	Oral presentation, multimedia, participative discourse, argumentation.	Practical proceeding to adhesion to enamel.	-	2
3	Chemical and histological characters of enamel; adhesion to enamel. Chemical and histological characters of dentine; adhesion to dentin.	Practical demonstration.	Practical proceeding to adhesion to dentine.	-	2
4	Materials, methods and technique options for adhesive fixing.	Written evaluation of the acquired knowledge.	Test.	-	2
5	Adhesive bridges.	Oral presentation, multimedia, participative discourse, argumentation.	Practical demonstration on adhesive bridges.	-	2

6	Adhesive techniques used in pedodontics.	Oral presentation, multimedia, participative discourse, argumentation.	Practical demonstration on deciduous teeth.	-	2
7	Successful treatment plans in adhesive dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Practical demonstartion.	-	2

Bibliography
1. Bors A, Szekely M, Molnar-Varlam C. Tehnici adezive moderne in medicina dentara. Editura: University Press 2015.
2. Jorge Perdigao: Current perspectives on dental adhesion: (1) Dentin adhesion – not there yet, Japanese Dental Science Review, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-Course content is in accordance with the courses on the same topic listed in other universities with important achievements in theoretical and empirical evidence techniques in adhesive dentistry.
-Acquiring these modern restorative methods will be extremely useful for future dentists, adhesive techniques representing the greatest progress that restorative dentistry it registers itself.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course topics	Test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge within the course topic.	Colloquium written evaluation or project presentation.	70
- practical final exam	-	-	0

Minimal performance standards:
Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of modern adhesive techniques used in dentistry, to have no more than 20% unjustified or unrecovered absences.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	30 minute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Diet principles in oral pathology			
2.2 Course coordinator: Prof dr Tarcea Monica			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: - nu e cazul
4.2 competency: - nu e cazul

5. Conditions

5.1 for lectures: minim 15 cursanti
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Descrierea noţiunilor de bază ale funcţionării organismului uman şi a mecanismelor generale de producere a bolilor. - Integrarea noţiunilor de bază în concepte/ situaţii care se aplică organismului uman cu scopul de a explica semne şi simptome. - Descrierea conceptelor, teoriilor şi noţiunilor fundamentale de fiziopatologie, pe sisteme şi mecanisme de acţiune. - Stabilirea tehnicilor de îngrijire impuse de existenţa unor semne şi simptome de boală. - Stabilirea principiilor terapeutice care modifică mecanismele fiziopatologice în vederea ameliorării simptomelor bolii. - Utilizarea noţiunilor dobândite în cadrul disciplinei pentru cercetarea ştiinţifică ulterioară
6.2 transversal competencies: Realizarea unei lucrări/referat/ caz clinic cu identificarea obiectivelor de realizat, a resurselor disponibile, condiţiilor de finalizare a acestora, etapelor de lucru,timpilor de lucru, termenelor de realizare aferente şi riscurilor aferente diverselor mecanisme fiziopatologice. - Identificarea rolurilor şi responsabilităţilor într-o echipa pluridisciplinară şi aplicarea de tehnici de relaţionare şi

muncă eficientă în cadrul echipei şi în relaţie cupacientul.
- Utilizarea eficientă a surselor informaţionale şi a resurselor de comunicare şi formare profesională asistată (portaluri Internet, aplicaţii software de specialitate,baze de date de tip PUBMED, cursuri on-line etc.) atât in limba romană, cât şi într-o limbă de circulaţie internaţională.
- Dezvoltarea gândirii medicale şi folosirea informaţiilor ştiinţifice în contextul interdisciplinarităţii

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Learning of basic diet principles and how to elaborate on specific diets recommended in various oral and dental illnesses.
- To monitor and evaluate the hazards related to nutrition, their effects on teeth and oral mucosa, and proper intervention to reduce and prevent the illnessesrelated to it and to promote the dental health status of the population.

7.2 Specific objectives:
- Analysis of main components of a healthy diet with a good impact on teeth
- Identification of general functions and major food sources for each nutrient necessary for dental and oral system
- To know the methodology of evaluation of food quality and food safety.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Definition and importance of nutrition in for a healthy dental status and prevention of chronic diseases. Healthy diet principles for mouth and teeth.	Oral presentation and multimedia	-	disorders of calcium and vitamin D metab	2
2	Dietary assessment. Digestion, absorbtion and metabolism of food and nutrients and dental impact.	Oral presentation and multimedia	-	eating disorders	2
3	Dietary reference and nutrients and caloric intakes for the body. Major food sources recommended in oral pathology and cooking technics	Oral presentation and multimedia	-	eating disorders	2
4	Diet recommendations during life cycle for healthy teeth: children, teenagers, adults, senior, athletes and pregnant women.	Oral presentation and multimedia	TBL	malabsorbtion	2
5	Diets and menus recommended in various oral and dental ilnesses like: caries, edentations, trush, granulomatosis, dermatosis, candidiasis or viral infections.	Oral presentation and multimedia	-	candidiosis	2
6	Diets and menus recommended in cancer	Oral presentation and multimedia	-	malnutrition	2
7	Diets and lifestyle practices recommended in diabetes, heavy metals poisoning, fluorosis or xerostomia	Oral presentation and multimedia	Final evaluation by Essay	xerostomiosis	2

Bibliography
1. Mahan LK, Escott-Stump S. - Krause's Food, Nutrition, and Diet Therapy. 14th ed. W.B. Saunders Co, Philadelphia, 2014.
Bibliografie suport:
2. Nnakwe NE. – Community Nutrition, Planning Health promotion and Disease Prevention, 3rd edition, Edit. Jones & Bartlett Learning, 2017

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Nutritional assessment methods	Oral presentations, multimedia and applications	nu e cazul	nutrition, scores	4
2	Anthropometric and clinic evaluation	applications and calculations	nu e cazul	nutrition, weight, obesity	4
3	Nutritional plan design	oral presentations and applications	nu e cazul	diet, steps, obesity management, cancer	4
4	Recuperari si Examen practic	exameinare, test grila si aplicatie	nu e cazul	testare	2

Bibliography
Mahan LK - Krause Food, nutritin and diet Therapy, 2017.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Evaluation and analysis of food nutritional risk factors and proper implementation of dental health programs, preventive measures, and education training forthe population.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	test grila	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Verificare	Referat	60
- practical final exam	Studii de caz	Discutii, dezbateri	30
Minimal performance standards: - admitere la examenul practic doar daca nu depaseste 50% din absente nerecuperate - nota minima 5 la practic si teoretic			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Tarcea Monica	30 minute dupa fiecare curs sau LP

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dental materials in paediatric dentistry			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): Sef lucrari dr. Bors Andrea Izabella			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 11		
3.9 Total hours: 25		
3.10 Credits: 1		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Signingin a minimum number of students (a group of 15-17 students). Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: -In addition to acquiring material handling modern techniques of dental materials used in restorative pediatric dentistry, the student will know the composition, the physical, mechanical and chemical properties of the dental materials in order to understand the impact of dental materials that come in contact with oral tissues and will have the necessary knowledge for a proper and effective use of these materials in practice. There is a specific use of the dental materials in pediatric dentistry, new restorative and therapeutic materials have been developed, and there are specific pedodontic materials that the student will endorse. -Future dentist should know that there are many variants of restoring coronary lesions in temporary and young permanent teeth and he or she should be able to choose a material from the variety of options on the market. They must know which material is better, more efficient and especially wich matchesthe requirements and demands of the small patients, ensuring the optimum conditions to comply with the international norms. In addition, the student will understand the orthodontic biomechanical ways and the materials from wich are manufactured the orthodontic brackets and devices for functional rehabilitation used in orthodontics.

6.2 transversal competencies:
-Collaboration and teamwork is today a complex, requiring permanent university training. The student realizes that the work they perform it is a teamwork and the human factor is: the dentist, the dental assistant and the dental technician who must ensure the health and safety at work and the use of modern technologies in pediatric and orthodontic practice.
-Teamwork, passion for performance and commitment to helping patients equally bounds students to become increasingly efficient dental professionals in dental practice.
-Marketing and dental practice management performance through knowledge of dental materials.
-Didactic activity in practical instruction or administration in the field of dental materials used in pedodontics and orthodontics.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
-To acquire the necessary knowledge for the proper and efficient use of materials in pediatric dentistry and orthodontics.

7.2 Specific objectives:
-To acquire the ability to understand different aspects about the composition and properties of dental materials which have major implications in practice in pediatric dentistry and orthodontics.
-Understanding theoretical aspects on dental materials to be able to use in pediatric dentistry.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Generalities, conditions of materials used in pediatric dentistry. Profilactic materials: fluoride containing products.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
2	Pit and fissure sealants.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
3	Materials for pulpo-dentinal protection, cavity base materials for pediatric dentistry use.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
4	Restorative materials. Materials used for endodontic treatments in pediatric dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
5	Materials used for cementation of orthodontic appliances. Materials used for prosthodontic treatment in pediatric dentistry (crowns for children).	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
6	Materials used for different orthodontic appliances.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2
7	Materials for mouthgards used in sport activities. Impression materials in pediatric dentistry. Generalities about reparation and reconditioning of appliances used in pediatric dentistry.	Oral presentation, multimedia, participative discourse, argumentation.	Two hours every week in english.	-	2

Bibliography
1. SC Leal, EM Takeshita: Pediatric Restorative Dentistry. Springer International Publishing, 2019.
2. Van Noort R: Introduction to Dental Materials. 4th ed. Mosby Elsevier Publishing, Edinburgh, 2016.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Explanations on differences between the dental materials used for temporary teeth and for young permanent teeth.	Interactive multimedia presentation with practical examples and specifications. Demonstration on fluoride materials application on plaster models.	Students will practice how to prepare these types of materials.	-	2

2	Practical features regarding pits and fissure sealants.	Interactive multimedia presentation with practical examples and specifications. Demonstration on pits and fissure sealants application on plaster models.	Students will practice how to prepare these types of materials.	-	2
3	Practical details about dental materials used for pulp and dentine protection.	Interactive multimedia presentation with practical examples and specifications. Demonstration on these type of materials application on plaster models.	Students will practice how to prepare these types of materials.	-	2
4	Practice on endodontic treatments materials in paediatric dentistry.	Practical demonstration.	Students will practice how to prepare these types of materials.	-	2
5	Dental cements used in paediatric dentistry. Prosthodontic practical details.	Practical demonstration.	Students will practice how to prepare these types of materials.	-	2
6	Dental cements used in paediatric dentistry. Orthodontic practical details.	Practical demonstration.	Students will practice how to prepare these types of materials.	-	2
7	Practical features about mouthgards and impression materials used in paediatric dentistry.	Practical demonstration.	Students will practice how to prepare these types of materials.	-	2

Bibliography

1. Vamani RE, Thimma R. Smart Materials: Dental Materials in Paediatric Dentistry. LAP LAMBERT Academic Publishing, 2023.
1. SC Leal, EM Takeshita: Pediatric Restorative Dentistry. Springer International Publishing, 2019.
2. Van Noort R: Introduction to Dental Materials. 4th ed. Mosby Elsevier Publishing, Edinburgh, 2016.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course topics.	Test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge within the course topic	Colloquium written evaluation or project presentation.	70
- practical final exam	-	-	0

Minimal performance standards:
Getting minimum mark of 5 (five) for each component of evaluation: to know the basics of dental materials used in paediatric dentistry, to have no more than 20% unjustified or unrecovered absences.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	30 minute dupa fiecare curs

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Anesthesia and sedation in dental medicine			
2.2 Course coordinator: Șef l dr Iacob Alina			
2.3 Practical activities coordinator(s): Șef l dr Iacob Alina, Șef l dr Petrovan Cecilia, Șef l dr Coșarcă Adina, Șef l dr Berecki Temistocle Despina, Șef l dr Golu Vlad, Asist Univ Veress Szidonia			
2.4 Year of study: III	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 10	3.2 lecture: 4	3.3 practical activities: 6
3.4 Total hours in curriculum: 70	3.5 lectures: 28	3.6 practical activities: 42
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 27		
- supplemental documentation at the library, from specialized information portals and in the field: 26		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 26		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 80		
3.9 Total hours: 150		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -basic knowledge in oral anatomy, basic understanding and communication skills

5. Conditions

5.1 for lectures: Internet connection
5.2 for practical activities: Room with dental chairs, anesthetic substances (xilocaine, articaine), disposable cartriges, seringes and needles, gloves, sterile environment for injections exercise.

6. Specific competencies acquired

6.1 professional competencies: Acquiring knowledge about performing and indications for different techniques of dental/oral anesthesia, and management of accidents and complications in each situation
6.2 transversal competencies: The ability to assess the indication of dental anesthesia for different treatment plans according to clinical findings and to integrate it with a multidisciplinary approach of a patient with specific condition.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Acquisition for the students of various dental and oral anesthesia techniques, solving loco-regional post-anesthetic accidents and complications.
7.2 Specific objectives: Assimilation by students of the basic rules of asepsia, antisepsia and sterilization. Students will well-know the tools and substances and techniques used in loco-regional anesthesia. Basic knowledges about the substances and techniques used in general anesthesia and sedation.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Anesthesia - Definitions. History. Particularities of Anesthesia in Dentistry and OMF Surgery. Classification of anesthetic methods used in Dentistry and Oral and Maxillo-facial Surgery	Multimedia and oral presentation	discussions	NA	2
2	The purpose of local anesthesia techniques used in Dentistry. The nervous impulse transmission of pain. Properties of the ideal local anesthetic solution. The secondary actions of local anesthetics.	Multimedia and oral presentation	discussions	NA	2
3	Anatomy of the trigeminal nerve.	Multimedia and oral presentation	discussions	NA	2
4	Techniques of anesthesia in the upper jaw	Multimedia and oral presentation	discussions	NA	2
5	Techniques of anesthesia in the lower jaw	Multimedia and oral presentation	discussions	NA	2
6	Local anesthetic solutions – Classification. Pharmacology	Multimedia and oral presentation	discussions	NA	2
7	Additives (and vasoconstrictors) in local anesthetic solutions (Primary and secondary side effects)	Multimedia and oral presentation	discussions	NA	2
8	Local accidents of dental / oral anesthesia	Multimedia and oral presentation	discussions, case presentation	NA	2
9	Systemic complication of dental / oral anesthesia	Multimedia and oral presentation	discussions, case presentation	NA	2
10	Patients at risk	Multimedia and oral presentation	discussions	NA	2
11	Local anesthesia in children	Multimedia and oral presentation	discussions, case presentation	NA	2
12	General practical aspects	Multimedia and oral presentation	discussions	NA	2
13	General anesthesia – general aspects, particularities, indications in Dentistry and Oral and Maxillo-facial Surgery.	Multimedia and oral presentation	discussions	NA	2
14	Recap	Multimedia and oral presentation	discussions, case presentation	NA	2

Bibliography

1. JA Baart, HS Brand: Local Anaesthesia in Dentistry. Wiley-Blackwell - 2009
2. Iacob Alina and B. Bogozi, A. Coșarcă, A. Ormenișan, C. Petrovan, S. Comișel, D. Szava, R. Grigoraș: Practical Locoregional Anesthesia In Dentistry And Oral Surgery (Tehnici de anestezie loco-regională în Medicina Dentară și Chirurgia Orală) - Ed. University Press, Tg-Mureș, 2018
3. Iacob Alina, Petrovan Cecilia: Anestezia loco-regională în medicina dentară și chirurgia oromaxilo- facială. Indreptar de lucrări practice pentru studenţii anului III Medicină Dentară – Tg-Mureș, 2011
4. Petrovan Cecilia, Iacob Alina: Anestezie și sedare în medicina dentară și chirurgia oromaxilofacială. Curs litografiat pentru studenţii anului III Medicină Dentară – Tg-Mureș, 2011
5. Bucur A., Navarro C.V., Lowry J., Acero J.: Compendiu de chirurgie oro-maxilo-facială, vol. 1 Editura 2009 Q Med Publishing Bucureşti, Cap 1, p1-62

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Anatomy of the trigeminal nerve - upper and lower jaw. Recap	Multimedia and oral presentation	discussions	NA	3

2	Practical aspects of handling specific materials, sterility and using various anesthetic substances	Multimedia and oral presentation	discussions, demonstration	NA	3
3	Theoretical presentation of anesthesia techniques by infiltration	Multimedia and oral presentation	discussions	NA	3
4	Practical implementation (exercise) of previous studied anesthetic techniques	practical demonstration	exercise	NA	3
5	Theoretical presentation of the local anesthetic techniques in the upper jaw	Multimedia and oral presentation	discussions	NA	3
6	Practical implementation (exercise) of previous studied anesthetic techniques	practical demonstration	CBL, exercise	NA	3
7	Theoretical presentation of the local anesthetic techniques in the lower jaw	Multimedia and oral presentation	discussions	NA	3
8	Practical implementation (exercise) of previous studied anesthetic techniques	practical demonstration	exercise	NA	3
9	Exercise of various dental/oral anesthetic techniques	practical demonstration	exercise	NA	3
10	Exercise of various dental/oral anesthetic techniques	practical demonstration	exercise	NA	3
11	Exercise of various dental/oral anesthetic techniques	practical demonstration	exercise	NA	3
12	Exercise of various dental/oral anesthetic techniques	practical demonstration	CBL, exercise	NA	3
13	Exercise of various dental/oral anesthetic techniques	practical demonstration	exercise	NA	3
14	Revision	discussion, case debate	exercise	NA	3

Bibliography

1. Hans Evers, Glenn Haegerstam. Introduction to Dental Local Anaesthesia
2. JA Baart,HS Brand: Local Anaesthesia in Dentistry. Wiley-Blackwell - 2009
3. Iacob Alina, Petrovan Cecilia: Anestezia loco-regională în medicina dentară și chirurgia oromaxilo- facială. Indreptar de lucrări practice pentru studenţii anului III Medicină Dentară – Tg-Mureș, 2011
4. Iacob Alina and B. Bogozi, A. Coșarcă, A. Ormenișan, C. Petrovan, S. Comișel, D. Szava, R.Grigoraș: Practical Locoregional Anesthesia In Dentistry And Oral Surgery (Tehnici de anestezie loco-regională în Medicina Dentară și Chirurgia Orală) - Ed. University Press, Tg-Mureș, 2018

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

At the end of the module each student must know to perform basic techniques of local and loco-regional anesthesia in the oral cavity, in terms to respect the rules, to solve local accidents and complications. Lack of knowledge of local anesthesia in dentistry, involves the inability of performing dental treatments which are necessary for all dental patients.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Correlation between theoretical and practical information Capacity of performing practical work	validation of the practical activities during the module The mean of the CBL - 20% Performing of local anesthesia procedures - 10% (performing a minimum 4 injections)	30
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts in daily activity Knowing of bibliographical references	Written (summative) test sustained at UNIX examination center - multiple choice questions	50
- practical final exam	Correlation between theoretical and practical information Capacity of performing practical dental anesthesia techniques	Oral examination based on practical scenarious	20

Minimal performance standards:
History taking, a complete and correct clinical examination as well as to establish an initial basic diagnosis.
Choosing an individualized therapeutic plan (choice of anesthetic solution depending on the general status of the patient) and performing basic therapies in case of some accidents.
Each student has to perform a minimum of 4 different anesthetic procedure:

The grade for written test – minimum 5; less than 5 = failed exam; The grade for practical exam – minimum 5; less than 5 = failed exam; Final grade – minimum 5; less than 5 = failed exam; Attendance to practical activities of the discipline is mandatory. Important number of unexcused absences from classes and more than 2 absences/module for practical classes will not give the student the right to participate in the semester examination session. The recuperation of any absence will be performed in pre-session depending of the teachers schedule. Additional absences are permitted during student scientific events or other specified situations.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

4 to 6 different oral anesthetic techniques

13. Appointment timetable (for students)

Șef l dr Iacob Alina	30 minutes after lecture on Mondays

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Internal medicine			
2.2 Course coordinator: Prof dr Tilinca Mariana-Cornelia			
2.3 Practical activities coordinator(s): Prof. dr.Tilinca Mariana-Cornelia			
2.4 Year of study: III	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 15		
- supplemental documentation at the library, from specialized information portals and in the field: 15		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 2		
- other activities: 2		
3.8 Total hours of individual study: 44		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Video projector, PC computer
5.2 for practical activities: Video projector, PC computer, case presentation, laboratory results interpretation

6. Specific competencies acquired

6.1 professional competencies: Acquiring the basic learning concept regarding the diagnosis and treatment algorithm in internal medicine Developing a complex and individualized treatment plan based on clinical examination, case presentation, invasive and non-invasive paraclinical explorations; Acquiring the basic learning concept regarding the clinical examination of the patient with cardiovascular, digestive, renal, pulmonary and haematological diseases Acquiring the basic learning concept of the communication with the patient and the norms of professional and medical ethics in the relationship physician-patient-family Preparing the patient for non-invasive and invasive investigations
6.2 transversal competencies: Disease state identification and accurately diagnosing of patients with dental complains. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Understanding the basic notions regarding the diagnosis and therapy of cardiovascular, hepatic, digestive, hematological and metabolic diseases

7.2 Specific objectives:
Understanding the risk factors for different diseases, and the notions of their medical management control, the pharmacological and interventional methods of therapy for various medical conditions

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Acute Tracheobronchitis. COPD. Asthma. Pneumonia	oral, multimedia presentations	-	dyspnoea	2
2	Lung abscess. Pulmonary tuberculosis. Pleurisy and pleural effusion. Pneumothorax. Lung cancer	oral, multimedia presentations	-	dyspnoea	2
3	Mitral stenosis. Mitral valve regurgitation. Aortic stenosis. Aortic regurgitaion. Ischemic heart disease. Stable angina pectoris. Unstable angina. Acute myocardial infarction	oral, multimedia presentations	-	chest pain	2
4	Infective endocarditis. Pericarditis. Cardiac tamponade. Myocarditis. Cardiomyopathies. Hypertension. Conduction and rhythm disorders. Heart failure. Acute pulmonary oedema. Cardiogenic shock. Cardiorespiratory resuscitation	oral, multimedia presentations	-	chest pain	2
5	Diseases of Esophagus. Gastoduodenal Ulcer. Gastric cancer. Diseases of the operated stomach. Inflamatory bowel disease	oral, multimedia presentations	=	abdominal pain. abdominal distension	2
6	Coloreclal cancer. Chronic hepatitis. Liver cirrhosis. Cholecystitis. Acute and chronic pancreatitis. Cancer of the head of the pancreas	oral, multimedia presentations	-	abdominal pain. abdominal distension	2
7	Glomerulopathies. Acute nephritic syndrome. Nephrotic syndrome	oral, multimedia presentations	-	dysuria	2
8	Urinary tract infections. Acute and chronic renal failure	oral, multimedia presentations	-	dysuria	2
9	Anemia. Leukemia	oral, multimedia presentations	-	anemia	2
10	Polycythemia Vera. Primary Myelofibrosis	oral, multimedia presentations	-	anemia	2
11	Diabetus Mellitus	oral, multimedia presentations	-	acid-base imbalance	2
12	Complications of Diabetus Mellitus. Treatment of Diabetus Mellitus	oral, multimedia presentations	-	acid-base imbalance	2
13	Obesity	oral, multimedia presentations	-	Acid-base imbalance	2
14	Lipid Disorders. Hyperuricemia	oral, multimedia presentations	-	acid-base imbalance	2

Bibliography
1. Tilinca M.C., Mureșan S., Schmiedt R.A., Murariu E. Internal Medicine for dentistry students. Editura University Press Târgu Mureș, 2021, 125 pg, ISBN 978-973-169-703-1
2. Kumar and Clark's Clinical Medicine, 10th edition 2021, Elsevier
3. Crispian Scully - Scully's Medical Problems in Dentistry 2014, Elsevier

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Clinical case presentation - Diseases of the respiratory system	multimedia presentations, clinical cases	-	dyspnoea	2
2	Clinical case presentation - Diseases of the respiratory system	multimedia presentations, clinical cases	-	dyspnoea	2

3	Clinical case presentation - Diseases of the cardiovascular system	multimedia presentations, clinical cases	-	chest pain	2
4	Clinical case presentation- Diseases of the cardiovascular system	multimedia presentations, clinical cases	-	chest pain	2
5	Clinical case presentation - Diseases of the dygestive system	multimedia presentations, clinical cases	-	abdominal pain	2
6	Clinical case presentation - Diseases of the dygestive system	multimedia presentations, clinical cases	-	abdominal pain	2
7	Clinical case presentation - Diseases of the urinary system	multimedia presentations, clinical cases	-	dysuria	2
8	Clinical case presentation - Diseases of the urinary system	multimedia presentations, clinical cases	-	dysuria	2
9	Clinical case presentation - Blood diseases	multimedia presentations, clinical cases	-	anemia	2
10	Clinical case presentation - Blood diseases	multimedia presentations, clinical cases	-	anemia	2
11	Clinical case presentation - Methabolic diseases	multimedia presentations, clinical cases	-	metabolic disorders	2
12	Clinical case presentation - Methabolic diseases	multimedia presentations, clinical cases	-	metabolic disorders	2
13	Clinical case presentation - Metabolic diseases	multimedia presentations, clinical cases	-	metabolic disorders	2
14	Clinical case presentation - Metabolic diseases	multimedia presentations, clinical cases	-	metabolic disorders	2

Bibliography

1. Tilinca M.C., Mureșan S., Schmiedt R.A., Murariu E. Internal Medicine for dentistry students. Editura University Press Târgu Mureş, 2021, 125 pg, ISBN 978-973-169-703-1
2. Kumar and Clark's Clinical Medicine, 10th edition 2021, Elsevier
3. Crispian Scully - Scully's Medical Problems in Dentistry 2014, Elsevier
4. The material presented during the practical activities

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The content of the subject is corroborated with the need to acquire the basic notions regarding the assessment of comorbidities of patients.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	0	0	0
- practical activities	clinical case	case presentation	30
Final evaluation			
- theoretical final exam	exam	evaluare pe platforma UNIX	50
- practical final exam	case presentation	oral	20

Minimal performance standards:
Obtaining at least 50% of the multiple choice test
Performing the anamnesis of the complete clinical examination, as well as some basic diagnostic operations, the request of the appropriate complementary examinations, formulating a positive and differential diagnosis;
Performing an individualized therapeutic plan

11. Must seen clinical situation list

Nu e cazul

12. Clinical / practical abilities

Nu e cazul

13. Appointment timetable (for students)

Prof dr Tilinca Mariana-Cornelia	30 de minute după fiecare curs / activitate practica

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Technology of dental prostheses (1)			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): Bors Andrea Izabella			
2.4 Year of study: III	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 39		
- supplemental documentation at the library, from specialized information portals and in the field: 38		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 38		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 116		
3.9 Total hours: 200		
3.10 Credits: 7		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Lecture hall equipped with multimedia equipment.
5.2 for practical activities: Specific dental laboratory, working tables, instruments, equipment and various dental materials necessary for the working stages in manufacturing dental prostheses.

6. Specific competencies acquired

6.1 professional competencies: Acquiring theoretical and practical knowledge using their own experiences in the process of achieving the technologies used in current practice for manufacturing the fixed dental prostheses. - Acquiring theoretical and practical knowledge regarding the achievement of dental prostheses through various technologies and the appropriate use of the dental materials in this process. -Students, these future doctors, must know thoroughly and accurately all stages of manufacturing the partial, fixed dental prosthesis, both, the clinical and laboratory phases, therefore they will be able to conceive a correct design of these restorations.
6.2 transversal competencies: The dentist's supporting team aids in providing oral health services: the students will understand the need for proper and orderly communication with both, dental technicians and dentist or teacher. The complexity of prosthodontics as well as the scientific and technological progress, makes the field of technology of dental prostheses absolutely necessary to be studied separately, in order to remain an well-defined discipline. Marketing and the dental laboratory management through the knowledge of equipping, techniques, classical and

modern technologies it will help to achieve appropriate dental prosthesis.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The students will acquire the knowledge on specific technological procedures performed in dental laboratory to achieve dental prostheses in view of prosthetic restorations (C4).

7.2 Specific objectives:
Acquiring theoretical and practical knowledge on the procedures and sequencing for obtaining prosthetic works.
-Acquiring the ability to conceive indirect fixed restorations.
-Acquiring basic skills to perform or correct the laboratory phases in the manufacture of dental prostheses.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Fixed partial dentures: definitions, basic concepts, classifications, manufacturing technologies.	Oral and multimedia presentation.	Two hours courses in english.	-	2
2	Dental crowns. The technology for manufacturing metallic crowns.	Oral and multimedia presentation.	Two hours courses in english.	-	2
3	Dental crowns. The technology for manufacturing polymer-based crowns.	Oral and multimedia presentation.	Two hours courses in english.	-	2
4	Dental crowns. The technology for manufacturing mixed metal-polymer crowns.	Oral and multimedia presentation.	Two hours courses in english.	-	2
5	Dental crowns. The technology for manufacturing porcelain-fused-to-metal dental crowns. (PFM's)	Oral and multimedia presentation.	Two hours courses in english.	-	2
6	Dental crowns. The technology for manufacturing full ceramic crowns.	Test	Written test.	-	2
7	Inlays, onlays manufacturing technologies.	Oral and multimedia presentation.	Two hours courses in english.	-	2
8	Partial crowns manufacturing technologies. Zirconia in technology of dental prosthesis. CAD/ CAM technologies.	Oral and multimedia presentation.	Two hours courses in english.	-	2
9	Dental posts and cores. Technological procedures.	Oral and multimedia presentation.	Two hours courses in english.	-	2
10	Dental bridges: classification, parts and procedure.	Test	Written test.	-	2
11	Manufacturing dental bridges depending on position of missing tooth replaced.	Oral and multimedia presentation.	Two hours courses in english.	-	2
12	Methods and materials for manufacturing pontics.	Oral and multimedia presentation.	Two hours courses in english.	-	2
13	Technological procedures for manufacturing temporary dental bridges.	Oral and multimedia presentation.	Two hours courses in english.	-	2
14	Particular dental bridges.	Oral and multimedia presentation.	Two hours courses in english.	-	2

Bibliography
Required bibliography:
1. Bors A, Szekely M, Molnar-Varlam C, Camarasan A. : Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureș, 2022.
2.Arthur R. G. Cortes. : Digital Dentistry: A Step-by-Step Guide and Case Atlas, ISBN: 978-1-119-85199-8 May 2022, Wiley-Blackwel

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Presentation of discipline rules for students, evaluation methods and safety rules in the dental office and dental laboratory.	Oral and written presentation.	Students will sign the acknowledgment. They will fill in the laboratory report (LR).	-	4

2	The technology of single unit fixed dental prosthesis.	Practical demonstrations. Taking impressions, mixing plaster and cast pouring.	Students will take impressions on phantoms with teeth prepared for all types of single unit fixed dental prosthesis. They will be graded (LR).	-	4
3	Intracoronal and partial crowns: wax pattern, spruing, investing, casting, divesting, finishing, polishing.	Practical demonstrations.	Students will manufacture the wax pattern for inlays and onlays. They will be graded (LR).	-	4
4	The metallic crown.	Practical demonstration. Manufacturing wax pattern for metallic crown.	Individual waxing the pattern for metallic crown. Grading (LR).	-	4
5	The acrylic crown.	Practical demonstration. Manufacturing wax pattern for acrylic crown.	Individual waxing the pattern for acrylic crown. Grading (LR).	-	4
6	The mixed metal-polymer crowns.	Practical demonstration. Manufacturing wax pattern for acrylic veneered metallic crown.	Individual waxing the pattern for acrylic veneered metallic crown. Grading (LR).	-	4
7	The mixed metal-polymer crowns.	Practical demonstration. Manufacturing the C + B acrylic veneer, direct modeling and thermo-baro polymerization.	Individual manufacturing the C + B acrylic veneer, direct modeling and thermo-baro polymerization Grading (LR).	-	4
8	Post and cores and substitution crowns	Practical demonstration. Manufacturing wax pattern for post and core and substitution crown.	Individual waxing the pattern for post and core and substitution crown. Grading (LR).	-	4
9	The full ceramic and porcelain fused to metal crowns.	Multimedia presentation of technologies for manufacturing all-ceramic and porcelain fused to metal crowns.	Skills written in LR.	-	4
10	Technology of fixed dental prosthesis.	Practical demonstration.	Students will take impressions on partial edentulous maxillary and mandibular phantoms and will pour impressions. Grading (LR).	-	4
11	Dental bridges with different pontics for different oral topographic areas. The esthetic bridge.	Practical demonstration.	Waxing the pattern for an anterior maxillary bridge with modified ridge lap contact. Grading (LR).	-	4
12	Dental bridges with different pontics for different oral topographic areas. The acrylic veneered metallic bridge.	Practical demonstration.	Waxing the pattern for a lateral maxillary bridge with ovate contact. Grading (LR).	-	4
13	Dental bridges with different pontics for different oral topographic areas. The metallic bridge.	Dental bridges with different pontics for different oral topographic areas. The metallic bridge. Practical demonstration	Waxing the pattern for a lateral mandibular sanitary bridge. Grading (LR).	-	4
14	Revision.	Test	Seminar fixed dental prosthesis.	-	4

Bibliography

1. Bors A, Szekely M, Molnar-Varlam C, Camarasan A. : Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureș, 2022.
2. Silas Duarte Jr. Quintessence of Dental Technology 2016, Quintessence Book, 2016.
3. Molnar-Varlam C., Grozescu V., Borș A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureș, 2015.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects through two tests.	Classification based on individual test.	10
- practical activities	Manufacturing one of the steps of realizing prosthetic works, acquired during the semester.	Activity performed in the form of test and exercises during the semester.	20
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects of the course topics.	Written exam as a test at UNIX platform.	50
- practical final exam	Manufacturing one of the steps of realizing prosthetic works, acquired during the semester and one question from the semester material.	Practical exam.	20
Minimal performance standards: Obtaining the minimum mark of 5 (five) for each component of the assessment: to know the basics of technology of dental prostheses, not more than 20% unjustified absences and recovered from practical work, to realize the phases of work of basic technical stages.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	Marti 14-15

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Preventive dentistry (2)			
2.2 Course coordinator: Șef l dr Bechir Farah			
2.3 Practical activities coordinator(s): Șef l dr Bechir Farah			
2.4 Year of study: III	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 15		
- tutorial activities: 10		
- examinations: 6		
- other activities: 15		
3.8 Total hours of individual study: 66		
3.9 Total hours: 150		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: multimedia equipment
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The student must be able to know the different techniques of professional hygiene and supra- and subgingival scaling as well as the techniques of sealing pits and fissures.
6.2 transversal competencies: The student must know the rules of occupational safety, the risks of possible nosocomial infections and develop the ability to work in a team with colleagues, doctors and nurses.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:

Introduction of basic notions of general and organic chemistry
7.2 Specific objectives: Selection of notions from the vast field of organic chemistry that interest the doctor and with direct applicability in understanding physiological processes involving biochemical transformations in the body, or pathological by the influence of internal or external factors on the metabolism

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Dental calculus: definition, classification, structure	Oral and multimedia presentation	no	no	2
2	Dental calculus: formation, attachment	Oral and multimedia presentation	no	no	2
3	Dental calculus: marginal calculus-periodontium relationship, pathogenicity	Oral and multimedia presentation	no	no	2
4	Manual supragingival scaling: instruments, techniques	Oral and multimedia presentation seminar	no	no	2
5	Manual supragingival scaling: instruments, techniques	Oral and multimedia presentation	no	no	2
6	Sonic and ultrasonic scaling: general principles, indications and contraindications	Oral and multimedia presentation	no	no	2
7	Ultrasonic scaling: technique, accidents and complications	Oral and multimedia presentation	no	no	2
8	Materials for sealing pits and fissures	Oral and multimedia presentation	no	no	2
9	Sealing techniques and evaluation of sealing efficiency	Oral and multimedia presentation	no	no	2
10	Halitosis	Oral and multimedia presentation	no	no	2
11	Acid dental erosion	Oral and multimedia presentation	no	no	2
12	Prophylaxis of malignancies with oral localization	Oral and multimedia presentation	no	no	2
13	Reversible carious lesions	Oral and multimedia presentation	no	no	2
14	Dentinal hypersensitivity. Prevention and treatment	Oral and multimedia presentation	no	no	2

Bibliography

1. Clinical Periodontology; Carranza, 9th Edition, 2002
2. Primary Preventive Dentistry; Norman O. Harris, 8th Edition, 2009
3. Course notes
4. Concepts in Preventive Dentistry; Tohati A., Bechir F., 2019

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Demonstration of the manual supragingival scaling technique	Practical demonstrations	-	-	4
2	Demonstration of the manual supragingival scaling technique	Practical demonstrations	-	-	4
3	Performing manual scaling on patients	Practical demonstrations	-	-	4
4	Performing manual scaling on patients	Practical demonstrations	-	-	4
5	Demonstration of the ultrasonic scaling technique	Practical demonstrations	-	-	4
6	Performing the ultrasonic scaling technique on patients	Practical demonstrations	-	-	4
7	Performing the ultrasonic scaling technique on patients	CBL session	-	-	4
8	Performing the ultrasonic scaling technique on patients	Practical demonstrations	-	-	4
9	Performing the ultrasonic scaling technique on patients	Practical demonstrations	-	-	4
10	Performing the ultrasonic scaling technique on patients	Practical demonstrations	-	-	4

11	Demonstration of sealing techniques	Practical demonstrations	-	-	4
12	Performing sealing on patients	Practical demonstrations	-	-	4
13	Performing sealing on patients	Practical demonstrations	-	-	4
14	Performing a complete oral prophylaxis session on the patient	Practical demonstrations	-	-	4

Bibliography
Concepts in Preventive Dentistry; Tohati A., Bechir F., 2019
Primary Preventive Dentistry; Norman O. Harris, 8th Edition, 2009

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Fundamentals of chemistry is the basis for understanding the nuances of advanced medical biochemistry

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	tests	single/multiple choice	15
- practical activities	practical activities	quiz	15
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects withinthe course topic.	Multiple choice quiz	50
- practical final exam	Knowledge of the theoretical and practical aspects within the topic of practical works.	performing practical procedures	20

Minimal performance standards:
Obtaining a minimum grade of 5 (five); patient's file;professional dental cleaning

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Bechir Farah	Monday 10-11

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Occlusology			
2.2 Course coordinator: Conf dr Biriș Carmen-Ioana			
2.3 Practical activities coordinator(s): CONF, UNIV.DR. BIRIS CARMEN IOANA			
2.4 Year of study: III	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 23		
- supplemental documentation at the library, from specialized information portals and in the field: 23		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 22		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 69		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: aplicarea cuostintelor acumulate in toate domeniile stomatologiei
6.2 transversal competencies: depistarea si diagnosticarea corecta, urmata de un plan de tratament corespunzator a afectiunilor sistemului oro-facial cu consecinte asupra intregului organism
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Identification and explanation of physical phenomena
7.2 Specific objectives: Usage of some practical methods and physical tools of medical investigation.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to the physiology of the stomatognatic system	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
2	The oro facial system(OFS), particularities and means of self-defense	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
3	Esentials functions of SOF	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
4	Anthropometric points and plans	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
5	Determinants of occlusion	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
6	The anterior determinant of occlusion(dental)	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
7	The posterior determinant of occlusion(articular). The temporo mandibular joint(TMJ)- components	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
8	The neuromuscular functional determinant. Masticatory muscles	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
9	References positions of the mandible(Rest position, Maximum intercuspation, Centric Relation)	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
10	test	-	-	-	2
11	Mandibular Kinematic. Analysis of mandibular movements in sagittal,transversal,frontal planes. Functional occlusion	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
12	Occlusal concepts and theories. Gnathological aspects in prosthetic treatment	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
13	Principles and types of articulators and cast holders. Face bows and jaw registration	lecture, systematic and interactive display of information, conversation,power point presentation	-	-	2
14	test	-	-	-	2
Bibliography Occlusion in Prosthodontic; Carmen Ioana Biris, Diana Cerghizan, Janosi Kinga Maria					

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Presentation of the discipline, of the dental equipment. Training on occupational safety in the dental office. Introductory notions of patient examination.	Presentation	-	-	2
2	2 Impression of dental arches. Casting models.	Presentation	-	-	2

3	3 Impression of dental arches. Casting models.	Presentation	-	-	2
4	Static examination of the occlusion in the three planes. Occlusion curves.	CBL. Study model analysis	-	-	2
5	Static examination of the occlusion in the three planes. Occlusion curves.	Study model analysis	-	-	2
6	Clinical examination in occlusology. Case presentation.	Presentation and practical applications.	-	-	2
7	Clinical examination of the musculoskeletal system of the oro-facial system (OFS).	Practical application.	-	-	2
8	Clinical examination of the temporomandibular joint (TMJ)	Practical application.	-	-	2
9	Clinical examination of the fundamental positions of the mandible. Resting position, centric relationship (CR) and maximum intercuspation (MI). The landmarks of point-centric, long-centric and freedom in centric.	CBL. Practical application.	-	-	2
10	Clinical examination of mandibular kinematics in the three spatial planes (sagittal, transversal, horizontal). Recording of the intermaxillary relations with the help of the facial bow.	Practical application.	-	-	2
11	Clinical examination of mandibular kinematics in the three spatial planes (sagittal, transversal, horizontal). Recording of the intermaxillary relations with the help of the facial bow.	Practical application.	-	-	2
12	Mounting the models in the articulator.	Practical application.	-	-	2
13	Occlusal rebalancing therapy by selective grinding.	CBL. Practical application.	-	-	2
14	Occlusal rebalancing therapy by selective grinding.	Practical application.	-	-	2

Bibliography
1.Okeson JP: Management of Temporomandibular Disorders and Occlusion. 7th Edition, Mosby, 2012
2.PA notes
3 Carmen Ioana Biris, Diana Cerghizan, Janosi Kinga Maria: Occlusion Prosthodontic, University Press, Tg. Mures, 2020

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Homework and home experiments	Grading of homeworks and home experiments reports.	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts.	Written/Online examination	70
- practical final exam	-	-	0
Minimal performance standards: The minimum passing grade for theoretical exam is 5/10 (five/ten)			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Biriș Carmen-Ioana	LUNI 10 -12 SALA E 09

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Restorative odontotherapy			
2.2 Course coordinator: Prof dr Monea Monica-Dana			
2.3 Practical activities coordinator(s): Sef. Lucr Dr Stoica, Sef Lucr Dr Sita, Sef Lucr Dr Ivacson			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 3		
- examinations: 3		
- other activities: 1		
3.8 Total hours of individual study: 41		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Lecture theatre with video projection, touchscreens, blackboard, whiteboard, Canvas online platform
5.2 for practical activities: Practical demonstrations rooms with Anatomage Table, anatomical models, plastinated specimens, projectors, touchscreens, blackboard, Canvas online platform

6. Specific competencies acquired

6.1 professional competencies: Academic and clinical skills: to structure and organize a course, with clear learning objectives, planning and appropriate assessments; the use of modern teaching methods; to objectively assess student performance and provide constructive feedback to improve their clinical and theoretical skills.
6.2 transversal competencies: Ethical and deontological competences: understanding and applying ethical and deontological principles in teaching and clinical practice. Ability to convey to students the importance of ethics in the relationship with patients and in dental practice.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Mastering of basic knowledge regarding the terminology and morphology of neuroanatomy and the anatomy of the head and neck.
7.2 Specific objectives: Shaping of a spatial, tridimensional representation of the human body as a whole and in its parts Knowledge of fundamental terms regarding the morphology and topography of the head and neck Knowledge of fundamental terms regarding the central and peripheral nervous systems Acquiring of certain skills and dexterities

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Simple caries. General concepts and epidemiology.	Power Point presentation	-	-	2
2	Dental hard tissue structure and carious lesion.	Power Point presentation	-	-	2
3	The role of nutrition in the parthenogenesis of dental caries.	Power Point presentation	-	-	2
4	The role of oral fluids in the parthenogenesis of caries.	Power Point presentation	-	-	2
5	The role of microorganisms in the parthenogenesis of dental caries.	Power Point presentation	-	-	2
6	High incidence dental caries and the concept of root caries.	Power Point presentation	-	-	2
7	The treatment of simple dental caries.	Power Point presentation	-	-	2
8	The morphopathology of dental caries.	Power Point presentation	-	-	2
9	Classification and the diagnosis of simple dental caries.	Power Point presentation	-	-	2
10	The treatment of the dentinal wound.	Power Point presentation	-	-	2
11	Pain management during tooth caries treatment.	Power Point presentation	-	-	2
12	Secondary caries and the concept of caries recurrence.	Power Point presentation	-	-	2
13	Principles of dental cavity preparation.	Power Point presentation	-	-	2
14	Relative and absolute teeth isolation.	Power Point presentation	-	-	2

Bibliography
1. Sturdevant's Art and Science of Operative Dentistry. 6th Edition

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Dental examination instruments and dental burrs	Practical demonstration	-	-	4
2	Principles of dental cavity preparation	Practical demonstration	-	-	4
3	Class I cavity preparation	Practical demonstration	-	-	4
4	Class II cavity preparation	Practical demonstration	-	-	4
5	Class III cavity preparation	Practical demonstration	CBL1	-	4
6	Class IV cavity preparation	Practical demonstration	-	-	4
7	Class V cavity preparation	Practical demonstration	CBL2	-	4
8	Class VI cavity preparation	Practical demonstration	-	-	4
9	Review of principles of dental cavity preparation	Practical demonstration	-	-	4
10	Teeth separation	Practical demonstration	-	-	4
11	Teeth isolation (relative and absolute)	Practical demonstration	-	-	4
12	Dental matrix systems.	Practical demonstration	-	-	4
13	Direct and indirect pulp capping procedures	Practical demonstration	-	-	4
14	Bio active base filling materials	Practical demonstration	-	-	4

Bibliography
1. Sturdevant's Art and Science of Operative Dentistry. 6th Edition

9. Correlations between the contents of the discipline and the expectations of the community

representatives, professional associations and representative employers in the domain

Applicability of the lectures and practical activities for obtaining for higher skills and qualification

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	written essay - oral debate	CB1 - CBL2	30
Final evaluation			
- theoretical final exam	Multiple choice test, open questions or clinical case studies.	Multiple choice Unix Exam	50
- practical final exam	Demonstration of techniques on models (phantom).	Practical exam	20
Minimal performance standards: The minimum performance standard is grade 5			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Monea Monica-Dana	Luni 10-12:00, Joi 11-13:00

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Technology of dental prostheses (2)			
2.2 Course coordinator: Șef l dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): Bors Andrea Izabella			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 25		
- supplemental documentation at the library, from specialized information portals and in the field: 22		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 5		
- examinations: 4		
- other activities: 0		
3.8 Total hours of individual study: 66		
3.9 Total hours: 150		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Lecture hall equipped with multimedia equipment
5.2 for practical activities: Specific dental laboratory, working tables, instruments, equipment and various dental materials necessary for the working stages in manufacturing dental prostheses.

6. Specific competencies acquired

6.1 professional competencies: -Acquiring theoretical and practical knowledge using their own experiences in the process of achieving the technologies used in current practice for manufacturing the mobile and mobilized dental prostheses. - Acquiring theoretical and practical knowledge regarding the achievement of dental prostheses through various technologies and the appropriate use of the dental materials in this process. -Students, these future doctors, must know thoroughly and accurately all stages of manufacturing the partial and complete removable dentures, both, the clinical and laboratory phases, therefore they will be able to conceive a correct design of these restorations.
6.2 transversal competencies: -The dentist's supporting team aids in providing oral health services: the students will understand the need for proper and orderly communication with both, dental technicians and dentist or teacher. -The complexity of prosthodontics as well as the scientific and technological progress, makes the field of technology of dental prostheses absolutely necessary to be studied separately, in order to remain an well-defined discipline. -Marketing and the dental laboratory management through the knowledge of equipping, techniques, classical and

modern technologies it will help to achieve appropriate dental prosthesis.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The students will acquire the knowledge on specific technological procedures performed in dental laboratory to achieve dental prostheses in view of prosthetic restorations (C4).

7.2 Specific objectives:
-Acquiring theoretical and practical knowledge on the procedures and sequencing for obtaining prosthetic works.
-Acquiring the ability to conceive mobile and mobilized restorations.
-Acquiring basic skills to perform or correct the laboratory phases in the manufacture of dental prostheses.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Mobile dentures: definitions, basic concepts, classifications, manufacturing technologies.	Oral and multimedia presentation.	Two hours course in english.	-	2
2	Complete denture: technology and manufacturing phases.	Oral and multimedia presentation.	Two hours course in english.	-	2
3	Complete denture manufacturing steps: the primary impression and the primary cast.	Oral and multimedia presentation.	Two hours course in english.	-	2
4	Complete denture manufacturing steps: the special tray.	Oral and multimedia presentation.	Two hours course in english.	-	2
5	Complete denture manufacturing steps: the functional impression and master cast.	Oral and multimedia presentation.	Two hours course in english.	-	2
6	Complete denture manufacturing steps: the occlusion rim.	Oral and multimedia presentation.	Two hours course in english.	-	2
7	Complete denture manufacturing steps: wax-up and packing methods.	Oral and multimedia presentation.	Two hours course in english.	-	2
8	Achieving acrylic based complete denture in practice. Modern technologies.	Oral and multimedia presentation.	Two hours course in english.	-	2
9	Relining, rebasing and optimising complete dentures.	Oral and multimedia presentation.	Two hours course in english.	-	2
10	Removable partial dentures: definitions, basic concepts, classifications, manufacturing technologies.	Oral and multimedia presentation.	Two hours course in english.	-	2
11	The technology of manufacturing acrylic based removable partial dentures.	Oral and multimedia presentation.	Two hours course in english.	-	2
12	The technology of manufacturing metal framed removable partial dentures.	Oral and multimedia presentation.	Two hours course in english.	-	2
13	Stability, support and maintenance systems for removable partial dentures.	Oral and multimedia presentation.	Two hours course in english.	-	2
14	Modern technologies of manufacturing and optimizing removable partial dentures.	Oral and multimedia presentation.	Two hours course in english.	-	2

Bibliography
1. Bors A, Szekely M, Molnar-Varlam C, Camarasan A.: Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureș, 2022.
2. Molnar-Varlam C., Grozescu V., Borș A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureș, 2015.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The technology of complete dentures. The impression and the primary cast.	Practical demonstration, complete edentulous phantom impressions and pouring casts.	Students will take impressions on edentulous phantoms and will pour primary casts. Grading (LR).	-	4
2	The technology of complete dentures. Manufacturing shellac base special tray	Practical demonstration, upper and lower shellac special tray.	Manufacturing shellac special tray. Grading (LR).	-	4

3	The technology of complete dentures. Manufacturing self curing acrylic special tray	Practical demonstration, self curing acrylic special tray.	Manufacturing self curing acrylic special tray. Grading (LR).	-	4
4	The technology of complete dentures. Manufacturing occlusion rims.	Practical demonstration, occlusion rims.	Manufacturing occlusion rims. Grading (LR).	-	4
5	The technology of complete dentures. Evaluation of acquired information.	Practical demonstration, mounting casts in articulator.	Mounting casts in articulator. Grading (LR).	-	4
6	The technology of complete dentures: modeling wax pattern, mounting teeth, denture processing.	Practical demonstration, modeling wax pattern, mounting teeth, denture processing.	Modeling wax pattern, mounting teeth for complete dentures.. Grading (LR).	-	4
7	The technology of complete dentures. Denture processing for acrylic based complete dentures.	Practical demonstration . for acrylic based complete denture processing.	Multimedia presentation of the clinical and technological stages steps in manufacturing complete dentures. (LR).	-	4
8	The technology of acrylic based removable partial dentures.	Practical demonstration, partial edentulous phantom impressions and pouring casts.	Partial edentulous phantom impressions and pouring casts. Grading (LR).	-	4
9	The technology of acrylic based removable partial dentures.	Practical demonstration, wax pattern for acrylic based removable partial denture, including wired clasps.	Modeling wax pattern for acrylic based removable partial denture. Grading (LR)	-	4
10	Modern technologies in manufacturing acrylic based removable partial dentures. Evaluation of acquired information through test.	Educational video.	Grading, seminar(LR).	-	4
11	The technology of metallic framed removable partial dentures (Skeletal RPD).	Practical demonstration with manufacturing metallic based removable partial dentures.	Written skills in LR.	-	4
12	The technology of metallic framed removable partial dentures (Skeletal RPD).	Practical demonstration, manufacturing wax pattern for metallic based removable partial dentures with preformed wax elements.	Manufacturing wax pattern for metallic framed removable partial dentures using preformed wax elements . Grading (LR).	-	4
13	The technology of metallic framed removable partial dentures (Skeletal RPD).	Multimedia presentation about modern technologies in manufacturing RPDs.	Written skills in LR.	-	4
14	Review, recovering. Evaluation of acquired knowledge.	Oral and individual test.	Seminar RPDs. Grading (LR).	-	4

Bibliography

1. Bors A, Szekely M, Molnar-Varlam C, Camarasan A.: Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureș, 2022.
2. Molnar-Varlam C., Grozescu V., Borș A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureș, 2015.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects through two tests.	Classification based on individual test.	10
- practical activities	Manufacturing one of the steps of realizing prosthetic works, acquired during the semester.	Activity performed in the form of test and exercises during the semester.	20

Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects of the course topics.	Written exam as a test.	40
- practical final exam	Manufacturing one of the steps of realizing prosthetic works, acquired during the semester and one question from the semester material.	Practical exam	30
Minimal performance standards: Obtaining the minimum mark of 5 (five) for each component of the assessment: to know the basics of technology of dental prostheses, not more than 20% unjustified absences and recovered from practical work, to realize the phases of work of basic technical stages.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Borș Andrea-Izabella	Marti 14-15

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Methodology of scientific research			
2.2 Course coordinator: Asist dr Răchită Anca			
2.3 Practical activities coordinator(s): Dr. Răchită Anca			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The student will need to know the main stages of evaluation and initiation of a specialized study The student must be able to interpret the quality of a study / published scientific article The student must be able to apply the knowledge gained in community practice, in initiating and conducting a community study, in dissemination of the obtained results and to assist local and national strategic programs
6.2 transversal competencies: Oral and written communication skills with knowledge of the scientific oral presentation rules and the undergraduate thesis / PhD thesis structure To respect the professional ethics by following the mandatory protocols used in medical research
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Scientific research has a big influence in university area. Applying the scientific research principles in medical area is a necessity given the structure of such University – 6 years with the possibility of admission to a PhD program. The essence of this course is the elaboration of an undergraduate thesis at the end of the studies.
7.2 Specific objectives: Introduce students to techniques of clinical and epidemiological studies. Learning required protocols to follow in medical research. Methodology of the medical research studies. Presentation of results and conclusions in writing (article) and oral (presentation rules).

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in Methodology of medical scientificresearch-History, Generalities, Strategies and planning aresearch study	Oral, PowerPoint presentation	-	Immunisation	2
2	Steps of a research study: Study population and sample and Types and methods of data collection	Oral, PowerPoint presentation	-	Oedema, Bone malignancy	2
3	Steps of a research study: Research studies (descriptive studies)	Oral, PowerPoint presentation	-	Infant feeding	2
4	Steps of a research study: Research studies (Analytical studies, Randomized clinical study, Screening and diagnostic tests)	Oral, PowerPoint presentation	-	Malformations of lip/ palate	2
5	Steps of a research study: Data analysis and Displaying results	Oral, PowerPoint presentation	-	Oral disorders (inlcl.Caries)	2
6	Ethics in medical research	Oral, PowerPoint presentation	-	HIV	2
7	Research project	Individual and teamwork	-	Oral disorders (inlcl.Caries)	2

Bibliography
a) Mandatory
Power point presentations
Bacârea Vladimir, Ghiga Dana, Măruşteri Marius, Oláh Péter, Petrişor Marius. A Primer in Research Methodology and Biostatistics, University Press Tg. Mureş, 2014.

b) Optional
Uwe Flick. Introducing research methodology. A beginner's guide to doing a research project. SAGE Publications Ltd, London, 2011.
Christensen LB, Burke Johnson R, Lisa A. Turner. Research Methods, Design, and Analysis. Eleventh Edition, Pearson Education, Inc., 2011.
Kumar R. Research methodology a step-by-step guide for beginners. 3rd edition, SAGE Publications Ltd,London,2011.

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Online documentation, The structure of a scientific paper (Evaluation of a scientific article)	Oral, PowerPoint presentation	-	Immunisation	2
2	Cross sectional study - generalities and exercises	Oral, PowerPoint presentation, Practical exercises (pdf and excel files)	-	Asthma	2
3	Test (cross sectional study)	Multiple choice test on computer	-	Hypertension	2
4	Cohort study - generalities and exercises	Oral, PowerPoint presentation, Practical exercises (pdf and excel files)	-	Malformations of lip/palate	2
5	Case–Control study - generalities and exercises	Oral, PowerPoint presentation, Practical exercises (pdf and excel files)	-	Malformations of lip/palate	2
6	Screening and diagnostic tests - generalities and exercises	Oral, PowerPoint presentation, Practical exercises (pdf and excel files)	-	Hypoglycaemia	2
7	Test (research studies)	Multiple choice test on computer	-	Osteoporosis	2

Bibliography
a) Mandatory bibliography:
Power-point presentations
Bacârea Vladimir, Ghiga Dana, Măruşteri Marius, Olah Peter, Petrişor Marius. A primer in research methodology and biostatistics. University Press Târgu Mureş, ISBN: 978-973-169-285-2, 2014.
b) Optional bibliography:
Uwe Flick. Introducing research methodology. A beginner's guide to doing a research project. SAGE Publications Ltd, London, 2011.
Christensen LB, Burke Johnson R, Lisa A. Turner. Research Methods, Design, and Analysis. Eleventh Edition, Pearson Education, Inc., 2011.
Kumar R. Research methodology a step-by-step guide for beginners. 3rd edition, SAGE Publications Ltd, London,2011.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Knowing the steps of a research study
Knowing how to collect patients data for use in research studies
Knowledge of undergraduate thesis structure in order to develop an undergraduate thesis and a PhD thesis

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Individual responses; Team responses; Responses motivation	Research project	10
- practical activities	Correlation between theoretical and practical notions	Multiple choice test oncomputer	20
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts	Multiple choice test	45
- practical final exam	Correlation between theoretical and practical notions	Multiple choice test on computer	25

Minimal performance standards:
Minimal performance standards:
Enunciation of the steps of a research study
Medical research study classification
Methods of result presentation
Scientific paper structure
A grade of at least 5 both in practical and in theoretical examination.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Asist dr Răchită Anca	30 minutes after each lecture

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Infectious diseases			
2.2 Course coordinator: Șef l dr Sincu-Bodnar Nina-Ioana			
2.3 Practical activities coordinator(s): Sef lucrari dr Bodnar Nina-Ioana, asist univ. drd. Manasturean Cristina, asist univ drd Fleseriu Tudor			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: None required
4.2 competency: None required

5. Conditions

5.1 for lectures: on site
5.2 for practical activities: on site

6. Specific competencies acquired

6.1 professional competencies: The course is addressed to students in the 3th year of Dental Medicine. At the end of the course, the students will acquire general knowledge about infectious diseases, will know principles of diagnosis and treatment in parenteral, nosocomial infections, infections in the oro-cervical region, systemic infections, infectious diseases with cardinal symptoms in the oral cavity, as well as peculiar features of infections in immunocompromised hosts.
6.2 transversal competencies: Integration of assimilated knowledge with the purpose of recognition and diagnosis of an infectious disease, curative and prophylactic treatment measures in emerging and reemerging infectious diseases with an impact on population health. Students should be able to manage the patients with infectious nosocomial pathology, those suffering from infectious diseases manifested in the oral cavity and with systemic repercussions or patients with transmissible infectious diseases posing epidemiologic risk. Acquiring proper communication skills towards patients with infectious diseases, and integration into multidisciplinary teams.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Knowledge regarding communicable and non-communicable infectious diseases; identification, diagnosis, treatment and preventive measures in infectious diseases.

7.2 Specific objectives:
Identifying the nosocomial character of an infection, the application and the explanation of the preventive measures in nosocomial infections. Knowing how the hepatitis viruses A, B, C, D, E, as well as HIV, are transmitted. Prescribing and interpreting virological examinations in infections with these viruses. Knowing the principles of prophylaxis and treatment.Information and counseling on the prevention and parenteral transmission of HIV. Knowledge about detecting an HIV infection in the dentist's office: specific manifestations in the oral cavity. Knowledge of the terms: systemic inflammatory response syndrome, bacteraemia, sepsis, septic shock. Emergency identification and management planning of sepsis. The role of dental focal infections in generating systemic cardiovascular and CNS manifestations and their management. Principles of etiological treatment in infectious diseases; the main classes of antimicrobial agents.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Infectious process. Classification of infectious diseases. Emerging and re-emerging infections. Particularities of prophylaxis and etiological therapy in odontogenic infections.	oral + multimedia presentation	None	PUO-pyrexia of unknown origin. Immunisation	2
2	Oro-cervical bacterial infections	oral + multimedia presentation	None	Oral disorders. Dysphagia	2
3	Oro-cervical viral and fungal infections	oral + multimedia presentation	None	Infectious diseases of childhood. Candidiasis	2
4	Systemic bacterial infections with oro-pharyngeal entry gate.	oral + multimedia presentation. MCQ assessing the knowledge acquired from the previous lectures	None	Septicaemia	2
5	HIV/AIDS infection. Oropharyngeal and facial manifestation of HIV infection.	oral + multimedia presentation	None	HIV	2
6	Acute viral hepatitis with parenteral and enteral transmission.	oral + multimedia presentation	None	Acute liver disease. Hepatomegaly. Jaundice.	2
7	Intracranial hypertension syndrome of infectious origin. Acute meningitis. Acute encephalitis.	oral + multimedia presentation	None	Meningitis. Headache. Raised intracranial pressure.	2

Bibliography
1. Georgescu AM, Tilea B, Chiriac C (sub red): Infectious diseases. University Press Tirgu Mures publishing house, 2014, 258 pg, ISBN 978-973-169-318-7
2. Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
3. Course notes

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Streptococcal infections – clinical manifestations.	case report, images from our clinical practice	None	Infectious diseases of childhood. Oral disorders. Dysphagia	1
2	Herpes-virus infections.	case report, images from our clinical practice	None	Bullous/vesicular skin eruption	1
3	Mumps - clinical manifestations and differential diagnosis challenges	case report, images from our clinical practice	None	Parotid swelling	1
4	Respiratory viral infections. Influenza. SARS-CoV-2 infection.	case report, images from our clinical practice	None	Respiratory tract infection	1

5	Diagnosis of acute pharyngitis.	case report, images from our clinical practice	None	Oral disorders	2
6	Acute viral hepatitis.	case report, images from our clinical practice	None	Acute liver disease. Hepatomegaly. Jaundice.	2
7	HIV/AIDS infection. Clinical aspects of oral cavity diseases in HIV/AIDS infections.	CBL	None	HIV	2
8	Antibiotic therapy in dental practice.	case report, images from our clinical practice	None	Drug reactions	1
9	Post-exposure prophylaxis	case report, images from our clinical practice	None	Immunisation	1
10	Nosocomial infections.	case report, images from our clinical practice	None	Acute renal disease	1
11	Infections with digestive entry gate.	case report, images from our clinical practice	None	Loose stools	1

Bibliography
1. Georgescu AM, Tilea B, Chiriac C (sub red): Infectious diseases. University Press Tirgu Mures publishing house, 2014, 258 pg, ISBN 978-973-169-318-7
2. Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
3. Course notes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- demographic and climatic changes help maintain infectious diseases up-to-date
- the appearance of emerging and reemergent diseases with particular epidemiological impact
- alarming increase in microbial resistance to antibiotics
- particularities of infectious diseases in immunocompromised hosts.
- the impact of decisions upon infectious pathology on the general well-being of the population.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Theoretical knowledge assessment (information acquired from lectures and individual study)	MCQ (multiple question test)	20
- practical activities	The ability to correctly manage a clinical case from the curriculum	CBL	10
Final evaluation			
- theoretical final exam	Acquiring theoretical knowledge regarding clinical findings, positive and differential diagnosis, therapeutic, curative and prophylactic measures regarding infectious diseases.	MCQ test – multiple choice questions	60
- practical final exam	The ability to identify the main signs and symptoms of the studied pathologies, in order to establish the investigation and treatment plan.	MCQ test – multiple choice questions	10

Minimal performance standards:
Minimum Performance Standard:
- recognizing infectious diseases
- managing an infectious disease in the dental practice

Minimum grade for passing the theoretical and practical exam, as well as the evaluations during the module is 5.
No absences are allowed at the practical activities.

CLINICAL ABILITIES
- to perform the medical history of the patient
- to perform the physical examination
- hierarchical representation of differential diagnosis lists
- enumerating and supporting the elements of positive diagnosis for the clinical conditions included in curriculum

TECHNICAL ABILITIES:
- collecting pharyngeal swab

PARACLINICAL ABILITIES:
- CBC results: interpretation
- coagulation test results: interpretation
- peripheral blood smear: interpretation
- urinalysis: interpretation

- plasma biochemistry: interpretation
- biochemical results from CSF: interpretation
- acid base balance: interpretation
- interpretation of different cultures and antibiotic sensitivity tests (blood culture, CSF, other bodily fluids)
- interpretation of serological tests
- parasite detection tests - result interpretation
THERAPEUTIC RECOMMENDATIONS
- identification of therapeutical objectives and priorities in a particular case
- to perform a correct therapeutical prescription for patients from different categories (suffering from infectious disease pathology in the oro-cervical region)
- selecting the right route of administration and optimal therapeutic form of medication in a specific case
PROPHYLAXIS
- Educating/counseling the patient for behavioral risk factors and promoting a healthy lifestyle
- Primary, secondary and tertiary prevention plan in a particular situation
COMMUNICATION
- To complete the medical history, physical examination, and medical documents of a patient
- Explaining the diagnostic and therapeutic procedures and obtaining the patient's consent
- To note the patient's daily evolution
- formulating the recommendations at discharge in verbal and written form
- oral case presentation of an infectious disease pathology in the oro-cervical region

MUST SEEN CLINICAL SITUATION LIST:
1. Oropharyngeal streptococcal infections
2. Oropharyngeal viral infections
3. Mumps
4. Influenza
5. Acute viral hepatitis
6. Oral manifestations in HIV infection
7. Acute meningitis
8. Encephalitis
9. Sepsis with oropharyngeal portal of entry

11. Must seen clinical situation list

1. Oropharyngeal streptococcal infections
2. Oropharyngeal viral infections
3. Mumps
4. Influenza
5. Acute viral hepatitis
6. Oral manifestations in HIV infection
7. Acute meningitis
8. Encephalitis
9. Sepsis with oropharyngeal portal of entry

12. Clinical / practical abilities

CLINICAL ABILITIES
- to take the patient's medical history 2.1
- to perform the physical examination 2.2
- hierarchical representation of differential diagnosis lists 2.10
- enumerating and supporting the elements of positive diagnosis included in the curriculum 2.11
TECHNICAL ABILITIES:
- collecting pharyngeal swab 3.8
PARACLINICAL ABILITIES:
- CBC - written results: interpretation 4.3
- coagulation test - written results: interpretation 4.4
- peripheral blood smear - written results: interpretation 4.6
- urinalysis – written results: interpretation 4.8
- plasma biochemistry – written results: interpretation 4.10
- biochemical tests from CSF – written results: interpretation 4.11
- acid base balance – written results: interpretation 4.12
- various cultures and antibiotic sensitivity tests (blood culture, CSF, other bodily fluids) – written results: interpretation 4.15
- serological tests – written results: interpretation 4.19
- parasite detection tests - written results: interpretation 4.21
THERAPEUTIC RECOMMENDATIONS
- identification of therapeutical objectives and priorities in a particular clinical case 6.1
- to perform a correct therapeutical prescription for various categories of patients (with infectious disease pathology in the oro-cervical region) 6.2
- selecting the right route of administering the treatment and the optimal therapeutic form of the medication in a particular clinical case 6.5
PROPHYLAXIS
- to educate / counsel the patient regarding behavior/lifestyle risk factors and how to alter these and promote a healthy lifestyle 7.1- 0

- primary, secondary and tertiary prevention plan in a particular clinical situation 7.6- 1 COMMUNICATION - To complete the medical history and physical examination in the patient's medical documents 8.1- 1 - to explain the diagnostic and therapeutic procedures and to obtain the patient's informed consent 8.2- 1 - To note the patient's daily evolution 8.3- 3 - to formulate the recommendations at discharge in verbal and written form 8.9- 1 - oral case presentation of a case of infectious disease pathology in the oro-cervical region 8.13- 1

13. Appointment timetable (for students)

Şef l dr Sincu-Bodnar Nina-Ioana	Tuesday 14-16 (2-4 p.m.)

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Prosthodontics			
2.2 Course coordinator: Șef l dr Jánosi Kinga-Mária			
2.3 Practical activities coordinator(s): Șef l dr Jánosi Kinga-Mária			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 13		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 2		
- examinations: 4		
- other activities: 0		
3.8 Total hours of individual study: 41		
3.9 Total hours: 125		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: Basic (high school) knowledge of anatomy and physiology
4.2 competency: -

5. Conditions

5.1 for lectures: Course hall, video projector, whiteboard, markers
5.2 for practical activities: Ensuring the clinical-technical conditions for performing prosthetic crowns Course hall, video projector, whiteboard, markers, simulators

6. Specific competencies acquired

6.1 professional competencies: The student must learn to restore dental lesions in terms of shape, function, and aesthetics in patients of all ages using direct and indirect prosthodontic methods. Must have the necessary knowledge and experience regarding the design and tooth preparation for different types of single-tooth restorations and elements related to dental laboratory procedures. The student must be familiar with the potentials and limitations of the various clinical and technological procedures involved in single-tooth restorations. - Interpretation of fundamental therapeutical principles for the selection of optimal prosthetic treatment through dental crowns - Elaboration of standardized data sheets to coordinate clinical data with treatment particularities, differentiated according to the nature of the pathology. - Communication between physician and patient or dental technician

6.2 transversal competencies:
Identifying achieve, workflow, deadlines, and risks that may occur
- Identify roles in a multidisciplinary team
- Apply effective relationship and work techniques within the team and in dealing with the patient. (The student must be competent in ensuring workplace safety and understand the importance of one's health and its impact on the development of one's profession. They must be competent in imposing on other colleagues the health and safety principles at work (simulation room, treatment room).
They must achieve the scientific aspects of biomaterials' use, their limits, and their effect on the environment in which they are used.
- Effective use of information resources (Be competent in recognizing one's limitations and the value of continuous study, self-improvement, and critical thinking in maintaining a high degree of professional competence.)

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The discipline addresses the problem of prosthetic treatment of patients through dental crowns (indications, contraindications, methods, and techniques)

7.2 Specific objectives:
The student's acquisition of the elements related to the clinical and therapeutic aspects of the prosthetic treatment of patients by dental crowns,
Elaborating prosthetic treatment sheets,
Mastering the methods (direct and indirect) and the techniques of prosthetic preparation of the teeth in the simulator (phantom) for the realization of various types of single-tooth restorations (full veneer crowns, dowel cores)
Communicating physician-technician, physician-patient

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General considerations of tooth preparation (biological, mechanical, prophylactic) art I	Oral and multimedia presentation	-	-	2
2	General considerations of tooth preparation (biological, mechanical, prophylactic) part II	Oral and multimedia presentation	-	-	2
3	General considerations of tooth preparation (esthetics, ergonomics).	Oral and multimedia presentation	-	-	2
4	Classification of the single-tooth restorations	assessment - test	-	-	2
5	Abutment protection. Provisional restorations.	Oral and multimedia presentation	-	-	2
6	Sulcus enlargement	Oral and multimedia presentation	-	-	2
7	Impression techniques	Oral and multimedia presentation	-	-	2
8	Interocclusal records	Oral and multimedia presentation	-	-	2
9	Try-in of the restorations	Oral and multimedia presentation	-	-	2
10	-Shade selection	Oral and multimedia presentation	-	-	2
11	Veneers	Oral and multimedia presentation	-	-	2
12	Dowel core	assessement test	-	-	2
13	Cementation of the restorations	Oral and multimedia presentation	-	-	2
14	Crown removal	Oral and multimedia presentation	-	-	2

Bibliography
Compulsory bibliography
I. Stephen F. Rosenstiel & Martin F. Land & Robert Walter: Contemporary Fixed Prosthodontics, 6th Edition, Elsevier, 2022
2. Keynotes

II. Optional bibliography

1. Shillingburg HT: Fundamentals of Fixed Prosthodontics 3rd edition, Quintessence Publishing Co. IL, 1997
2. Wiskott A: Fixed Prosthodontics. Principles and Clinics. Quintessence Publishing Co. IL, 2011

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Technical and labor protection training. Presentation of the ADEC simulation equipment. Interactive theoretical examination of the necessary instruments and phases of tooth preparation for various types of single-tooth restorations.	CBL.	-	-	4
2	Interactive theoretical examination of the necessary instruments and phases of tooth preparation for various types of single-tooth restorations.	CBL.	-	-	4
3	Interactive theoretical examination of the necessary instruments and phases of tooth preparation for various types of single-tooth restorations.	CBL.	-	-	4
4	Interactive theoretical examination of the necessary instruments and phases of tooth preparation for various types of single-tooth restorations.	CBL.	-	-	4
5	Knife-edge preparation for the cast crown - tooth 4.6	Practical activities: tooth preparation on the simulator	-	-	4
6	Chamfer preparation for cast crown - tooth 1.7	Practical activities: tooth preparation on the simulator	-	-	4
7	Shoulder preparation for Jacket ceramic crown - tooth 1.3	Practical activities: tooth preparation on the simulator	-	-	4
8	Heavy chamfer preparation for the full ceramic crown - tooth 1.2	Practical activities: tooth preparation on the simulator	-	-	4
9	Tooth preparation for the metal-ceramic crown - tooth 1.5	Practical activities: tooth preparation on the simulator	-	-	4
10	Tooth preparation for veneers - tooth 1.1	Practical activities: tooth preparation on the simulator	-	-	4
11	Tooth preparation for partial crowns / onlays - tooth 4.3	Practical activities: tooth preparation on the simulator	-	-	4
12	Tooth preparation for post and core, dowel core - tooth 4.4, 4.5	Practical activities: tooth preparation on the simulator	-	-	4
13	Clinical training regarding the impression techniques for single crown restorations	Practical activities: tooth preparation on the simulator	-	-	4
14	Recovery practical activities	Practical activities: tooth preparation on the simulator	-	-	4

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Compulsory bibliography
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2. Keynotes

II. Optional bibliography
1. Shillingburg HT: Fundamentals of Fixed Prosthodontics 3rd edition, Quintessence Publishing Co. IL, 1997
2. Wiskott A: Fixed Prosthodontics. Principles and Clinics. Quintessence Publishing Co. IL, 2011

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dento-maxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis, evolution, and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania and the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of theoretical elements and the specific clinical and technical steps of tooth preparation for different types of single-tooth restorations. Knowing the objectives of the preparation. Knowledge of working instruments. The grade obtained during the TBL sessions.	Single choice questions	15
- practical activities	Knowledge of theoretical elements and the specific clinical and technical steps of tooth preparation for different types of single-tooth restorations. Knowing the objectives of the preparation. Knowledge of working instruments and ergonomic working positions. The grade obtained during the CBL sessions.	Appreciation of the work done during the semester by giving a qualification of each preparation performed during the semester, qualification obtained at CBL sessions	15
Final evaluation			
- theoretical final exam	Following the specifics of the discipline Knowledge of the theoretical elements related to the concept of single-tooth restorations, indications, contraindications, advantages, disadvantages, the clinical and technological particularities of the single-tooth restorations	Verification-Multiple choice test	50
- practical final exam	Following the specifics of the discipline Knowledge of the specific clinical and technical steps of tooth preparation for different types of single-tooth restorations. Knowing the objectives of the preparation. Knowledge of working instruments and ergonomic working positions.	Practical verification - tooth preparation for a specific type of single-tooth restoration	20

Minimal performance standards:
Assessment during the semester:
1. Practical activities:
Fulfillment of the minimum activity scale regarding tooth preparation:
evaluation of each preparation, the minimum promotion grade 5.00.
Knowledge of the objectives of tooth preparation, acceptable preparation
Qualificatives obtained at CBL sessions.
The minimum promotion grade is 5.00 (not rounded).

2. Theoretical:
Promotion of the theoretical tests with a minimum of 5.00 (the average of the grades obtained at all the tests)

Final evaluation:
1. Practical final exam
The minimum promotion mark is 5.00 (not rounded). Students who do not promote the final practical assessment have the right to participate in the theoretical examination.
2. The final theoretical exam
Multiple choice questions with (80% from the mandatory bibliography, 20% from the course notes)
The minimum promotion mark is 5.00 (not rounded).
Non-passing one of the exams (in practice or theoretically) requires you to resume it at the next exam session.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Jánosi Kinga-Mária	3ö minutes after each lesson

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: General surgery. Anesthesia and intensive care			
2.2 Course coordinator: Șef l dr Roșca Ancuța-Noela			
2.3 Practical activities coordinator(s): sef l dr, Borz Cristian			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8	3.2 lecture: 4	3.3 practical activities: 4
3.4 Total hours in curriculum: 56	3.5 lectures: 28	3.6 practical activities: 28
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 1		
- examinations: 1		
- other activities: 1		
3.8 Total hours of individual study: 11		
3.9 Total hours: 67		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: eaching rooms equipped with video projector, PC, flipchart, or online presentations
5.2 for practical activities: Treatment rooms, outpatient hospital, patient wards, operating rooms for surgical instruments and sanitary materials, UMFST Simulation Center or online presentations

6. Specific competencies acquired

6.1 professional competencies: To identify and establish a correct diagnosis of surgical diseases.Developing and implementing adequate treatment plans (including surgery) for the identified diseases. Correct assessment of disease risks or the context of an individual /collective disease occurrence, followed by the selection and application of appropriate preventive measures. Addressing health/disease issues from the perspective of community specifics, directly related to the social, economic, and/or cultural conditions of that collectivity. Initiation and development of scientific research and/or formative in the surgical field. Fulfillment in terms of efficiency and effectiveness of managerial duties imposed by certain professional roles
6.2 transversal competencies: Development, under coordination, of projects to solve particular problems in the surgical field, with the correct assessment of the workload, available resources, the time required for completion and risks; the application of 12/7/2020 https://apps.umfst.ro/Fisdis.php?oper=Dfisa&kfis=868 https://apps.umfst.ro/Fisdis.php?oper=Dfisa&kfis=868 2/7

professional and ethical rules in this field, as well as those of safety and health at work. Carrying out works or projects, and responsibly performing tasks specific to the role in a multidisciplinary team.
Elaboration, writing, and presentation in Romanian and English of specialized works on current topics in the field of surgery, using various sources of information and tools.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Acquiring knowledge to diagnose diseases requiring surgical treatment. Understanding the main methods of surgical treatment and its physiological bases. Developing an interest in scientific research.

7.2 Specific objectives:
Recall of students' knowledge of anatomy gained in previous years and acquiring surgical anatomy data necessary for understanding surgical procedures.
Understanding the pathophysiological basis of surgical diseases.
Gaining the knowledge necessary for early recognition and diagnosis of diseases requiring surgical treatment to minimize risks of surgery and for a better late prognosis in neoplastic diseases.
Understanding the main methods of surgical treatment and its physiological basis.
Understanding the specificity of the surgical patient, the need for appropriate preoperative preparation, the operative risk, and the methods of postoperative rebalancing and support until discharge.
Information about the worldwide latest methods of surgical treatments and diagnosis
.Acquiring surgical emergency maneuvers to save patients' lives in critical situations.
Understanding the oncological principles of treatment.
Counseling students interested in a surgical career.
Developing of interest for scientific research by implying students in different kinds of research themes.
Training in communication with patients and clinical examination

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Hernias and incisional hernias	Oral + multimedia presentation, including surgical / online or onsite films	no	Abdominal pain Hernia Abdominal distension	2
2	Surgical pathology of the thyroid gland	Oral + multimedia presentation, including surgical / online or onsite films	no	Thyroid pathology Cervical node	2
3	Surgical pathology of the mammary gland	Oral + multimedia presentation, including surgical / online or onsite films	no	Breast lump Gynecomastia Carcinoma Paget's disease Adenopathy	2
4	Surgical pathology of the esophagus	Oral + multimedia presentation, including surgical / online or onsite films	no	Dysphagia Esophageal carcinoma Weight loss	2
5	Pathology of the stomach and duodenum	Oral + multimedia presentation, including surgical / online or onsite films	no	Peptic ulcer Gastric carcinoma Abdominal pain Hematemesis Anemia Vomiting Weight gain Weight loss	2
6	Surgical pathology of the colon and rectum	Oral + multimedia presentation, including surgical / online or onsite films	no	Colon and rectal carcinoma Abdominal pain Intestinal transit changes Anemia Intestinal obstruction Rectal hemorrhage	2
7	Acute appendicitis	Oral + multimedia presentation, including surgical / online or onsite films	no	Appendicitis	2
8	Ano-perineal pathology	Oral + multimedia presentation, including surgical / online or onsite films	no	Fecal incontinence Anorectal pain Intestinal transit changes Constipation Rectal hemorrhage	2
9	Surgicl pathology of gallbladder	Oral + multimedia presentation, including surgical / online or onsite films	no	Pathology of the gallbladder Abdominal pain Jaundice	2

10	Surgical pathology of the pancreas	Oral + multimedia presentation, including surgical / online or onsite films	no	Pancreatic pathology Abdominal pain Pancreatic carcinoma	2
11	Intestinal occlusion	Oral + multimedia presentation, including surgical / online or onsite films	no	Intestinal obstruction	2
12	Arterial pathology	Oral + multimedia presentation, including surgical / online or onsite films	no	Peripheral vascular disorders	2
13	Varicose veins of the lower limbs	Oral + multimedia presentation, including surgical / online or onsite films	no	Varicose veins	2
14	Chest injuries	Oral + multimedia presentation, including surgical / online or onsite films	no	Thoraco-abdominal trauma Fall trauma Aggression / violence Dyspnoea Chest pain Cyanosis Hemoptysis Pleurisy Pneumothorax	2

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2.Coros Marius et al. :Volume II - Surgical pathology, University Press Publishing House, Tg.Mures, 2015
3.Peter F. Lawrence - Essentials of General Surgery and Surgical Specialties, Sixth edition – Philadelphia: Wolters Kluwer Health, 2019
4.Schwartz's Manual of Surgery / Editor: F. Charles Brunicardi, Eleventh Edition, Publisher McGraw-Hill Medical Publishing Division, New-York, 2020

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Hernias and incisional hernias	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Abdominal pain Hernia Abdominal distension	2
2	Surgical pathology of the thyroid gland	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Thyroid pathology Cervical node	2
3	Surgical pathology of the mammary gland	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Breast nodule Gynecomastia Breast carcinoma Paget's disease Adenopathy	2
4	Surgical pathology of the esophagus	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Dysphagia Esophageal carcinoma	2
5	Pathology of the stomach and duodenum	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Peptic ulcer Gastric carcinoma Abdominal pain Hematemesis Anemia Vomiting Weight gain Weight loss	2
6	Surgical pathology of the colon and rectum	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Colon and rectal carcinoma Abdominal pain Intestinal transit changes Anemia Intestinal obstruction Rectal hemorrhage	2
7	Acute appendicitis	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Appendicitis	2
8	Ano-perineal pathology	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will	Fecal incontinence Ano-rectal pain Intestinal transit changes Constipation Rectal hemorrhage	2

			participate		
9	Surgical pathology of the gallblader	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Pathology of the gallbladder Abdominal pain Jaundice	2
10	Surgical pathology of the pancreas	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Pancreatic pathology Abdominal pain Pancreatic carcinoma	2
11	Intestinal occlusion	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Intestinal obstruction	2
12	Arterial pathology	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Peripheral vascular disorders	2
13	Varicose veins of the lower limbs	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Varicose veins	2
14	Chest injuries	Onsite clinical examination followed by case presentation Video presentations	The student will examine the patient and make an case presentation the next day in which all students will participate	Thoraco-abdominal trauma Fall trauma Aggression / violence Dyspnoea Chest pain Cyanosis Hemoptysis Pleurisy Pneumothorax	2

Bibliography

1. Coros Marius et al. :Volume II - Surgical pathology, University Press Publishing House, Tg.Mures, 2015
2. Virgil Razesu - General surgery - practical tests for exams and competitions, 2nd edition, revised and added - 1995
3.SCHWARTZ's Manual of Surgery / Editor: F. Charles Brunicardi, Eleventh Edition, Publisher McGraw-Hill Medical Publishing Division, New-York, 2020,
4.Eugen Tarcoveanu, Tehnici chirurgicale, Ediyura Polirom ,2004

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The content of the discipline is adapted to the training needs of young doctors who, upon graduation, will be able to provide general medical care to patients in the public and private health system.
Surgical diseases represent an especially important segment of human pathology with an increasing incidence. Almost any disease by its nature or its complications needs at a time a solution that involves an invasive method of surgical nature in its many variants. Surgery is spectacular, with immediate results in lifesaving and students acquire knowledge about first emergency measures even within courses and internships of surgery. All these aspects make surgical knowledge an essential component indispensable to any physician at any level of training they are. This surgical knowledge cannot be separated from another knowledge necessary to a physician. In addition to information specific for surgical treatment of diseases, students acquire, during courses of surgical pathology, other information from various fields: anatomy, pathophysiology, epidemiology, oncology, medical ethics, research, etc.. still useful regardless of the specialty they will get to practice.
All these aspects make the surgical specialty an essential specialty in the formation of highly qualified physicians, whose final aim is to save as many lives as possible and to alleviate suffering, basic aspects of labor market criteria in the medical field. Transmitting information to students about modern surgical techniques facilitates their integration into top surgical teams. Students are trained in various activities of scientific research and professional formation preparing them for and in various activities of scientific research and professional formation, preparing them for an academic career.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Evaluation is based on a score calculated according to achieving specific objectives during the surgical lectures	During the module, there will be short tests with five multiple choice questions each.	15

- practical activities	Evaluation is based on a score calculated according to achieving specific objectives during the surgical case presentation	During the module, each student will have to do a case presentation . Evaluation is made upon the quality of presentation and participation to prctical work	15
Final evaluation			
- theoretical final exam	The rating is based on the score achieved at the final theoretic test UNIX	Multiple choice grid tests that cover all topics across the syllabus. The test is given on UNIX center	40
- practical final exam	Evaluation is based on a score calculated according to achieving specific objectives in presenting the surgical case.	Clinical case presentation. The exam lasts 60 minutes (20 minutes for examination, 20 minutes for thinking, and 20 minutes for exposure)	30

Minimal performance standards:
Minimal performance standards: The minimum criteria for validating the evaluations during the semester:
• Completion of at least 80% of classes and internships
• Doing at least one surgical case presentation
The minimum conditions for admission to the final examination and the minimum specific maneuvers performed:
• Achieving passing grades (>5) both at the theoretical and the practical exams
The minimum requirements for passing the final assessment (detailed for each component of the final grade)

o At the theoretical exam, the grid test type, the passing grade must be at least 5:00 calculated with two decimals. Students who did not obtain a passing grade (score) on the test are not admitted to the final theoretical test, but they may still attend the practical exam when other conditions are met.
o The student can be admitted to the practical test if he obtained a passing grade on the test and completed at least 80% of internships. Even if the student did not obtain a passing grade on the practical test, he may be admitted to the theoretical test if he obtained a passing grade on the test.
o The minimum passing grade for the practical exam is 5:00 calculated with two decimals
o All intermediate grades (scores) will have two decimals, except the final general grade.
o To pass the final assessment, the student must obtain a general final grade of at least 5. The final score, with two decimals will be transformed in a final grade without decimals. The final score will be rounded upwards starting with the decimal X:50, and downwards from the decimal X:49.

11. Must seen clinical situation list

Abdominal wall pathology – inguinal hernia, femoral hernia, umbilical hernia, incisional hernia. Recognize and treat strangulated hernia. Diagnosis and management, including operative management of primary and
o recurrent abdominal wall hernia.
o Thyroid pathology – goiter, thyroid nodule
o Breast pathology – breast cancer, breast fibroadenoma
o Esophagus pathology – esophageal cancer, hiatal hernia
o Stomach & duodenum pathology – Upper digestive bleedings. Operative management of cases with upper digestive bleedings where endostasis has failed. Gastric cancer
o Surgery of obesity – bariatric surgery
o Small intestine pathology – small intestine occlusion
o Large bowel pathology – colorectal cancer
o Anoperineal pathology – hemorrhoids, anal fissure, fistula-in-ano
o Liver pathology – tumors of the liver
o Biliary tract pathology – gall bladder lithiasis, CBD lithiasis, mechanical jaundice
o Pancreas pathology – acute pancreatitis, cancer of the pancreas
o Intestinal occlusion – large bowel occlusion (colon cancer)
o Thoracic pathology – pleural effusion

12. Clinical / practical abilities

Achieving minimal practical skills in surgery:
o Oral communication with the patient, medical and administrative staff:
 To communicate with the patient during examinations and treatment
 To record the history and informed consent
 To make recommendations, advices, and patient education
 To explain to the patients the effects of treatment, possible side effects and the importance of timing and compliance with the treatment
 To participate in group activities and teamwork
 To orally present cases and issues
 To formulate opinions and recommendations
 To relate and effectively collaborate
 To react appropriately emotional / empathetic to the problems
o Written communication:
 To make records of clinical history and physical exam
 To record the patient's evolution
 To draft the epicrisis and medical letters
 To fill out hospital forms and records
o To make a correct clinical examination:
 To make a correct anamnesis of the adult patient

- To do a general and local clinical examination of the adult patient upon systems and organs
- To make a fair diagnosis
- To know the laboratory tests and investigations for specific diseases:
- To know the normal values of tests
- To be able to interpret and explain the lab tests
- To be able to make the difference between important and irrelevant information
- To interpret accurately and efficiently the data:
- to list and order by priority the differential diagnoses
- to list and sustain elements of positive diagnosis
- to list and discuss rare pathological conditions, but with a possible vital impact for patient
- To Identify and differentiate between emergency situations, acutizations of chronic conditions and serious chronic diseases, or with poor prognosis
- To Identify situations where a further consultation or specialized investigations are needed
- To discuss clinical cases and information / medical records with the medical team members, evaluates his work and identifies his professional and personal development needs
- Decision-making and case management:
- To critically evaluate the diagnostic and tests
- To Identify therapeutic objectives and priorities for various stages of evolution of the patient's condition
- To discuss the diagnosis, the treatment options, the response to treatment, the disease progression, and the prognosis
- To do therapeutic prescriptions correctly
- To correctly evaluate the risk / benefit of the treatment

13. Appointment timetable (for students)

Șef l dr Roșca Ancuța-Noela	vineri 8-10

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Radiology - medical imaging			
2.2 Course coordinator: Conf dr Pop Marian			
2.3 Practical activities coordinator(s): plata cu ora			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 3		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Formarea unui sistem de cunoștințe specifice domeniului radiologiei si imagisticii medicale ; Cunoașterea sistem ului de principii, metode, mijloace specifice imagisticii medicale Să fie capabil de a analiza și transpune practic, inter-disciplinar, cunoștințele teoretice acumulate la curs; Să dobândească capacitatea de a core la diversitatea cunoştinţelor dobândite pe parcursul cursului; Să fie capabil de a identific a şi utiliza noi surse de informaţie necesare pentru rezolvarea unor probleme contextualizate disciplinei parcurse. Forma rea unor preocupări pentru inovaţie şi provocarea schimbărilor, echilibru între spiritul critic şi tolerant Dezvoltarea unui comportament empatic şi a „or ientării helping" Formarea unor capacități de accesare a diverselor surse de informare în scopul documentării
6.2 transversal competencies: Organizarea de activități de corelare cantitativă și calitativă a imagisticii medicale specifice terapiei fizice și recuperării funcționale a persoanelor cu niveluri diferite de pregătire în condiții de asistență calificată, având la bază cunoștințe, competențe și abilități dobândite prin parcurgerea disciplinei de studiu Respectarea normelor de etică și deontologie profesionala având la bază cunoștințe, competențe și abilități dobândite prin parcurgerea disciplinei de studiu

Îndeplinirea în con diții de eficiență și eficacitate a sarcinilor de lucru pentru organizarea și desfășurarea activităților de corelare cantitativă și calitativă pe baza cunoștințelor, a competențelor și a abilităților dobândite prin parcurgerea disciplinei de studiu Operarea cu programe digitale documentare a și comunicarea într-o limba de circulație internațională
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: The main goal of the discipline is to foster effective communication skills for medical students and future doctors acting in different settings and with various types of patients.
7.2 Specific objectives: - Augmentation of specific communication skills that are mandatory for effective doctoring, such as active listening, non-verbal skills, verbal skills, empathy, support, partnership, cultural competence, trust, etc. - Avoidance of jargon making the information accesible to the patient.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Brief history.X-rays: mechanism of production, atomic structure, X-ray proprieties, X-ray device. Dosimetry. Protection in radiology. The rules of the radiolographic image formation , Basic notions concerning the computer tomography examination:principles, the main characteristics, scanning parameters, indications, contraindications, advantages and disadvantages. Ultrasonography: basic notions.Magnetic resonance imaging	Oral presentation, Powerpoint presentation	-	nu sunt	2
2	The radiological diagnosis of the lung lesions-congenital malformations, bronchitis, pneumonias, lung infections, occupational lung disease, tuberculosis, primary and metastatic lung tumors, pleural lesions	Oral presentation, Powerpoint presentation	-	nu sunt	2
3	Radiological diagnosis of the mediastinal and diaphragmatic lesions. Masses of anterior, middle and posterior mediastinum.Subphrenic abscess, free peritoneal air diaphragmatic hernia	Oral presentation, Powerpoint presentation	-	nu sunt	2
4	Radiological diagnosis of the cardiovascular system-investigation methods, the radiological aspects of acquired valvular lesions, pericardial lesions, congenital heart diseases,aortic aneurysms and dissection, pulmonary embolism	Oral presentation, Powerpoint presentation	-	nu sunt	2
5	Imaging of the gastro-intestinal tract-esophagus, stomach, duodenum,small and large bowel disease.Imaging of the liver, biliary tree and gall bladder, pancreas,spleen	Oral presentation, Powerpoint presentation	-	nu sunt	2
6	Genitourinary imaging : lithiasis, pyelonephritis, tumor of kidneys, congenital malformations,urinary bladder lithiasis and tumors,adrenal masses, benign prostate hyperplasia, prostate cancer, uterine fibroids, ovarian cancer	Oral presentation, Powerpoint presentation	-	nu sunt	2
7	musculoskeletal imaging: radiological semeiology, trauma,infections, bone dystrophies,arthropathies, bone tumors, spine disorders	Oral presentation, Powerpoint presentation	-	nu sunt	2
Bibliography ESR eBook for Undergraduate Education in Radiology https://www.myesr.org/education/ebook-for-undergraduate-education-in-radiology/					

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	demonstration of imaging investigations: Xray, CT scan, ultrasound, MR scan	demonstration	nu sunt	nu sunt	2

2	respiratory pathology	case discussion from laboratory archive	nu sunt	chronic lung disease, respiratory tract infections, pleural effusion chronic bronchitis and emphysema, carcinoma of the bronchus	2
3	imaging o mediastinum and diaphragm	case discussion from laboratory archive	nu sunt	disphagia, chest pain	2
4	imaging of cardiovascular system	case discussion from laboratory archive	nu sunt	cardiac valvular disease, Pericardial disease Malformations of cardiovascular system,aortic aneurysm, pulmonary embolism	2
5	imaging of gastro-intestinal tract, liver and biliary tree, pancreas, spleen	case discussion from laboratory archive	nu sunt	inflammatory bowel disease, intestinal obstruction,peptic ulcer, carcinoma of the oesophagus, carcinoma of the stomach, carcinoma of the colon and rectum,hepatomegaly, jaundice, gall bladder disease, carcinoma of the pancreas	2
6	imaging of genito-urinary diseases	case discussion from laboratory archive	nu sunt	urinary tract infection, urinary tract obstruction, carcinoma of the uterus/cervix/ovary	2
7	musculo-skeletal imaging	case discussion from laboratory archive	nu sunt	trauma to limbs, osteomyelitis, osteoporosis osteoarthrosis,malignant bone tumors	2
Bibliography Course support in electronic format.					

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Through the aquisition of this discipline's content, students accumulate the basic knowledge and skills to effectively communicate with future patients and other health professionals.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	insusire notiuni teoretice	TBL	10
- practical activities	prezentare caz practic	CBL	20
Final evaluation			
- theoretical final exam	insusire notiuni de baza teoretice	test grila	50
- practical final exam	recunoastere tip investigatie, descriere, formulare diagnostic pozitiv si diferential	diagnostic pozitiv si diferential examinare cazuri din arhiva laboratorului	20
Minimal performance standards: Minimal performance standards: Recunoasterea tipului unei examinari imagistice (radiografie, computertomografie, imagine rm) scintigrafie, ecografie), corelatia intre tipul de imagine si procesul patologic, diferentierea intre mai multe afectiuni cu imagistica asemanatoare.Evaluarea cu calificativ minim promovabil a nivelului de cunoștințe, competențe profesionale și abilități practice conform specificului disciplinei.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Pop Marian	Monday 19-20

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dermatovenerology			
2.2 Course coordinator: Șef l dr Badea Mihail-Alexandru			
2.3 Practical activities coordinator(s): Șef l dr Badea Mihail-Alexandru			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 3		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 4		
- examinations: 4		
- other activities: 3		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -Anatomy, histology
4.2 competency: -

5. Conditions

5.1 for lectures: PPT materials, on line platform
5.2 for practical activities: Clinical cases

6. Specific competencies acquired

6.1 professional competencies: Carrying out the anamnesis, the complete clinical examination in dermatology, - Performing basic diagnostic procedures the patient with dermatological disorders - Formulation of a positive and differential diagnosis in dermatology - Realization of an individualized therapeutic plan for the patient with dermatological and venereal diseases - Presentation of a clinical case of dermatology - Requesting appropriate complementary examinations in pathology
6.2 transversal competencies: - Acquiring both oral and written communication skills with the patient with dermatological and venerological diseases - Realization of a work / project, executing responsibly role-specific tasks in a team - Realization of projects under coordination, for solving some problems specific to the Dermatology Field, with the correct evaluation of workload, available resources, time required completion and risks, in conditions of application of deontological norms and professional ethics in the field, as well as security and occupational health

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Deepening basic knowledge in dermatology and Venereology

7.2 Specific objectives:
Knowledge of the pathology specific to dermatology and venereology: dermatological semiology, skin infections, allergic dermatoses, dermatological oncology and notions of dermatological therapy

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Local dermatological examination - Examination cutaneous organ. Rash examination: elementary lesions, distribution of lesions,lesion morphology - size, color,consistency, configuration, edges, surface.Examination of mucous membranes, hair and nails.Subjective symptoms. Installation history symptoms. The evolution of the eruption	Oral presentation, Powerpoint presentation	None	bullous / vesicular eruption, pathologies of oral cavity, pruritus, leukorrhea, adenopathy, edema	2
2	Viral skin infections - Warts. Genital warts Skin infections caused by herpesviruses. Moluscum contagios.Pityriasis rosea Skin mycosis - Dermatophytosis. Candidiasis Bacterial skin Infections Dermatoses caused by animal parasites :Scabies, Pediculosis Mycobacterial infections: Typical and atypical cutaneous tuberculosis	Oral presentation, Powerpoint presentation	None	sexually transmited disorders, pathologies of oral cavity, pruritus, leukorrhea, pruritus, leukorrhea, adenopathy, edema	2
3	Allergic dermatoses - Eczema. Urticaria. Ide reaction. Itching. Stasis dermatitis. Vasculitis. Chronic venous insufficiency. Chronic leg ulcer .Erythema nodosum Henoch-Schonlein purpura Connective tissue diseases - Lupus erythematous. Scleroderma. Dermatomyositis. Mixed connective tissue diseases	Oral presentation, Powerpoint presentation	None	edema, pruritus, bullous / vesicular eruption,skin ulcers, edema, bullous / vesicular eruption, pathologies of oral cavity, pruritus, leukorrhea, adenopathy,	2
4	Bullous dermatoses - Pemphigus, Herpetiform dermatitis. Herpes gestations. Pemphigoid bulos. Epidermolysis bullousa. Skin porphyria Lyell syndrome. Polymorphous erythema. Papulo-squamous diseases - Lichen planus. Psoriasis. Diseases of the sebaceous glands - Acne. rosacea	Oral presentation, Powerpoint presentation	None	bullous / vesicular eruption, pathologies of oral cavity, edema, pruritus, bullous / vesicular eruption, psoriasis, acne	2
5	Benign skin tumors. Dermatoses precancerous - Seborrheic warts. Keratoacanthoma. Sebaceous adenomas. Jokes. Molluscum pendulum. Hemangiomas. Lymphangiomas. Lipoame. Nevii. Melanoza Dubreuilh. Bowen's disease. Paget's disease Xeroderma pigmentosum Malignant skin tumors - Epitheliomas basal cell carcinoma. Squamos cell carcinoma. Melanoma. Other skin tumors: Kaposi's sarcoma, Dermatofibro-sarcoma, skin lymphomas.	Oral presentation, Powerpoint presentation	None	adenopathy, edema, skin cancers, skin ulcers adenopathy, edema, skin cancers, skin ulcers	2
6	Sexually transmitted diseases: Generalities. Pathogens. Syphilis - Syphilis primary. Secondary syphilis. Tertiary syphilis. Congenital syphilis. Serology. Treatment. Other sexually transmitted diseases- Urethritis	Oral presentation, Powerpoint presentation	None	sexually transmited disorders, pathologies of oral cavity, pruritus, leukorrhea, adenopathy, edema	2

	gonococcal and nongonococcal.Trichomoniasis. Inguinal lymphogranulomatosis. Genital infections with Chlamydia.				
7	Skin adnexal disorders: Alopecia-localized and diffuse. Nail disorders	Oral presentation, Powerpoint presentation	None	hair disorders, adenopathy, edema	2

Bibliography
Mandatory bibliography:
1. Fekete Gyula László, Fekete László, Toth Mate; Dermatology and venerology for dental students. Editura University Press, Tîrgu Mureş, 2021, 126 pg,
2. GL Fekete, L Fekete- Basic Dermatology for Medical Students, University Press, 2015
3. KUMAR & KLARK'S. Clinical Medicine. Tenth Edition
Support bibliography:
3. SH Morariu - Atlas de Dermato – Venerologie, Vol. I, University Press, 2011,
4. SH Morariu - Atlas de Dermato – Venerologie, Vol. II, University Press, 2013
5. Burgdorf, W.H.C.; Plewig, G.; Wolff, H.H.; Landthale - Braun-Falco´s Dermatology. Springer Verlag 2009

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Skin structure and functions. Differential diagnosis in dermatology	Oral and multimedia presentation	None	bullous / vesicular eruption, pathologies of oral cavity, pruritus, leukorrhea, adenopathy, edema	2
2	Paraclinical examinations in dermatology	Oral and multimedia presentation	None	skin cancers, skin ulcers, sexually transmited disorders, skin infections, candidiasis, psoriasis, acne	2
3	Topical treatment in dermatology	Oral and multimedia presentation	None	Itching, diseases of hair, skin ulcers, purpura, acne, psoriasis	2
4	Drug reactions	Oral and multimedia presentation	None	Itching, bullous / vesicular eruption, purpura, edema	2
5	Differential diagnosis related to anatomical regions	Oral and multimedia presentation	None	skin cancers, skin ulcers, sexually transmited disorders, skin infections, candidiasis, psoriasis, acne	2
6	Oral disorders Genital disorders in women Genital disorders in men	Oral and multimedia presentation	None	bullous / vesicular eruption, pathologies of oral cavity, skin cancers, skin ulcers, sexually transmited disorders, skin infections, candidiasis	2
7	Recapitulative lecture	Oral and multimedia presentation	None	Itching, diseases of hair, skin ulcers, purpura, acne, psoriasis, bullous / vesicular eruption, pathologies of oral cavity, skin cancers, skin ulcers, sexually transmited disorders, skin infections, candidiasis	2

Bibliography
Mandatory bibliography:
1. Fekete Gyula László, Fekete László, Toth Mate; Dermatology and venerology for dental students. Editura University Press, Tîrgu Mureş, 2021, 126 pg,
2.GL Fekete, L Fekete- Basic Dermatology for Medical Students, University Press, 2015
3.KUMAR & KLARK'S. Clinical Medicine. Tenth Edition
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4.SH Morariu - Atlas de Dermato – Venerologie, Vol. II, University Press, 2013
5.Burgdorf, W.H.C.; Plewig, G.; Wolff, H.H.; Landthale - Braun-Falco´s Dermatology. Springer Verlag 2009

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

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10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			

- lecture	Formative assesment. Knowledge assesment. Participation in the 1 TBL session is mandatory. The absenceof the TBL session must be motivated according to the discipline regulation.	TBL	15
- practical activities	Assesment of practical knowledge acquired during the semester- CBL	CBL	15
Final evaluation			
- theoretical final exam	Assesment of knowledge acquired during the semester.	Summativ evaluation. Final verification	60
- practical final exam	Identification of primary skin lesions	Clinical cases	10
Minimal performance standards: - carrying out the anamnesis, the complete clinical examination in dermatology, Formulation of a positive and differential diagnosis in dermatology - establishing treatment principles in dermatological diseases			

11. Must seen clinical situation list

leucoplasia, eritroplasia, squamos cell carcinoma, melanoma

12. Clinical / practical abilities

Identification of primary skin lesions

13. Appointment timetable (for students)

Şef l dr Badea Mihail-Alexandru	1 hour after the lecture

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Endodontics (1)			
2.2 Course coordinator: Șef l dr Kovács-Ivacson Andrea-Csinszka			
2.3 Practical activities coordinator(s): vacant			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 30		
- supplemental documentation at the library, from specialized information portals and in the field: 30		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 30		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 91		
3.9 Total hours: 175		
3.10 Credits: 7		

4. Prerequisites (where applicable)

4.1 curricular: No
4.2 competency: No

5. Conditions

5.1 for lectures: No
5.2 for practical activities: No

6. Specific competencies acquired

6.1 professional competencies: Acquiring knowledge related to the etiology, diagnosis and treatment of acute and chronic pulp inflammations. Knowledge of examination methods and therapeutic possibilities applicable in the case of inflammation of the dental pulp, with the objective of keeping the tooth on the arch. Familiarizing the student with different methods and materials of root obturation used in endodontic therapy, acquiring the necessary knowledge to establish the correct diagnosis and treatment plan. A special emphasis will be placed on the knowledge of iatrogenic factors and their elimination from the practical activity.
6.2 transversal competencies: Developing collaboration with other specialties within dental medicine, especially Prosthetics and Orthodontics, to solve complex cases. Knowing the implications that endodontic treatment has on the body as a whole and learning how to work in a team with specialist doctors from other medical fields. The formation of complex teams of specialists, which must also include the family doctor, in order to determine the appropriateness of endodontic treatment in sick patients.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Integrated understanding of the working mechanisms of the cardiovascular, renal and nervous systems.

7.2 Specific objectives:
To integrate the functional issues, to place the functional concepts of the organism in the context of normal functioning organism and in case of clinical pathology - the ability to understand and perform functional clinical tests.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Notions of dental pulp morphophysiology	Oral presentation	-	-	2
2	Histopathological characteristics of the dental pulp	Oral presentation	-	-	2
3	Functions of the dental pulp	Oral presentation	-	-	2
4	Ethiopathology of pulpal inflammation	Oral presentation	-	-	2
5	Anatomo-clinical forms of acute pulpal inflammations	Oral presentation	-	-	2
6	Anatomo-clinical forms of chronic pulpal inflammations	Oral presentation	-	-	2
7	Dentinal hypersenzitvity and hyperestesia	Oral presentation	-	-	2
8	Participation of immune mechanisms in pulpo-periapical pathology	Oral presentation	-	-	2
9	Treatment of acute pulpal inflammations	Oral presentation	-	-	2
10	Treatment of chronic pulpal inflammations	Oral presentation	-	-	2
11	Biological methods of preservation of the dental pulp	Oral presentation	-	-	2
12	Methods of partial preservation of pulp tissue	Oral presentation	-	-	2
13	Internal anatomy of teeth	Oral presentation	-	-	2
14	Vital and non-vital pulp extirpation	Oral presentation	-	-	2

Bibliography
Arnaldo Castellucci: endodontics, vol 1 and vol 2

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Use of examination tools	Clinical activity	-	-	4
2	Completing the treatment sheet, identifying carious lesions	Clinical activity	-	-	4
3	Diagnostic methodology in simple caries	Clinical activity	-	-	4
4	Cavity preparation in case of simple carious lesions	Clinical activity	-	-	4
5	Diagnostic methodology in case of complicated caries	Clinical activity	-	-	4
6	Cavity preparation in case of complicated carious lesions	Clinical activity	-	-	4
7	Cavity preparation in case of complicated carious lesions	Clinical activity	-	-	4
8	Cavity preparation in case of complicated carious lesions	Clinical activity	-	-	4

9	Cavity preparation in case of complicated carious lesions	Clinical activity	-	-	4
10	Complementary examination methods	Clinical activity	-	-	4
11	Complementary examination methods	Clinical activity	-	-	4
12	Absolute isolation- the usage of rubber dam	Clinical activity	-	-	4
13	Indirect pulp capping	Clinical activity	-	-	4
14	Direct pulp capping	Clinical activity	-	-	4

Bibliography

1. Monica Monea, Pop Mihai: Odontoterapie și elemente de estetică dentară, curs litografiat, UMF Tg. Mures, 2015.
2. Iliescu A.: Tratat de endodonție, vol.I, Ed. Medicală, Bucureşti, 2014.
3. Iliescu A., Gafar M.: Cariologie și odontoterapie restauratoare, Ed. Medicală, București, 2003.
4. Odontologie. Îndreptar de lucrări practice, Litografia UMF Tg. Mureş, 2004.
- - -
5. Pop Mihai, Monea Monica, Kovács Mónika, Buka Imola, Bukhari Csilla, Ivácson Csinszka: Alapfogalmak Endodonciában, Ed. University Press, UMF Tg. Mures, 2015.
6. Fazekas Árpád: Megtartó fogászat és endodoncia, Semmelweis Kiadó, Budapest, 2006.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Understanding the functioning mechanisms of the cardiovascular, renal and digestive system. Obtaining the necessary skills for ECG recording and interpretation, evaluation of urine tests and neurological functional tests

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Nu e cazul	Nu e cazul	0
- practical activities	Stapanire cunostintelor preadate la stagii	CBL	30
Final evaluation			
- theoretical final exam	Stapanirea cunostintelor acumulate pe parcursul modului	Multiple choice test	50
- practical final exam	Stapanire cunostintelor preadate la stagii	Examinare orala	20

Minimal performance standards:
Minimal performance standards: For the practical exam and final theoretical test the passing grade is the grade is set to 5, which is obtained if the student attends the courses and practical works, uses correctly the specialized terminology and proves the learning of general and special physiology of the organs and systems.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Kovács-Ivacson Andrea-Csinszka	1 ora dupa fieacre curs

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Odontotherapy			
2.2 Course coordinator: Șef l dr Hănțoiu Tudor-Alexandru			
2.3 Practical activities coordinator(s): Șef l dr Hănțoiu Tudor- Alexandru			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 30		
- supplemental documentation at the library, from specialized information portals and in the field: 30		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 30		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 91		
3.9 Total hours: 175		
3.10 Credits: 7		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The student must learn the examination and diagnostic methods used for dental caries; thorough knowledge regarding the conservative treatment of dental caries and best treatment options for deep cavities, in order to preserve the vitality of dental pulp. They have to acquire theoretical and technical skills in order to use composite resins for coronal restorations. Development of complex treatment plans.
6.2 transversal competencies: Development of interdisciplinary collaboration, especially with Prosthetics and Orthodontics, in order to solve difficult cases.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Acquire of theoretical and practical knowledge regarding the etiology and treatment methods used in dental caries. The correct use of composite resins.
7.2 Specific objectives: Extensive knowledge and practical skills required for the treatment of dental caries.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General information regarding esthetic restorations	Multimedia and oral presentation	-	-	2
2	Clinical aspects important in esthetic restoration	Multimedia and oral presentation	-	-	2
3	Frequent clinical problems during esthetic restorations	Multimedia and oral presentation	-	-	2
4	Use of composite resins for class III, IV and V cavities restoration	Multimedia and oral presentation	-	-	2
5	Clinical steps in direct composite restorations for class III cavities	Multimedia and oral presentation	-	-	2
6	Clinical steps in direct composite restorations for class IV cavities	Multimedia and oral presentation	-	-	2
7	Clinical steps in direct composite restorations for class V cavities	Multimedia and oral presentation	-	-	2
8	Use of composite resins for class I, II and VI cavities restoration	Multimedia and oral presentation	-	-	2
9	Clinical steps in direct composite restorations of class I and VI micro cavities	Multimedia and oral presentation	-	-	2
10	Clinical steps in direct composite restorations of class I cavities.	Multimedia and oral presentation	-	-	2
11	Clinical steps in direct composite restorations of class II cavities	Multimedia and oral presentation	-	-	2
12	Clinical steps in direct composite restorations of large class II cavities.	Multimedia and oral presentation	-	-	2
13	Clinical evaluation of direct composite restorations	Multimedia and oral presentation	-	-	2
14	Laser in odontal treatment	Multimedia and oral presentation	-	-	2

Bibliography

1. Tudor Hănțoiu, Monica Monea. Odontotherapy, Lecture notes, UMFST, 2020.
2. Sturdevant's Art and Science of Operative Dentistry, 6th edition, Heymann HO, Swift EJ, Ritter AV, Elsevier, 2013.

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Identifying carious lesions, Filling in the clinical Chart	Multimedia presentation, clinical cases, practical demonstrations	-	-	4
2	Diagnostic methods used in dental caries	Multimedia presentation, clinical cases, practical demonstrations	-	-	4
3	Vitality testing	Clinical training	-	-	4
4	Radiographic evaluation in dental caries	Clinical training	-	-	4
5	Indirect pulp capping	CBL. Clinical training	-	-	4
6	Direct pulp capping	Clinical training	-	-	4
7	Class III and IV dental cavities treatment with composite resins	Clinical training	-	-	4
8	Class V and VI dental cavities treatment with composite resins	Clinical training	-	-	4
9	Class I and II dental cavities treatment with composite resins	Clinical training	-	-	4
10	Noncarious lesions treatment	CBL. Clinical training	-	-	4
11	Treatment of dental hypersensitivity	Clinical training	-	-	4
12	Use of magnification in odontotherapy	Clinical training	-	-	4
13	Minimal invasive treatment of early carious lesions	Clinical training	-	-	4

14	Composite resins restorations - quality evaluation	Multimedia presentation, clinical cases, practical demonstrations	-	-	4

Bibliography
Tudor Hănțoiu, Monica Monea. Odontotherapy, Lecture notes. UMFST, 2020.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	According to specific aspects of the subject CBL	According to specific aspects of the subject CBL	30
Final evaluation			
- theoretical final exam	According to specific aspects of the subject	Multiple choice questions/ written exam	50
- practical final exam	According to specific aspects of the subject	Case presentation/ written exam	20

Minimal performance standards:
Minimal performance standards:
Minimal performance standards:
Minimal grade for multiple choice test and for practical exam needs to be 5.00. The final average must be at least 4.50.
The ability to identify simple carious lesions, to reach the correct diagnosis and to apply the necessary therapeutic measures.
Minimal requirements:
- Coronal restorations of class I and II cavities (2)
- Coronal restorations of class III-V cavities (2)

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Hănțoiu Tudor-Alexandru	luni ora 13

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M3
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pediatrics			
2.2 Course coordinator: Șef l dr Chinceșan Mihaela-Ioana			
2.3 Practical activities coordinator(s): Șef l dr Chinceșan Mihaela-Ioana			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: nu este cazul
4.2 competency: nu este cazul

5. Conditions

5.1 for lectures: nu este cazul
5.2 for practical activities: nu este cazul

6. Specific competencies acquired

6.1 professional competencies: Recognition of clinical signs specific to the child with the pathology presented in the course curriculum Performing diagnostic and therapeutic maneuvers for the diseases listed in the curriculum Interpretation of appropriate complementary examinations in pediatric pathology Achieving a personalized therapeutic plan for the child Presentation of a clinical case of pediatrics
6.2 transversal competencies: Acquiring oral and written communication skills with both the mother and the pediatric patient Making a project, performing with responsibility tasks specific to a team Making projects under coordination to solve specific problems in the pediatric field, with the correct assessment of the workload, the available resources, the time needed for completion and the risks, in the conditions of the deontological norms and the professional ethics in the field, as well as the safety and health at work.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches.

Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The knowledge of basic pediatrics care.

7.2 Specific objectives:
The known of specific pediatric pathology: neonatology, pneumology, gastroenterology, hematology and pediatric oncology.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	CHILD CARE NOTIONS: describing the childhood periods. Growth and development: weight and height growth, perimeters, teething, psychical and motor development, methods for assessing the growth.Assessing the nutritional status - eutrophic, normotrophic, paratrophic, dystrophic child. Primary prophylaxis; Nutrition	Oral presentation + multimedia	nu	normal child development, weight gain, malnutrition , weight gain, infant feeding, immunisation	2
2	THE NEWBORN: neonatal period, evaluation of the gestational age, the newborn's classification, the newborn's assessment at birth.The newborn at term – morphological particularities, the newborn's physiological crises	Oral presentation + multimedia	nu	normal pregnancy and deliver, normal child development, jaundice	2
3	THE PATHOLOGY OF THE RESPIRATORY SYSTEM: Upper airways infections: Acute rhinopharyngitis – definition, etiology, clinical picture, evolution and treatment; Acute pharyngitis- definition, etiology, symptomatology, laboratory, complications, treatment; Low airways infections: Acute laryngitis, Epiglotitis, Acute bronchiolitis, Asthma, Pneumonia- definitions, general symptomatology, treatment	Oral presentation + multimedia	nu	oral disorders (incl. caries), dysphagia respiratory tract infection, breathlessness, Stridor, cyanosis, asthma, acid based disturbance	2
4	DISORDERS OF THE DIGESTIVE TRACT: Acute diarrhea, acute dehydration syndrome, acute gastritis and peptic ulcer in child. INFANT'S DEFICIENCY DISORDERS: RICKETS- classification, etiology, clinical picture, imagistic investigations, diagnosis, treatment, prophylaxis, evolution and prognosis	Oral presentation + multimedia	Theoretical evaluation	abdominal pain; loose stools; vomiting; peptic ulcer; disorders of calcium and vitamin D metabolism	2
5	THE PATHOLOGY OF THE CARDIOVASCULAR SYSTEM – Congenital cardiac malformations: etiology, the anamnesis of the child with congenital cardiac pathology, clinical exam, paraclinical investigations, classification of congenital cardiac malformations.Congestive cardiac failure: definition, etiology, clinical picture, signs and symptoms, treatment; Infectious endocarditis- definition, prophylaxis, risk groups	Oral presentation + multimedia	nu	cyanosis, breathlessness,oedema ; malformations of cardiovascular system; hepatomegaly,endocarditis	2
6	HEMATOLOGICAL PATHOLOGY - Anemias- Iron deficiency anemia- definition, etiology, clinical picture, laboratory, prophylactic and curative treatment; Leukemias- definition, etiology, classification, laboratory, treatment, prognosis. Hemorrhagic diatheses- classification of hemorrhagic syndromes, clinical picture; Hemophilia- definition, classification, clinical picture, laboratory, treatment; Platelets disorders: Purpura Schonlein- Henoch purpura, Immune thrombocytopenic purpura- definition, etiology, clinical manifestations, classification, laboratory, treatment, evolution and	Oral presentation + multimedia	nu	anemia; lymphadenopathy; splenomegaly; lymphoproliferative disorders; purpura; coagulation disease	2

	prognosis.				
7	THE PATHOLOGY OF THE RENO-URINARY SYSTEM: urinary tract infections- definition, etiology, pathogeny, symptomatology, laboratory, treatment, evolution, prognosis; Post-streptococcal acute diffuse glomerulonephritis- definition, etiology, physiopathology, clinical picture, laboratory, diagnosis, treatment, prophylaxis; nephrotic syndrome- definition, classification; Idiopathic nephrotic syndrome- definition, etiology, pathogeny, symptomatology, laboratory, complications, diagnosis, treatment. THE PATHOLOGY OF THE CENTRAL NERVOUS SYSTEM: Febrile seizures- definition, etiology, pathophysiology, clinical picture, laboratory, diagnosis, treatment, prophylaxis	Oral presentation + multimedia	nu	dysuria, haematuria; polyuria; frequency of micturition; urinary tract infection; disturbance of consciousness	2

Bibliography

1. Pediatrics-Course notes. Marginean Cristina Oana, Toganel Rodica, Cucerea Manuela, Borka-Balas Reka, Duicu Carmen, Chincesan Mihaela Ioana, Pitea Ana Maria, Editura University Press Targu-Mures, 2013; 268 pag, ISBN: 978-973-169-266-1, cod CNCSIS 210
2. Care and nutrition of newborn and toddler. Marginean Cristina Oana, Editura University Press Targu-Mures 2012, 169 pag, ISBN 978-973-169-179-4

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	NOTIUNI DE PUERICULTURA. Examinarea clinica la sugar si copil. Foaia de observaţie în pediatrie. Metode de evaluare a cresterii si dezvolatarii la sugar si copil (percentile greutate, talie, perimetre), Dezvoltarea Neuro-psihomotorie, dentitia de lapte si definitiva.	demonstratii practice, discutii, prezentari de caz	CBL	dezvoltarea normala a copilului; malnutritie; castig ponderal	2
2	NOU NASCUTUL. Bolile carentiale ale sugarului. Nou nascutul la termen, prematur, postmatur, dismatur, Reflexele arhaice. Crizele nou nascutului. Alimentatia exclusiva si preponderenta, diversificare.	demonstratii practice, discutii, prezentari de caz	nu este cazul	sarcina si nasterea normala/ dezvoltarea normala a copilului, dezvoltarea normala a copilului, icter, alimentatia sugarului	2
3	PATOLOGIA APARATULUI RESPIRATOR. Infectii de cai respiratorii superioare – recunoastere clinica, examinari de laborator si paraclinice. Infectii de cai respiratorii inferioare – recunoastere clinica, examinari de laborator si paraclinice. Insuficienta respiratorie acuta, criterii clinice de recunoastere, oxigenoterapie, indicatii	demonstratii practice, discutii, prezentari de caz	nu este cazul	patologii ale cavitatii bucale; disfagie; otita medie; infectie de tract respirator, dispnee; stridor; cianoza; astm; dezechilibru acido-bazic	2
4	PATOLOGIA APARATULUI DIGESTIV. Criterii clinice de incadrare a sindromului de deshidratare acuta gradul I,II, III, abordare practica. Descrierea scaunelor normale si patologice la sugar, notarea in FO. BOLILE CARENTIALE ALE SUGARULUI: RAHITISMUL - tablou clinic, examen radiologic, diagnostic, tratament, profilaxia.	demonstratii practice, discutii, prezentari de caz	nu este cazul	durere abdominala; diaree; varsaturi; ulcer peptic, tulburari ale metabolismului calciului si vitaminei D	2
5	PATOLOGIA APARATULUI CARDIOVASCULAR. Anamneza copilului cu cardiopatie congenitala. Examinarea copilului cu MCC. Abordarea practica clinica. Investigatii paraclinice. Recunoasterea clinica a insuficientei cardiace la copil. Endocardita infectioasa – profilaxie.	demonstratii practice, discutii, prezentari de caz	nu este cazul	cianoza; dispnee; edem; malformatii ale sistemului cardiovascular; hepatomegalie; edem;endocardita	2
6	PATOLOGIA HEMATOLOGICA. Anemia feripriva - tablou clinic, laborator, tratament profilactic si curativ; Leucemiile - laborator, tratament. Diatezele hemoragice, hemofilia, sindroame hemoragipare trombocitare: criterii clinice de recunoastere, abordarea practica a hemostazei	demonstratii practice, discutii, prezentari de caz	nu este cazul	anemie;adenopatie; splenomegalie; patologii limfoproliferative, purpura; tulburari de coagulare	2

7	PATOLOGIA APARATULUI RENOURINAR. Infectiile tractului urinar. Examenul de urina. Sindromul nefrotic si Glomerulonefrita-abordare practica clinica, regimul de nefrita, nefroza. PATOLOGIA SISTEMULUI NERVOS CENTRAL : Convulsiile febrile - recunoastere clinica, tratament.	demonstratii practice, discutii, prezentari de caz	nu este cazul	disurie; hematurie; poliurie; diureza/frecventa mictiunilor, infectie de tract urinar; cefalee; presiune intracraniana crescuta	2

Bibliography

1.Pediatrics-Course notes. Marginean Cristina Oana, Toganel Rodica, Cucerea Manuela, Borka-Balas Reka, Duicu Carmen, Chincesan Mihaela Ioana, Pitea Ana Maria, Editura University Press Targu-Mures, 2013; 268 pag, ISBN: 978-973-169-266-1, cod CNCSIS 210
2.Care and nutrition of newborn and toddler. Marginean Cristina Oana, Editura University Press Targu-Mures 2012, 169 pag, ISBN 978-973-169-179-4

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The graduate must know and apply their knowledge in the field their speciallity.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	punctaj obtinut	1 Evaluare teoretica pe parcursul semestrului – test grila complement simplu/multiplu	15
- practical activities	acuratetea prezentarii cazului	1 CBL –prezentare de caz	15
Final evaluation			
- theoretical final exam	punctaj obtinut	test grila – complement simplu/multiplu	50
- practical final exam	punctaj obtinut	intrebari tip redactional/test cu caracter practic	20

Minimal performance standards:
-Prezenta la Evaluarea teoretica pe parcursul semestrului este obligatorie; nu exista posibilitate de repetare a acesteia, dar este permisa participarea la
examenul final. In caz de absenta se va nota cu nota 1.
-Examenul practic este obligatoriu; nota minima de trecere este 5.
-Se considera promovat examenul de Pediatrie in urmatoarele conditii cumulative:
1. Obtinerea unei note de trecere la evaluarea teoretica finala test grila (verificare) mai mare sau egala cu 5.00.
2. Obtinerea unei note de trecere la examenul practic final mai mare sau egala cu 5.00.
Toate notele intermediare vor avea doua zecimale si vor intra ca atare in calculul notei finale. Doar nota finala se va rotunji in sus pentru cele care sunt egale sau depasesc 50 de sutimi, si in jos pentru cele care nu indeplinesc acest criteriu.

11. Must seen clinical situation list

1. Nou-nascut; Sugar sanatos – dentitie temporara; Distrofia
2. Bronsiolita acuta; Laringita acuta
3. Malformatii cardiace congenitale; criza hipoxica
4. Endocardita infectioasa
5. Hemofilie; PTI
6. ITU febrile; Glomerulonefrita ac
7. Gastrita acuta
8. Convulsii febrile

12. Clinical / practical abilities

-Examenul cavitatii bucale la sugar/copil sanatos si cu diferite patologii (Pedodontie 1/3,4,5- pag 49; Pedodontie 2/1,2,5,8-pag 68, Patologie orala 1-14, pag 105)
-Masuri de prim-ajutor in urgentele pediatrice (criza hipoxica, hemoragii, febra, convulsii febrile etc) (Pedodontie 2/7-pag 68)

13. Appointment timetable (for students)

Șef l dr Chinceșan Mihaela-Ioana	30 minute dupa fiecare curs /activitati practice

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Forensic medicine			
2.2 Course coordinator: Șef l dr Carașca Cosmin			
2.3 Practical activities coordinator(s): Șef l dr Carașca Cosmin			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: Anatomy, Physiology, Physiopathology, Clinical Medicine
4.2 competency: not required.

5. Conditions

5.1 for lectures: Access to a videoprojector laptop
5.2 for practical activities: Access to the practical activities room of The Legal Medicine Institute of Targu Mures, which has the logistical requirements(image recording system in the autopsy room, videoprojector, laptop)

6. Specific competencies acquired

6.1 professional competencies: Knowledge of the legal situations and the requirement proceedings of medico-legal expertise on living persons (tratumatology, psychiatry, parentage, etc), and cadavers (necropsy). Correct description and interpretation of violent bodily lessions. Correct completion of the death certificate. Knowledge of the thanatogenesis and the specific lesional aspects of some causes of death
6.2 transversal competencies: Respecting the ethical standards of handling and examination of cadavers. Integration of knowledge from other disciplines in a medico-legal and legal context
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the

managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Obtaining theoretical and practical knowledge in legal medicine specialty as well as the basic legislative notions used in the current medico-legal practice

7.2 Specific objectives:
Obtaining knowledge regarding medico-legal expertise on living persons(traumatology, psychiatric, parentage) as well regarding cadavers(necropsy).
Correct recognition and interpretation of physical signs of violence .
Correct recognition and interpretation of the criterias of death in clinical practice and in the autopsy room.
Knowledge of the correct completion of death certificates.
Obtaining knowledge regarding the thanatogenesis and specific lesions present in different causes of death.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	MEDICO-LEGAL TANATOLOGY Definition and stages of death, medico-legal clasfication of death, The signs of death	lecture	-	agression/violence	2
2	TRAUMATIC LESIONS (medico-legal causality , primary traumatic lesions). LESIONS BY SHARP OBJECTS.	lecture, TBL session	-	Trauma of the limbs , agression/ violence	2
3	MECHANICAL TRAUMAS AND THEIR EFFECTS ON DIFFERENT TISSUES. FALLING AND PRECIPITATION.LESIONS AND DEATH BY ONE'S OWN MEANS OF ATTACK/DEFENCE	lecture	-	cyanosis,cardiopulmonary arrest,trauma of the limbs, sepsis, shock, coagulation disorders	2
4	MECHANICAL ASPHYXIA.LESIONS AND DEATH BY TRAFFIC ACCIDENTS.LESIONS AND DEATH BY FIREGUNS	lecture	-	cyanosis,cardiopulmonary arrest,trauma of the limbs, sepsis, shock, coagulation disorders	2
5	LESIONS AND DEATH BY PHYSICAL AND CHEMICAL AGENTS	lecture	-	Hypothermia, cerebral palsy, burns, acido-basic inbalance,poisoning	2
6	FORENSIC PSYCHIATRIC EXPERTISE. FORENSIC EXPERTISE IN INPRISONMENT CASES.FORENSIC EXPERTISE IN SEXUAL OFFENCES. PATERNITY.INFANTICIDE	lecture	-	agression/violence, suicide, self-mutilation	2
7	DNA EXPERTISE IN CIVIL AND CRIMINAL LAW. FORENSIC EXPERTISE IN MEDICAL LIABILITY CASES	lecture	-	Substance abuse, drug reactions	2

Bibliography
C.C. Radu, C. Carasca, T. Hogea. Medicină legală- suport de specialitate. Editura University Press.2020
C.C.Radu.Aspecte medico-legale si etice ale traumatismului cranio-facial.Editura Universitatii din Oradea.2016
C.C.Radu. Notiuni introductive de bioetica in medicina legala. Editura Universitatii din Oradea. 2015
STEP-UP to USMLE STEP 2 CK, 5th Edition
Knight's Forensic Pathology - 4th Edition
V.Belis. Tratat de medicina legala. Vol. 1,2 . Editura medicala Bucuresti.1995

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	MEDICO-LEGAL TANATOLOGY. Definition and stages of death, medico-legal clasification of death. The signs of death	practical activities	-	Agression/violence	2
2	TRAUMATIC LESIONS (medico-legal causality, primary traumatic lesions).LESIONS PRODUCED BY SHARP WEAPONS	practical activities	-	trauma of the limbs, agression/violence	2
3	MECHANICAL TRAUMAS AND THEIR EFFECTS ON DIFFERENT TISSUES. FALLING AND PRECIPITATION.LESIONS AND DEATH BY ONE'S OWN MEANS OF ATTACK/DEFENSE	practical activities	-	thoracic /abdominal trauma, trauma of the limbs, agression/violence	2
4	MECHANICAL ASPHYXIA. LESIONS AND DEATH BY TRAFFIC ACCIDENTS. LESIONS AND DEATH BY FIREARMS	practical activities	-	cyanosis, cardiopulmonary arrest, trauma of the limbs, sepsis, shock, coagulation disorders.	2

5	LESIONS AND DEATH BY PHYSICAL AND CHEMICAL AGENTS	practical activities ,CBL	-	Hypothermia, cerebral palsy, burns, acido-basic inbalance, poisoning	2
6	FORENSIC PSYCHIATRIC EXPERTISE.FORENSIC EXPERTISE IN INPRISONMENT CASES.FORENSIC EXPERTISE IN SEXUAL OFFENCES .PATERNITY. INFANTICIDE	practical activities	-	agression/violence. Suicide, self-mutilation	2
7	DNA EXPERTISE IN CIVIL AND CRIMINAL LAW.FORENSIC EXPERTISE IN MEDICAL LIABILITY CASES	practical activities	-	Substance abuse, drug reactions	2

Bibliography

1. C.C. Radu, C. Carasca, T. Hogea. Forensic medicine- specialty support, University press, 2021
2. C.C.Radu.Aspecte medico-legale si etice ale traumatismului cranio-facial.Editura Universitatii din Oradea.2016
3. C.C.Radu. Notiuni introductive de bioetica in medicina legala. Editura Universitatii din Oradea. 2015
4. STEP-UP to USMLE STEP 2 CK, 5th Edition
5. Simpson s Forensic Medicine, 14th edition
6. V.Belis. Tratat de medicina legala. Vol. 1,2 . Editura medicala Bucuresti.1995

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Analysing done in the discipline is followed by discussions in order to harmonize with other disciplines.The equivalence between the content and the expectations of the academical comunity, it's representatives, professional associates and staff is taken into account.
The discipline follows to offer the students optimal premises to get sucessfully hired, imediately after graduation, in residency programmes in Romania and other EU countries.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	1 TBL session, assessment during the lectures	Assessment during the lectures using interactive questions	20
- practical activities	1 CBL session, assessment during the practical activities	Assessment during the lectures using interactive questions	10
Final evaluation			
- theoretical final exam	Sumative assessement	Multiple question test	60
- practical final exam	PA assessment- forensic certificate	Assessment during the recapitulative lecture	10
Minimal performance standards: Minimal passing grade - 5			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Carașca Cosmin	30 de minute după fiecare curs / activitate practică

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: General radiology			
2.2 Course coordinator: Conf dr Pop Marian			
2.3 Practical activities coordinator(s): plata cu ora			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 3		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 4		
- examinations: 4		
- other activities: 3		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -anatomie normala si patologica, fiziologie, fiziopatologie
4.2 competency: nu este cazul

5. Conditions

5.1 for lectures: on line/on site
5.2 for practical activities: on line/on site

6. Specific competencies acquired

6.1 professional competencies: Formarea unui sistem de cunoștințe specifice domeniului radiologiei si imagisticii medicale ; Cunoașterea sistem ului de principii, metode, mijloace specifice imagisticii medicale Să fie capabil de a analiza și transpune practic, inter-disciplinar, cunoștințele teoretice acumulate la curs; Să dobândească capacitatea de a core la diversitatea cunoştinţelor dobândite pe parcursul cursului; Să fie capabil de a identific a şi utiliza noi surse de informaţie necesare pentru rezolvarea unor probleme contextualizate disciplinei parcurse. Forma rea unor preocupări pentru inovaţie şi provocarea schimbărilor, echilibru între spiritul critic şi tolerant Dezvoltarea unui comportament empatic şi a „or ientării helping" Formarea unor capacități de accesare a diverselor surse de informare în scopul documentării
6.2 transversal competencies: Organizarea de activități de corelare cantitativă și calitativă a imagisticii medicale specifice terapiei fizice și recuperării funcționale a persoanelor cu niveluri diferite de pregătire în condiții de asistență calificată, având la bază cunoștințe, competențe și abilități dobândite prin parcurgerea disciplinei de studiu Respectarea normelor de etică și deontologie profesionala având la bază cunoștințe, competențe și abilități dobândite prin parcurgerea disciplinei de studiu

Îndeplinirea în con diții de eficiență și eficacitate a sarcinilor de lucru pentru organizarea și desfășurarea activităților de corelare cantitativă și calitativă pe baza cunoștințelor, a competențelor și a abilităților dobândite prin parcurgerea disciplinei de studiu Operarea cu programe digitale documentare a și comunicarea într-o limba de circulație internațională
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Însuşirea noţiunilor de bază referitoare la metodele de investigaţie imagistice ; însuşirea principalelor indicaţii şi contraindicaţii ale examinărilor radiologice convenţionale, CT, ultrasonografice, prin rezonanţă magnetică şi cu radioizotopi;
7.2 Specific objectives: Interpretarea în context clinic a imaginilor obtinute prin radiologie conventionala, CT, ultrasonografie,IRM

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Brief history.X-rays: mechanism of production, atomic structure, X-ray proprieties, X-ray device. Dosimetry. Protection in radiology. The rules of the radiographic image formation , Basic notions concerning the computer tomography examination:principles, the main characteristics, scanning parameters, indications, contraindications, advantages and disadvantages. Ultrasonography: basic notions.Magnetic resonance imaging	powerpoint presentation	nu sunt	nu sunt	2
2	The radiological diagnosis of the lung lesions-congenital malformations, bronchitis, pneumonias, lung infections, occupational lung disease, tuberculosis, primary and metastatic lung tumors, pleural lesions	powerpoint presentation	TBL	Respiratory tract infection, Chronic bronchitis and emphysema,Carcinoma of the bronchus	2
3	Radiological diagnosis of the mediastinal and diaphragmatic lesions. Masses of anterior, middle and posterior mediastinum.Subphrenic abscess, free peritoneal air diaphragmatic hernia	powerpoint presentation	nu sunt	Dysphagia, stridor	2
4	Radiological diagnosis of the cardiovascular system-investigation methods, the radiological aspects of acquired valvular lesions, pericardial lesions, congenital heart diseases,aortic aneurysms and dissection, pulmonary embolism	powerpoint presentation	nu sunt	Cardiac valve disease , Pericardial disease, congenital heart malformation, aortic aneurysm	2
5	Imaging of the gastro-intestinal tract-esophagus, stomach, duodenum,small and large bowel disease.Imaging of the liver, biliary tree and gall bladder, pancreas,spleen	powerpoint presentation	nu sunt	inflammatory bowel disease, intestinal obstruction,peptic ulcer, carcinoma of the oesophagus, carcinoma of the stomach, carcinoma of the colon and rectum,hepatomegaly, jaundice, gall bladder disease, carcinoma of the pancreas	2
6	Genitourinary imaging : lithiasis, pyelonephritis, tumor of kidneys, congenital malformations,urinary bladder lithiasis and tumors,adrenal masses, benign prostate hyperplasia, prostate cancer, uterine fibroids, ovarian cancer	powerpoint presentation	nu sunt	urinary tract infection, urinary tract obstruction, carcinoma of the uterus/cervix/ovary	2
7	musculoskeletal imaging: radiological semeiology, trauma,infections, bone dystrophies,arthropathies, bone tumors, spine disorders	powerpoint presentation	nu sunt	trauma to limbs, osteomyelitis, osteoporosis osteoarthrosis,malignant bone tumors	2

Bibliography
Mandatory bibliography:
1.Course support in electronic format.
2.Weissleder R et al - Primer Diagnostic Imaging 5th ed.Mosby 2011
Suport bibliography:
1.R.B.Gunde rman - Essential Radiology , second ed., Thieme, 2006

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	demonstration of imaging investigations: Xray, CT scan, ultrasound, MR scan	demonstration	nu sunt	nu sunt	2
2	respiratory pathology	case discussion from laboratory archive	CBL	chronic lung disease, respiratory tract infections, pleural effusion chronic bronchitis and emphysema, carcinoma of the bronchus	2
3	imaging o mediastinum and diaphragm	case discussion from laboratory archive	nu sunt	disphagia, chest pain	2
4	imaging of cardiovascular system	case discussion from laboratory archive	nu sunt	cardiac valvular disease, Pericardial disease Malformations of cardiovascular system,aortic aneurysm, pulmonary embolism	2
5	imaging of gastro-intestinal tract, liver and biliary tree, pancreas, spleen	case discussion from laboratory archive	nu sunt	inflammatory bowel disease, intestinal obstruction,peptic ulcer, carcinoma of the oesophagus, carcinoma of the stomach, carcinoma of the colon and rectum,hepatomegaly, jaundice, gall bladder disease, carcinoma of the pancreas	2
6	imaging of genito-urinary diseases	case discussion from laboratory archive	nu sunt	urinary tract infection, urinary tract obstruction, carcinoma of the uterus/cervix/ovary	2
7	musculo-skeletal imaging	case discussion from laboratory archive	nu sunt	trauma to limbs, osteomyelitis, osteoporosis osteoarthrosis,malignant bone tumors	2

Bibliography
Mandatory bibliography:
1.Course support in electronic format.
2.Weissleder R et al - Primer Diagnostic Imaging 5th ed.Mosby 2011
Suport bibliography:
1.R.B.Gunde rman - Essential Radiology , second ed., Thieme, 2006

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

La finalul cursului studentii vor fi capabili :
Să expliciteze tendinţele şi orientările co ntemporane în domeniul imagisticii medicale
Să utilizeze corect şi flexibil terminologia generală și specifică din domeniul imagisticii medicale
Să însuşească operaţional unele concepte şi problematici specifice imagisticii medicale specifice terapiei fizice și recuperării funcționale;
Să realizeze analize critice ale produ selor suport oferite în cadrul cursului
Să aplice achiziţiile teoretice în proiectarea şi derularea unor situaţii practic e efective

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	insusire notiuni teoretice	TBL	10
- practical activities	prezentare caz practic	CBL	20
Final evaluation			
- theoretical final exam	insusire notiuni de baza teoretice	test grila	50
- practical final exam	recunoastere tip investigatie, descriere, formulare diagnostic pozitiv si diferential	examinare cazuri din arhiva laboratorului	20

Minimal performance standards:
Recunoasterea tipului unei examinari imagistice (radiografie, computertomografie, imagine rm) scintigrafie, ecografie), corelatia intre tipul de imagine si procesul patologic, diferentierea intre mai multe afectiuni cu imagistica asemanatoare.Evaluarea cu calificativ minim promovabil a nivelului de cunoștințe, competențe profesionale și abilități practice conform specificului disciplinei.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Pop Marian	Monday 19-20

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Fixed prosthodontics			
2.2 Course coordinator: Conf dr Cerghizan Diana			
2.3 Practical activities coordinator(s): Cerghizan Diana			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 8/12	3.2 lecture: 2	3.3 practical activities: 6/10
3.4 Total hours in curriculum: 140	3.5 lectures: 28	3.6 practical activities: 112
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 19		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 60		
3.9 Total hours: 200		
3.10 Credits: 8		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: Ensuring the clinical-technical conditions for performing prosthetic fixed denture

6. Specific competencies acquired

6.1 professional competencies: Practical application of appropriate measures for the choice of dento-periodontal support for the realization of different types of dental bridges - Interpretation of fundamental therapeutical principles for the selection of optimal prosthetic treatment through dental bridges - Elaboration of standardized data sheets for the coordination of clinical data with treatment particularities, differentiated according to the nature of the pathology. - Communication between physician and patient or dental technician
6.2 transversal competencies: Identifying achieve, workflow, deadlines, and risks that may occur - Identify roles in a multidisciplinary team - Applying effective relationship and work techniques within the team and in dealing with the patient - Effective use of information resources

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
The discipline addresses the problem of prosthetic treatment of the partial edentation through the dental bridges.

7.2 Specific objectives:
The student's acquisition of the elements related to the clinical and therapeutic aspects of the prosthetic treatment of the partial edentation by dental bridges,
Elaborating of prosthetic treatment sheets,
Communicating physician-technician, physician-patient

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Partially edentulous: Definition, nomenclature, etiology, clinical forms, symptoms, evolution and complications. (Part I)	Oral and multimedia presentation	-	-	2
2	Partially edentulous: Definition, nomenclature, etiology, clinical forms, symptoms, evolution and complications. (Part II)	Oral and multimedia presentation	-	-	2
3	Clinical examination of the partially edentulous patient	assessment - test	-	-	2
4	General principles in the treatment of partial edentation by dental bridges	Oral and multimedia presentation	-	-	2
5	The therapeutic algorithm in the partial edentation treated by dental bridges	Oral and multimedia presentation	-	-	2
6	Preprosthetic non-specific and specific preparations (pro prosthetic) (Part I)	Oral and multimedia presentation	-	-	2
7	Preprosthetic non-specific and specific preparations (pro prosthetic) (Part II)	Oral and multimedia presentation	-	-	2
8	Clinical and technical stages of dental bridge construction - impression	Oral and multimedia presentation	-	-	2
9	Clinical and technical stages of dental bridge construction - determination of intermaxillar relation	Oral and multimedia presentation	-	-	2
10	Clinical aspects of special bridges - Resin bonded bridge	Oral and multimedia presentation	-	-	2
11	Clinical aspects of special bridges - movable and removable bridges	Oral and multimedia presentation	-	-	2
12	Implants supported dental bridges	Oral and multimedia presentation	-	-	2
13	Application, control, and cementation of fixed partial prostheses in the oral cavity. Removal of fixed prosthetic bridges.	assessment - test	-	-	2
14	Therapeutic variants in the treatment of the partial edentation by dental bridges	Oral and multimedia presentation	-	-	2

Bibliography
I. Compulsory bibliography
1. Stephen F. Rosenstiel & Martin F. Land & Robert Walter: Contemporary Fixed Prosthodontics, 6th Edition, Elsevier, 2022
2. Keynotes

II. Optional bibliography

1. Schillingburg HT: Fundamentals of Fixed Prosthodontics 3rd edition, Quintessence Publishing Co. IL, 1997
2. Wiskott A: Fixed Prosthodontics. Principles and Clinics. Quintessence Publishing Co. IL, 2011
3. Pongracz A: Rogzedish fogpotlasok, UMF Tg.Mureş, 2003
4. Forna N: Dental Prosthetics, vol.I, pp. 401-805 - Topics included in residency, Encyclopedic Publishing House, 2011
5. Stomatologie, manual pentru rezidentiat, volumul I, capitol 3, Sub redacția Prof. Dr. Ecaterina Ionescu

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
2	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
3	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
4	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
5	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
6	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
7	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	6
8	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10
9	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10
10	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10
11	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10
12	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10
13	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10
14	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	Practical demonstrations, case presentations, application of real-world knowledge	-	-	10

Bibliography

1. Stephen F. Rosenstiel & Martin F. Land & Robert Walter: Contemporary Fixed Prosthodontics, 6th Edition, Elsevier, 2022

Keynotes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Marks obtained in assesment sessions	Multiple choice questions	15
- practical activities	Semestrial activity: attendance and punctuality (course and internships), qualifiers along the way, fulfillment of the minimum activity scale, qualification obtained at CBL sessions	Practical activities Semestrial activity: attendance and punctuality (course and internships), qualifiers along the way, fulfillment of the minimum activity scale, Appreciation of the work done during the semester by giving a rating for each activity performed.	15
Final evaluation			
- theoretical final exam	Course - material taught and discussed - mandatory bibliography	Multiple choice questions	50

- practical final exam	The student's ability to perform a correct examination of the partial edentation by establishing the prosthetic diagnosis at the end of the trainee, to perform a correct analysis of a study casts, to recognize different types of prosthetic works	oral verification	20

Minimal performance standards:
Accumulating more than five absences practical activities (unmotivated or motivated) leads the student not to take exams (practically and theoretically)! The maximum number of applicative activities that can be recovered is 2
Assessment during the semester:
1. During practical work:
Fulfillment of the minimum activity scale:
- One cast post - 1 point
- One single tooth crown - 1 point
- Fixed partial denture of at least three elements - 3 points
- Temporary fixed partial denture - by the Scutan method - 1 point
- A case presentation for an edentulous patient partially treatable by a fixed prosthetic - 4 points
The minimum promotion mark is 5.00 (not rounded).
2. At the course
Promotion of tests with a minimum of 5.00 (the average of the grades obtained at the 2 assesment sessions will be achieved)
Final evaluation:
1. Practical final exam
The minimum promotion mark is 5.00 (not rounded). Students who do not promote the final practical assessment have the right to participate in the theoretical examination.
2. The final theoretical exam
Multiple choice questions with a certain number of questions from the mandatory bibliography. The mark is made up of the score of the grid test (80%) and the score obtained for the editorial questions in the course notes (20%).
The minimum promotion mark is 5.00 (not rounded).
Non-passing one of the exams (in practice or theoretically) requires him to resume at the next exam session.
MUST SEEN CLINICAL SITUATIONS LIST:
1. Tooth with extensive caries treatable by cast post-and-core
2. Single missing tooth in frontal zone
3. Single missing tooth in lateral zone
4. Frontal partial edentulism, 2 or more teeth missing, treatable by dental bridge
5. Lateral partial edentulism, 2 or more teeth missing, treatable by dental bridge
6. Mixed partial edentulism (frontal+lateral)
7. Partial edentulism with stable occlusion which becomes unstable after teeth preparation
8. Partial edentulism with unstable occlusion

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Cerghizan Diana	Luni 12-14, Joi 18-20

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Applications of laser in dentistry			
2.2 Course coordinator: Conf dr Bechir Edwin-Sever			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 18		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Multimedia Equipment
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Acquiring the knowledge needed to develop a laser based treatment plan. Acquiring theoretical knowledge that implies choosing the type of laser and its parameters according to thefuture intervention. Ability to gain knowledge about choice of ideal candidate for laser treatments.
6.2 transversal competencies: Cognitive skills: Concepts of laser therapies Concepts of paraclinical investigations useful in formulating effective diagnoses and treatment plans. Affective-value competencies: Communication with the patient.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Knowledge of laser therapies, indications, contraindications, laser therapy variants

7.2 Specific objectives:
Understanding the methods of examining patients.
Understanding the importance of the oral rehabilitation concept supported by laser therapies. Acquiring the knowledge needed to develop an individualized treatment plan supported by laser therapies.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Laser Basics	Multimedia presentation	-	-	1
2	Laser physics	Multimedia presentation	-	-	1
3	Laser Safety	Multimedia presentation	-	-	1
4	Types of lasers	Multimedia presentation	-	-	1
5	Diode lasers	Multimedia presentation	-	-	1
6	Diode laser applications	Multimedia presentation	-	-	1
7	Diode lasers and diode laser clinical applications	Multimedia presentation	TBL	-	1
8	Nd:YAG lasers	Multimedia presentation	-	-	1
9	Nd:YAG laser applications	Multimedia presentation	-	-	1
10	Er:YAG lasers	Multimedia presentation	-	-	1
11	Er:YAG laser applications	Multimedia presentation	-	-	1
12	CO2 lasers	Multimedia presentation	-	-	1
13	CO2 laser applications	Multimedia presentation	-	-	1
14	Clinical situations for different types of lasers and their effects on tissues - soft tissues, hard tissues, implants	Multimedia presentation	TBL	-	1

Bibliography
1. Donald J. Coluzzi, Steven P. A. Parker, Lasers in Dentistry—Current Concepts, Springer, 2023.
2. Robert A. Convissar, Principles and Practice of Laser Dentistry, Elsevier Mosby, 2022.
3. Aldo Brugnera Jr., Samir Namour. Laser Dentistry: Current Clinical Applications, World Federation for LaserDentistry Universal Publishers, 2018.
4. Donald J. Coluzzi, Robert A. Convissar. Atlas Of Laser Applications In Dentistry, Quintessence Pub Co, 1stedition, 2007.
5. Patricia M. Freitas, Alyne Simões. Lasers in Dentistry: Guide for Clinical Practice, Wiley-Blackwell, 1st edition,2015.
6. Olivi Giovanni, De Moor Roeland, DiVito Enrico. Lasers In Endodontics, Springer International Publishing, 2016.
7. Course notes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The content of the discipline is relevant and updated to the requirements of the correct application of the notionsof laser therapies in oral rehabilitation, periodontology, implantology, and of general pathology,

pharmacology,physiopathology and psychology.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects of the course.	3 TBL sessions	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects of the course.	Multiple choice examination	70
- practical final exam	-	-	0
Minimal performance standards: Minimal performance standards: Obtain the minimum score of 5 (five) for each evaluation component: course: - to know the basic notions regarding laser therapy, - to participate in the TBL debates in the above-mentioned themes			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Bechir Edwin-Sever	Luni 10-11

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M3
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pregnant and post-partum women in the dental office			
2.2 Course coordinator: Șef l dr Molnar-Varlam Claudiu			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Dotare multimedia +conexiune internet
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Studentul trebuie să știe ce poate face și mai ales ce nu are voie să facă în conduita terapeutică stomatologică a gravidelor și lăuzelor, precum și particularitățile acestor paciente care se confuntă în perioada de sarcină și lăuzie cu probleme stomatologice.
6.2 transversal competencies: Colaborarea și munca în echipă, tratamentul multidisciplinar constituie astăzi un element complex care necesită o permanentă formare universitară. Medicul stomatolog trebuie să conștientizeze că munca pe care o realizează în cazul gravidelor și lăuzelor este una în echipă, factorul uman fiind reprezentat nu numai de medicul dentist, asistenta dentară și tehnicianul dentar, dar și a medicului obstetrician pentru ca să se asigure, sănătatea gravidelor și lăuzelor.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the

managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Să însușească cunoștințele necesare în domeniul tratării gravidei și lăuzei în cabinetul de medicină dentară. Alegerea planului de tratment stomatologic să se facă după un raționament clinic corect condus în colaborare cu medicul obstetrician.

7.2 Specific objectives:
Să dobândească capacitatea de înțelegere a multiplelor probleme și controverse de ordin practic în privința conduitei medicului dentist în cazul aplicării terapiei la gravide și lăuze.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Noțiuni introductive, noțiuni generale de anatomie și fiziologie ale aparatului genital feminin	Prezentare orală + prezentare PowerPoint multimedia	-	-	2
2	Modificări adaptative generale și genitale ale organismului matern în sarcină și lăuzie	Prezentare orală + prezentare PowerPoint multimedia	-	-	2
3	Modificări buco-dentare ale organismului matern în sarcină și lăuzie	Prezentare orală + prezentare PowerPoint multimedia	-	-	2
4	Noțiuni de embriologie și dezvoltare a aparatului dento-maxilar în perioada fetală	Prezentare orală + prezentare PowerPoint multimedia	-	-	2
5	Particularitățile terapeutice ale gravidei și lăuzei în cabinetul de medicină dentară	Prezentare orală + prezentare PowerPoint multimedia	-	-	2
6	Gravidele cu risc obstetrical crescut în cabinetul de stomatologie	Prezentare orală + prezentare PowerPoint multimedia	-	-	2
7	Curs final cu caracter interactiv pe baza unor cazuri clinice cu gravide și lăuze tratate în cabinetul de Medicină dentară	Prezentare orală + prezentare PowerPoint multimedia	-	-	2

Bibliography
1. Afecțiunile buco-dentare și sarcina. Petrache Vârtej, Memet Gafar, Henriette Panaite. Editura ALL. 1998
2. Obstetrică și psihoprofilaxia nașterii. Claudiu Molnar Varlam. Editura University Press. 2012

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Datorită multiplelor probleme stomatologice pe care gravida și lăuza le poate prezenta toate acestea trebuie cunoscute și aplicate corect de medicul dentist care trebuie să cunoască specificul tratamentului în aceste cazuri și să se adapteze în funcție de situația clinică dată pentru a satisface atât exigențele pacientului cât și pentru a respecta problemele cu care se confruntă gravida în perioada de sarcină.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	Team-Based Learning (TBL)	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Cunoștințe teoretice bazate	Acordarea notei pentru testul individual	70
- practical final exam	-	-	0

Minimal performance standards:
Obținerea notei minime de 5 (cinci) pentru fiecare componentă a evaluării. Să cunoască noțiunile de bază predate.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Molnar-Varlam Claudiu	După fiecare curs 30 de minute conform orarului

Head of departament	Course coordinator	Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Digital orthodontics			
2.2 Course coordinator: Prof dr Păcurar Mariana			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: no
4.2 competency: no

5. Conditions

5.1 for lectures: projector
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Computer aid complex ethiologic, morphological and functional complex orthodontic diagnosis
6.2 transversal competencies: Identification of serious skeletal anomalies, affecting facial harmony and guidance to specialized services (orthodontics, OMF surgery)Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Elaboration of an orthodontic complex diagnosis by modern techniques

7.2 Specific objectives:
Acquiring the computational analysis features of lateral cephalometry
- Knowing the optimal moment to establish an orthodontic treatment based on the assessment of skeletal age using the CVM method
- Designing a complex orthodontic treatment plan based on child's age, general health status, with emphasis on the nature of the anomaly (functional, anatomical)
- The role of CBCT in the diagnosis of anomalies (retained canine).

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Orthodontic programming and storage software.Finite element method FEM, method of evaluation of dental movements in orthodontic biomechanics	Power Point Presentation	-	-	2
2	Growth assessment on profile teleradiography, VTO method in orthodontic diagnosis.Use of Dolphin software in measurements on profile cephalogram	Power Point Presentation	-	-	2
3	Diagnostic set-up, advantages and limitations of the Invisalign technique	Power Point Presentation	-	-	2
4	My dent digital application, possibilities for online communication with patients	TBL	-	-	2
5	Scanning and storing models on computer. The advantages of the digital method.Digital photography. Means of assessing facial asymmetries	Power Point Presentation	-	-	2
6	The advantages of Easy Dent radiological software in detecting root resorption following orthodontic therapy. Total space analysis. Cephalometric correction after growth prediction	Power Point Presentation	-	-	2
7	CVM method of bone age analysis compared to dental and chronological age.Transversal expansion assessment. (Pennsylvania CBCT Analysis)3D facial recognition software. Evaluation of craniofacial parameters in digital orthodontics	Power Point Presentation	-	-	2

Bibliography
1. Mártha Krisztina, Cristina Bică: OrthoAtlas, Ed. University Press Tg. Mureș, 2015, ISBN: 978-973-169-329-3
2. Cristina Bică, Ligia Brezeanu: Deplasarea dentară ortodontică. Modele, simulări si aplicatii. Ed. University Press Tirgu Mures, 2012
3. Păcurar, M , Mahmoud El Saafin. - Clinical aspects of dento-maxillary anomalies Târgu Mureş : University Press, 2021 , ISBN 978-973-169-717-8

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Assessing the optimal time to start an orthodontic treatment, assessing facial growth patterns with computerized radiographic techniques

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	information aquired	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	final exam	multiplechoice test	70
- practical final exam	-	-	0

Minimal performance standards:
Minimum 5

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Păcurar Mariana	30 minutes after each course

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Periodontal regeneration and surgical techniques			
2.2 Course coordinator: Șef l dr Benedek Csilla			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: Videoprojector, PC, flipchart
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Knowledge of the periodontal regeneration methods. Knowledge of the biomaterials of the periodontal regeneration. The complex rehabilitation of the periodontal diseased patient.
6.2 transversal competencies: The formation of skills to collaborate interdisciplinary with similar medical specialities (dento-alveolar surgery) to realize a complex treatment of the periodontal disease. Knowledge of the working methods of the students on medium and long term regarding the results of the periodontal therapy in case of different patient groups.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Knowledge of the data linked with the surgical treatment and with the guided tissue regeneration of the different types of periodontal diseases.
7.2 Specific objectives: Knowledge of the general principles of the periodontal surgery. Assimilation of the different types of incisions, flaps and sutures used in periodontal surgery. Assimilation of periodontal surgical techniques. Knowledge of the periodontal regeneration phases.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General principles of the periodontal surgery. Tissue management and patient preparation.	Oral and multimedia presentation	-	-	2
2	Surgical instrumentation. Types of incisions. Types of flaps. Types of sutures.	Oral and multimedia presentation	-	-	2
3	Surgical treatment of the gingival hyperplasia.	Oral and multimedia presentation	-	-	2
4	Periodontal pocket surgery.	Oral and multimedia presentation	-	-	2
5	Mucogingival surgery.	Oral and multimedia presentation	-	-	2
6	Osseous surgery.	Oral and multimedia presentation	-	-	2
7	Guided tissue regeneration.	Oral and multimedia presentation	-	-	2

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9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The content of the the discipline is strongly linked with the necesity of the employers in the field of health, medical management, medical education, firms of medicines, research in dental medical field.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Attendance; individual active participation on courses through debates, questions, ideas related with the topic of the course	The arithmetic mean of the marks obtained when assessing the fulfillment of the evaluation criteria	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Knowledge of the surgical and regenerative treatment methods in different types of periodontal disease.	Test	70
- practical final exam	-	-	0

Minimal performance standards:
In case of non attending more than 2 courses, the student will not be accepted in the final exam!
In case of non attendance of the TBL sessions it will be given the mark 1. It is not possible to repeat this kind of assessment, but it will be allowed anyhow the attendance of the final exam. In case of an extremely justified absence during TBL evaluation the student can make an essay related with the topic of the TBL.
Final evaluation:
The minimum promotion mark is 5.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Benedek Csilla	Thuesdays 14-16

Head of departament	Course coordinator	Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Minimally invasive techniques in prosthetic dentistry			
2.2 Course coordinator: Conf dr Cerghizan Diana			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 3		
- examinations: 5		
- other activities: 1		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: -
6.2 transversal competencies: -
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: -

7.2 Specific objectives:
-

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Minimally invasive techniques - prosthetic perspectives, definition, classification	Oral + multimedia presentation	-	-	2
2	Dental veneers - history, indications, contraindications, adhesive cementation	Oral + multimedia presentation	-	-	2
3	Dental veneers - workflow	Oral + multimedia presentation	-	-	2
4	Dental veneers - case report	Oral + multimedia presentation	-	-	2
5	Partial crowns - indications, contraindications, workflow	Oral + multimedia presentation	-	-	2
6	Anchoring systems - indications, contraindications, workflow	Oral + multimedia presentation	-	-	2
7	Adhesive bridge - indications, contraindications, workflow	Oral + multimedia presentation	-	-	2

Bibliography
course notes
Hasan Sarfaraz, Minimally Invasive Fixed Prosthodontics, LAP LAMBERT Academic Publishing, mai 2022

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	quiz test	single/multiple choice questions	100
- practical final exam	-	-	0
Minimal performance standards: minim 5 grade			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Cerghizan Diana	Luni 12-14, Joi 18-20

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Risk management of occupational injuries and illness in dentistry			
2.2 Course coordinator: Șef l dr Dobreci Liana-Claudia			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Students' knowledge and appropriate use of the basic concepts related to: the usefulness and obligation of evaluating work systems from the point of view of work security; the elements of the work process and their interaction; work accident and occupational disease as dysfunctions of the work system; the social and economic consequences of work accidents and occupational diseases; social responsibility in the field of occupational health and safety.
6.2 transversal competencies: -identification and management of available resources, work stages, execution durations, deadlines related to professional tasks/projects; -identifying roles and responsibilities in a team and applying communication techniques and effective work within the team; -identifying opportunities and informational sources for continuous training for one's own professional development; - the responsible application of the principles, norms and values of professional ethics in carrying out professional tasks.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Acquiring knowledge, developing skills and abilities in the field of occupational health and safety.

7.2 Specific objectives:
The assimilation of knowledge regarding the assessment of the risks of occupational accidents and diseases in the field of dental medicine, necessary skills in order to organize and authorize offices from the point of view of labor protection and the elaboration of own instructions for occupational safety.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The concept of occupational health and safety. The course presents the current concept of 'OHS occupation, health and safety' - a broad and complex concept, having a scientific, legal and methodological applicative character - of a proactive type, in opposition to the reactive behaviour that is based on looking for solutions and taking measures only after problems have already appeared.	PowerPoint presentation, interactive discussions, case studies	-	-	2
2	The legislative framework related to occupational health and safety presents: a brief history regarding the legislative concerns on occupational safety and health, the process of harmonization of Romanian legislation with that of the EU, the structure and characteristics of the legislative system in the field of occupational health and safety, as well as the institutions of the national OHS system.	PowerPoint presentation, interactive discussions, case studies	-	-	2
3	Dysfunctions of the work system - risk factors of occupational injury and/or illness. After presenting the four elements of the work system and process (executor, workload, means of production, work environment), the course addresses the dysfunctions of the work system as factors of risk of occupational injury and/or illness, respectively as potential causes of work accidents and occupational diseases, including the possible consequences of the risk factors action on the human body.	PowerPoint presentation, interactive discussions, case studies	-	-	2
4	The work accident and occupational disease. It presents the genesis of the phenomena of occupational injury and disease, the elements, effects and classification of work accidents, the notion of occupational disease and the classification of occupational diseases, respectively social and economic consequences of work accidents and occupational diseases.	PowerPoint presentation, interactive discussions, case studies	-	-	2
5	Work safety assessment methods. The course presents the usefulness and obligation of work systems assessment from the point of view of work safety, possibilities, methods and indicators of work safety assessment, respectively post-accident assessment (a posteriori) and pre-accident assessment (a priori). The analytical method (INCDPM - Bucharest) for assessing the risks of accidents and occupational diseases is presented in detail - starting from the theoretical premises to the detailed description of the method - with all the stages and phases of the method.	PowerPoint presentation, interactive discussions, case studies	-	-	2
6	The occupational health and safety management system presents: the advantages of the implementation and integration of an occupational health and safety management system, the OHSAS 18000 family of standards in relation to the occupational health and safety management systems, respectively the management system documents of OSH.	PowerPoint presentation, interactive discussions, case studies	-	-	2
7	Case studies, the course presents the application of the method developed by INCDPM - Bucharest for the assessment of occupational injury and illness risks for a dentist, dental assistant and dental technician.	PowerPoint presentation, interactive discussions, case studies	-	-	2

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Bibliography:
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Darabont A., Pece St., Dăscălescu A. Managementul securităţii şi sănătăţii în muncă, vol.1 şi 2, Editura AGIR, Bucureşti, 2001
Pece Şt., Dăscalescu A., Metodă de evaluare a riscurilor de accidentare şi îmbolnăvire profesională, Institutul Naţional de Cercetare – Dezvoltare pentru Protecţia Muncii (INCDPM), Bucureşti, 2003
Pece, Şt., Evaluarea riscurilor în sistemul de muncă, Editura Rubin, Bucureşti, 2010
Niculescu, T., ş.a., Medicina muncii, Editura: MEDMUN, Bucureşti, 2003
* * * Legea securităţii şi sănătăţii în muncă nr. 319/2006, Monitorul Oficial al României, Partea I, nr. 646/26.07.2006
* * * H.G. nr. 1425/2006 pentru aprobarea Normelor metodologice de aplicare a prevederilor Legii securităţii şi sănătăţii în muncă nr. 319/2006, Monitorul Oficial al României, Partea I, nr. 882/30.10.2006
*** SR OHSAS 18001:2008 - Sisteme de management al sănătăţii şi securităţii ocupaţionale. Cerinţe
*** SR OHSAS 18002: 2009 – Sisteme de management al sănătăţii şi securităţii ocupaţionale. Linii directoare pentru implementarea OHSAS 18001
*** http://www.mmuncii.ro – Ministerul Muncii
*** http://www.ms.ro – Ministerul Sănătăţii
*** http://www.protectiamuncii.ro
*** http://www.inpm.ro - Institutul Naţional de Cercetare-Dezvoltare pentru Protecţia Muncii
*** https://osha.europa.eu - Agenţia Europeană pentru SSM
*** http://europe.osha.eu.int/good_practice/sector/education/
*** http://www.cmdr.ro - Colegiul Medicilor Dentişti din Romania

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The acquired competences will be necessary for dentists who carry out their activity: within individual offices and hospitals, respectively within the OSH departments, or as natural persons authorized in the field and who provide specialized services in order to authorize medical units from the point of view of labor protection.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Ability to understand the issues presented in the course	MCQ test	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Answers to the final colloquium written test	MCQ test	70
- practical final exam	-	-	0

Minimal performance standards:
The minimum passing grade is 5
Minimum standard of performance: passing the test during the year with a minimum grade of 6

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Dobreci Liana-Claudia	30 minutes after every lecture

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Geriatric dentistry			
2.2 Course coordinator: Prof dr Suciu Mircea			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: dotare multimedia
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Realizarea unui examen clinic complet și complex al pacientului vârstnic. Abilitatea de a corela noțiunile de medicină generală cu cele stomatologie și stabilirea intercondiționării reciproce. Abilitatea de a solicita și utiliza investigații paraclinice determinante în stabilirea diagnosticului. Abilitetea de a formula o suită de diagostice corecte corelate cu senescența.
6.2 transversal competencies: Competenţe cognitive: Noţiuni despre conceptele ce definesc reabilitarea orală complexă a vârstnicului. Noţiuni despre semne, simptome sau boli din cadrul patologiei medicale generale reflectate în medicina dentară. Noţiuni despre boli ale aparatului dento-maxilar ce influențează starea generală de sănătate. Noţiuni referitoare la investigațiile paraclinice utile în formularea unor diagnostice eficiente. Noţiuni privind terapia de reabilitare orală. Competenţe afectiv-valorice: Relaţionarea cu pacientul şi personalul medical. Comunicarea cu pacientul. Comunicarea cu tehnicianul dentar.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Însuşirea de către studenţi a noţiunilor generale legate de evoluția fiziologică și patologia pacientului vârstnic.

7.2 Specific objectives:
Să cunoască şi sa înteleagă profilul medical al pacienților vârstnici în tratamentul de reabilitare orală.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Senescența. Context actual. Definiții. Condiția fiziologica sistemului orofacial la pacientul vârstnic.	Prezentare multimedia	-	-	1
2	Condiția fiziologica sistemului orofacial la pacientul vârstnic.	Prezentare multimedia	TBL	-	1
3	Patologia medicală și influența ei asupra sistemului orofacial.	Prezentare multimedia	-	-	1
4	Homeostazia cavității orale	Prezentare multimedia	-	-	1
5	Specificul patologiei odoantale la vârstnici.	Prezentare multimedia	-	-	1
6	Specificul patologiei parodontale la pacientul vârstnic.	Prezentare multimedia	-	-	1
7	Patologia protetică la pacientul vârstnic.	Prezentare multimedia	-	-	1
8	Investigații paraclinice. Stabilirea diagnosticelor.	Prezentare multimedia	-	-	1
9	Măsuri pre și pro protetice specifice vârstei.	Prezentare multimedia	TBL	-	1
10	Tratamente convenționale la pacientul vârstnic.	Prezentare multimedia	-	-	1
11	Tratamente moderne la pacientul vârstnic. Posibilități și limite.	Prezentare multimedia	-	-	1
12	Evoluție, prognostic și complicații in tratamentul pacientului vârstnic.	Prezentare multimedia	-	-	1
13	Eficacitatea tratamentului la pacienții vârstnici.	Prezentare multimedia	-	-	1
14	Prezentari de cazuri clinice.	Prezentare multimedia	-	-	1

Bibliography
1. Ieremia L, Bratu D, Biriş C, Totolici D, Petrovici D, Iancu AM, Suciu M, Ghergic DL, Roman D. Viziunea intersistemică în medicina dentară, Editura Petru Maior, Tg. Mureş, 2006, 386 pg, ISBN – 10 973-7794-42-7, ISBN – 13 978-973-7794-42-0
2. Bodnar C. Odontologie geriatrică, EdituraTehnoplast SRL,
Bucureşti, 1999
3. Ieremia L, Chirilă-Balaş M. Gerontognatoprotetică, Editura University Press,Târgu-Mureş, 1999
4. Miler V, Ursache M. Gerontostomatologie clinică. Editura Apollonia,
Iaşi, 1998
5. Podariu A, Jumanca D, Găluscanu A, Borţun C. Asistenţa stomatologică apacienţilor de vârsta a III-a, Editura Mirton,
Timişoara, 1998

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Însușirea noțiunilor prezentate și stimularea gândirii active, logice, contribuie la formarea de specialiști competitivi pe piața muncii, capabili să execute tratamente complexe.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			

- lecture	Cunoasterea aspectelor teoretice din cadrul tematicii de curs.	TBL	20
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Cunoasterea aspectelor teoretice din cadrul tematicii de curs.	teste grilă	80
- practical final exam	-	-	0
Minimal performance standards: Nota minimă 5 la sesiunile TBL			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Suciu Mircea	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Magnification in endodontics			
2.2 Course coordinator: Șef l dr Pop Mihai			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: C	2.7 Type of discipline: Opt

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 2	3.2 lecture: 2	3.3 practical activities: 0
3.4 Total hours in curriculum: 14	3.5 lectures: 14	3.6 practical activities: 0
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 12		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 36		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: videoproiector, laptop
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: The ability to use magnification equipment. Knowledge of the clinical indications and advantages of the magnification systems. Understanding of ergonomic principles and correct use of the instruments.
6.2 transversal competencies: Developing the ability of students from higher years to establish the correct diagnosis, the indication of retreatment and the realization of its clinical stages, using the magnification systems (dental microscope and magnifiers).
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Getting the students familiarized with the use of magnification systems, used in different fields of dental medicine.
7.2 Specific objectives: Training of the skills of using the instruments specific to the dental microscope, of ergonomics and knowledge of the clinical situations in which they are indicated for use.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Magnification in dentistry	Prezentare orală şi multimedia	-	-	2
2	Advantages of magnification and indication of its use	Prezentare orală şi multimedia	-	-	2
3	Guidelines of ergonomic use of magnification in endodontics	Prezentare orală şi multimedia	-	-	2
4	Clinical use of the dental operating microscope in endodontics and other dental specialties	Prezentare orală şi multimedia	-	-	2
5	Factors that make the use of magnification difficult	Prezentare orală şi multimedia	-	-	2
6	Importance of magnification in establishing diagnosis	Prezentare orală şi multimedia	-	-	2
7	The use of the operating dental microscope in endodontic retreatment	Prezentare orală şi multimedia	-	-	2

Bibliography

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S Cohen: Pathways of the pulp, 10-th edition, Mosby Elsevier, St. Louis, Missouri, 2011
Manual pentru rezidențiat, Volumul I, sub redacția Prof.dr. Ecaterina Ionescu, Editura Universității Carol Davila București, 2021.

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

The students' training program must also include elementary notions of the use of magnification in endodontic therapy, an aspect emphasized by international specialized bodies.
The quality of the medical act is dependent on the degree of visibility, and this can only be obtained by using the dental microscope.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Colocviu - test grilă	-	100
- practical final exam	-	-	0

Minimal performance standards:
n vederea promovarii este necesara obtinerea minimum notei 5,00 la testul grila.
Indicatiile folosirii magnificarii in endodontie si in odontoterapie. Principiile ergonomice ale magnificarii.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Pop Mihai	30 de minute după fiecare activitate practică

Head of departament | Course coordinator | Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Epidemiology and preventive medicine			
2.2 Course coordinator: Șef l dr Golea Cristina			
2.3 Practical activities coordinator(s): sef lucr dr Golea Cristina			
2.4 Year of study: IV	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 5		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 2		
- examinations: 3		
- other activities: 2		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: no
4.2 competency: no

5. Conditions

5.1 for lectures: -Mobile phones will be closed during the lectures and practical activities, no personal telephone calls will be allowed during the lectures and practical activities - Punctuality is recquired for lectures and practical activities;
5.2 for practical activities: - Attendancy is compulsory for practical activities - Maximum 15% absences accepted. - Maximum 15% absences may be recuperated by pay, during the presession (excepted medical cases, after deans office' s approval). - Verification for practical activities and lectures during the last week of the module

6. Specific competencies acquired

6.1 professional competencies: - Gestionarea bazelor teoretice si legislative ale sistemelor de sanatate operationale in Romania, precum si a celor manageriale vizând cabinetul de medicina dentara. - Selectarea adecvata a legislatiei sanitare si a metodelor de management in domeniul medicinei dentare - Aplicarea metodelor de planificare, coordonare a serviciilor de sanatate, de asigurare a managementului cabinetului dentar pe piata de servicii medicale reglementata in UE. - Evaluarea critica a rezultatelor activitatii medicale individuale si institutionale, respectand legislatia in vigoare, a eticii si deontologiei profesionale. - Distribuirea, din perspectiva manageriala, de roluri si sarcini membrilor echipei - Proiectarea unui plan managerial pentru activitatea unui cabinet de medicina dentara

- Evaluarea corecta a riscului de imbolnavire sau a contextului aparitiei unei imbolnaviri individuale colective, urmate de alegerea si aplicarea masurilor adecvate de profilaxie. - Identificarea principiilor de aplicare a masurilor de preventie, precum si a instrumentelor care stau la indemana medicului - Interpretarea si analiza factorilor de risc in vederea identificarii celor mai eficiente masuri de preventie a bolilor - Aplicarea masurilor de profilaxie adecvate pentru a preveni imbolnavirile precum si a celor de reechilibrare recuperare a consecintelor unor boli deja declansate - Observatia si evaluarea critica a rezultatelor aplicarii masurilor de profilaxie, atat in ceea ce priveste patologia individului, cat si a colectivitatilor - Elaborarea si aplicarea unui plan concret de profilaxie care sa asigure prevenirea aparitiei, agravarea sau/si instalarea consecintelor invalidante ale imbolnavirii. - Realizarea unui plan de profilaxie primara, secundara si tertiara intr-o situatie data.
6.2 transversal competencies: - Identificarea obiectivelor de realizat, a resurselor disponibile, conditiilor de finalizare a acestora, etapelor de lucru, timpilor de lucru, termenelor de realizare aferente si riscurilor aferente - Identificarea rolurilor si responsabilitatilor într-o echipa pluridisciplinara si aplicarea de tehnici de relationare si munca eficienta în cadrul echipei si în elatie cu pacientul - Utilizarea eficienta a surselor informationale si a resurselor de comunicare si formare profesionala asistata (portaluri Internet, aplicatii software de specialitate, baze de date, cursuri on-line etc.) atât in limba romana cat si intr-o limba de circulatie internationala
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: - Specialitatea se ocupa cu activitati practice rezultate in urma studiului distributiei starilor de sanatate si de boala cat si a determinantilor acestora, in populatia generala sau in grupuri specifice, pentru realizarea prevenirii si controlului problemelor de sanatate la nivel individual si al comunitatii, in acord cu politicile de sanatate la nivel local, regional si international. - Prezentarea notiunilor de epidemiologie a bolilor transmisibile (epidemiologie generala si speciala) necesare in practica unui cabinet de medicina dentara.
7.2 Specific objectives: - Cunoaşterea obiectivelor epidemiologiei clinice, care pornind de la criterii ştiinţifice permit aplicarea metodelor epidemiologice în activitatea medicală. - Insusirea notiunilor privind procesul epidemiologic al bolilor infectioase, a notiunilor privind epidemiologia, prevenirea si controlul unor boli infectioase (infectii nosocomiale, infectia HIV/SIDA, hepatite virale) si a unor boli neinfectioase.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Epidemiology –preventive medicine science (Objectives . Study fields. Hystorical data). Clinical epidemiology. Definitions, objectives. Health and disease. Causality. Disease prevention and control (primordial, primary, secondary and tertiary prevention)	Oral and multimedia presentation	X	Paleative care, Transfusion of blood products, Pre-operative care, Post operative care, Fever, Drug reactions. Contraception	2
2	Epidemiological process for communicable and non-communicable diseases. Definition, structure, infectious process, epidemic site, site of infection. Sources of pathogenic agents for communicable diseases/ risk factor sources for non-communicable diseases. Ways and routes of transmission. Receptivity, resistance, immunity, vulnerability, adaptation capacity. Favoring factors for the epidemiological process. Manifestation forms for the epidemiological process.	Oral and multimedia presentation	X	Infectious disease of childhood, Malaria, Drug reactions, cerebrovascular disease, Immunization, Immunodeficiency	2
3	Epidemiology of hospital acquired infections (HAI). Definition, etiology, risk factors, classification . Structure of epidemiological process. Surveillance. Prevention and intervention strategies for HAI	Oral and multimedia presentation	TBL -General epidemiology	Immunisation, Imunodeficiency Pre-operative care, Post operative care	2

4	Epidemiology of enteral and parenteral transmitted viral hepatitis and sexually transmitted diseases/HIV-AIDS. Pathogenic agents. Structure of epidemiological process, prevention and intervention methods.	Oral and multimedia presentation	X	Gastroenteritis Jaundice Hepatomegaly, Transfusion of blood products, HIV, Immunodeficiency, Sexually transmitted diseases	2
5	Epidemiology of diseases prevented by vaccination. Pathogenic agents. Structure of epidemiological process, prevention and intervention methods	Oral and multimedia presentation	X	Infectious disease of childhood Immunization,	2
6	Epidemiology of respiratory/digestive transmitted diseases. Pathogenic agents. Structure of epidemiological process, prevention and intervention methods	Oral and multimedia presentation	x	Respiratory tract infection, Tuberculosis Gastroenteritis Infectious disease of childhood	2
7	Epidemiology of non-communicable diseases: cancer, metabolic diseases: DM type 1 And 2, obesity, cardiovascular diseases, respiratory diseases, digestive diseases, neurological and psyhiatrical diseases. Descriptive epidemiology, morbidity/mortality rates, causality and risk assessment.. Structure of epidemiological process, prevention and intervention methods.	Oral and multimedia presentation	X	Carcinoma of the colon and rectum, Diabetes mellitus Cerebrovascular disease	2

Bibliography
References:
1. Gordis L. Epidemiology, 5th edition. 2014. ISBN 9781455742516. Available online:https://studentconsult.inkling.com/store/book/gordis-epidemiology-5th/
2. Bonita R, Beaglehole R, Kjellström T. Basic epidemiology, 2nd edition. World Health Organization, 2006. Available online:http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf
3. .Last J.M.: A Dictionary of Epidemiology, 4th ed., Oxford University Press, New York, 2000
4.Merrill R. M.: Principles of Epidemiology, Workbook, Jones&Bartlett Learning, Sudbury, 2011
5.Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
6.Ganti Latha, Lebowitz D, Rosario J, Vera A. Step-up to USMLE Step2 CK, 5th edition. 2020

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Epidemiological surveillance for communicable diseases. Epidemiological rates. Epidemiological investigation. Field project for epidemiological investigation and intervention. Epidemiological analysis. Epidemiological assessment.	Oral and multimedia presentation	Theoretical and practical presentations	Immunization, Tuberculosis, Sexually transmitted diseases Infectious disease of childhood	2
2	Risk assessment, practical use of data obtained in epidemiological studies. Risk rates (OR, RR, RA, HHR) . Practical exercise.	Oral and multimedia presentation	Theoretical and practical presentations	Malformations of cardiovascular system Drug effect on fetus	2
3	Epidemiological studies. Sampling, Practical use of different types of epidemiological studies (transversal, case-control, cohort, clinical randomized trial,). Practical exercise	Oral and multimedia presentation	Theoretical and practical presentations	Carcinoma of the cervix/uterus/ ovary, Malformations of cardiovascular system	2
4	Screening. Types of screening testing. Practical cryteria for screening. Performance assessment. Practical exercise.	Oral and multimedia presentation	Theoretical and practical presentations	Carcinoma of the cervix/uterus/ ovary, Malformations of cardiovascular system	2
5	Intervention methods for communicable diseases. Case definition, diagnostic, isolation, case report. Epidemiological inquiry. Types of inquiries, objectives, stages. Practical exercise inquiry report for different types of diseases and epidemiological circumstances	Oral and multimedia presentation	Theoretical and practical presentations	Immunization, Tuberculosis Infectious disease of childhood	2

6	Decontamination and sterilization: decontamination and sterilization methods, procedures and products. Prevention of professional exposure of health-care workers: standard precautions, protective equipment, hand hygiene, waste materials management, management of professional exposure cases	Oral and multimedia presentation	Theoretical and practical presentations	Pre-operative care, post operative care, Transfusion of blood products	2
7	Elements of immunoprevention: vaccination, vaccines, National Vaccination Program, active immunization, passive immunisation	Oral and multimedia presentation	Theoretical and practical presentations	Immunization, Malaria, Meningitis	2

Bibliography
Mandatory bibliography:
1.Ordin M.S. 1101/2016 privind aprobarea Normelor de supraveghere, prevenire și control al IAAM in unitatile sanitare.
2.OMS 1761/2021 pentru aprobarea Normelor tehnice privind curăţarea, dezinfecţia şi sterilizarea în unităţile sanitare publice şi private.
3.OMS 1226/2012 pentru aprobarea Normelor tehnice privind gestionarea deşeurilor rezultate din activităţi medicale şi a Metodologiei de culegere a datelor pentru baza naţională de date privind deşeurile rezultate din activităţi medicale.

Support bibliography:
1.Bonita R, Beaglehole R, Kjellström T. Basic epidemiology, 2nd edition. World Health Organization, 2006. Available online:http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf
2.Gordis L. Epidemiology, 5th edition. 2014. ISBN 9781455742516. Available online:https://studentconsult.inkling.com/store/book/gordis-epidemiology-5th/
3.Last J.M.: A Dictionary of Epidemiology, 4th ed., Oxford University Press, New York, 2000
4.Merrill R. M.: Principles of Epidemiology, Workbook, Jones&Bartlett Learning, Sudbury, 2011
5.Ivan A.,Azoicăi D., Grigorescu R.: Epidemiologie generală și specială - Ediție bilingvă, Ed. Polirom, Iași, 1996, (English version: GENERAL AND SPECIAL EPIDEMIOLOGY, p 103-197
6.Sabău M., Voidăzan S, Golea C., : Epidemiologie generală ediţia a-II-a, Litografia UMF Tg. Mureş, 2010
7.Sabău M., Golea C., Bacârea V.: Epidemiologie generală, Litografia UMF Tg. Mureş, 2005
8.Sabău M., Golea C., Bacârea V., Epidemiologie specială-Boli netransmisibile, Litografia UMF Tg.Mureş, 2005
9.Bocşan I.S.: Epidemiologie practică pentru medicii de familie, editura Medicală Universitară „Iuliu Haţieganu”, Cluj-Napoca, 1999

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Students will develop the ability to understand the role of epidemiology in the field of public health and also use epidemiological methods to understand and apply epidemiological methods.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL session attendance	multiple choice test	15
- practical activities	practical exercise attendance	practical test	15
Final evaluation			
- theoretical final exam	-cunoașterea noțiunilor teoretice referitoare la activitatea care urmează a fi efectuată	multiple choice test Evaluarea scrisă-test grilă cu 40 de întrebări - max. 25% tip complement simplu, restul de tip complement multiplu, din tematica de curs. multiple choice test	35
- practical final exam	-cunoașterea materialului bibliografic -înțelegerea conceptelor de bază și integrarea lor	practical test Test practic grilă cu 40 de întrebări - max. 25% tip complement simplu, restul de tip complement multiplu, din tematica de lucrări practice. practical test	35

Minimal performance standards:
- cunoasterea noţiunilor teoretice privind procesul epidemiologic al bolilor transmisibile şi netransmisibile, a noţiunilor teoretice privind epidemiologia, supravegherea şi controlul unor boli transmisibile şi netransmisibile
- cunoasterea noţiunilor practice privind aprecierea şi evaluarea stării de sănătate a populaţiei sau a unor grupe populationale
- cunoasterea noţiunilor practice necesare în cazul intervenţiilor profilactice (imunizări, decontaminări profilactice, etc.)
-cunoasterea masurilor de intervenţie în focare de boală (anchete, decontaminări, imunizari, chimioprofilaxie, etc.).
- cunoştinţe pentru nota 5: realizarea a 50% din punctajul maxim posibil al grilei;
- cunoştinţe pentru nota 10: realizarea a 90% din punctajul maxim posibil al grilei.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Golea Cristina	monday (luni) 12-14

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dento-alveolar surgery			
2.2 Course coordinator: Șef l dr Bereczki-Temistocle Despina-Luciana			
2.3 Practical activities coordinator(s): Șef l dr Petrovan Cecilia, Șef l dr Coșarcă Adina, Șef l dr Iacob Alina, Șef l dr Bereczki-Temistocle Despina, Șef l dr Golu Vlad, Asist univ dr Veress Szidonia			
2.4 Year of study: IV	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 12	3.2 lecture: 4	3.3 practical activities: 8
3.4 Total hours in curriculum: 84	3.5 lectures: 28	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 22		
- supplemental documentation at the library, from specialized information portals and in the field: 22		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 21		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 66		
3.9 Total hours: 150		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: -
4.2 competency: -

5. Conditions

5.1 for lectures: -
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Description of the concepts, theories and fundamental notions regarding the appearance of dental pathology, signs and symptoms characteristic of each disease, useful for guiding clinical diagnosis. Identification of resuscitation maneuvers in first aid conditions. Correct interpretation of clinical and paraclinical signs, symptoms to develop the diagnosis. Use of therapeutic resources to formulate the treatment plan as well as correct interpretation of clinical and paraclinical data. Application of acquired clinical techniques and knowledge to be integrated with paraclinic data. Developing and applying a treatment plan in accordance with the stage of the disease and its individualized adaptation to the patient's particularities. Correct examination of the patient, establishing the indications for tooth extraction and carrying them out. Prevention of accidents and post-extractive complications, respectively their treatment, if they have occurred. Appropriate establishment of indications of surgery to aid endodontic treatment; indications of preprosthetic surgical treatment.

6.2 transversal competencies: Identification of objectives to be achieved, available resources, conditions for their completion, working stages, working times, related risks. Identifying roles and responsibilities in a multidisciplinary team and applying techniques of relationship and effective work within the team and in relation to the patient. Efficient use of communication resources and assisted training. Compliance with the rules of asepsis and antisepsis, occupational and medical protection. Effective teamwork.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions. Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective: Acquisition of extraction techniques in different dental groups.
7.2 Specific objectives: Familiarize students with the extraction tool. Acquisition of extraction techniques at different dental groups, accidents and complications of tooth extraction and their treatment. Acquiring theoretical knowledge from surgery dental-alveolar (endodontic and proprosthetic surgery).

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Examination of the patient in OMF surgery. Clinical examination. Paraclinical examinations	oral presentation + multimedia, discussions	-	-	2
2	Tooth extraction. Indications, contraindications of extraction of temporary and permanent teeth	oral presentation + multimedia, discussions	-	-	2
3	Tooth extraction. Tooth extraction technique with extraction forceps	oral presentation + multimedia, discussions	-	-	2
4	Tooth extraction with forceps, by groups of teeth	oral presentation + multimedia, discussions	-	-	2
5	Extraction of roots with forceps; elevators; by separating the roots	oral presentation + multimedia, discussions	-	-	2
6	Tooth extraction by alveolotomy	oral presentation + multimedia, discussions	-	-	2
7	Post-extractional healing	oral presentation + multimedia, discussions	-	-	2
8	Local accidents of dental extraction	oral presentation + multimedia, discussions	-	-	2
9	Local complications of tooth extraction	oral presentation + multimedia, discussions	-	-	2
10	Endodontic surgery. Transmaxilary drainage	oral presentation + multimedia, discussions	-	-	2
11	Endodontic surgery. Apical resection. Radicular amputation	oral presentation + multimedia, discussions	-	-	2
12	Dental replanting. Dental transplanting	oral presentation + multimedia, discussions	-	-	2
13	Proprosthetic surgery. Restoration of the deficiencies of the soft parts of the prosthetic field	oral presentation + multimedia, discussions	-	-	2
14	Proprosthetic surgery. Restoration of bone deficiencies of the prosthetic field	oral presentation + multimedia, discussions	-	-	2

Bibliography

Oral and maxillo facial surgery, Sumit Sanghai,JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD
Oral surgery, Fragiskos D, 2007
Cosarcă Adina, Golu Mihai Vlad, Bereczki Temistocle Despina Luciana -BASIC
CONCEPTS IN DENTOALVEOLAR SURGERY, Editura University Press Tîrgu Mureş, 2023, ISBN 978-973-169-798-7

8.2 Content of workout, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Revision of the dento-maxillary anatomy and a local and loco-regional anesthesia techniques necessary to perform dental extractions	Multimedia presentation, teaching materials, discussions	-	-	4

2	Examination of the patient, indications and contraindications of dental extraction. Familiarity with the extraction tool	Multimedia presentation, teaching materials, discussions	-	-	4
3	Preparation of the patient, doctor and a instruments for performing tooth extraction. Extractions by groups of teeth	Multimedia presentation, teaching materials, discussions	-	-	4
4	Accidents and complications of tooth extraction and their treatment	Multimedia presentation, teaching materials, discussions	-	-	4
5	Performing practical extractions (in patients)	CBL	CBL1	-	4
6	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
7	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
8	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
9	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
10	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
11	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
12	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
13	Performing practical extractions (in patients)	Supervision of extractions in patients	-	-	4
14	Performing practical extractions (in patients)	CBL	CBL2	-	4

Bibliography
Oral Surgery Fragiskos 2007
Cosarcă Adina, Golu Mihai Vlad, Bereczki Temistocle Despina Luciana -BASIC CONCEPTS IN DENTOALVEOLAR SURGERY, Editura University Press Tîrgu Mureş, 2023, ISBN 978-973-169-798-7

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

At the end of the fourth year, students should be able to diagnose dental-alveolar conditions that indicate tooth extraction or conservative surgical treatment, perform uncomplicated dental extractions, prevent, recognize and treat accidents and complications that occurred during extractions; redirect patients to the chiryr. If the extraction could not be completed, there have been accidents and complications that it cannot treat. SA recommend surgical methods to help with prosthetic therapy if this is necessary. Diagnose clinical situations that indicate and allow replanting, dental transplants.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	according to the specific objectives of the disciplines	-	0
- practical activities	according to the specific objectives of the disciplines students should perform a number of 3 tooth extractions per module in order to receive the maximum grade for the practical activity during the module- 10% of the grade	oral examination; monitoring the required teeth extractions (10%); CBL (20% of the grade)	30
Final evaluation			
- theoretical final exam	according to the specific objectives of the disciplines	written summative exam multiple choice questions, UNIX examination center	50
- practical final exam	according to the specific objectives of the disciplines	oral examination	20

Minimal performance standards:
Conducting anamnesis, complete and correct clinical examination and basic diagnostic procedures, requesting appropriate complementary examinations, and formulating a correct diagnosis.
Developing an individualized therapeutic plan and performing basic therapeutic procedures, including first aid.
Be able to perform uncomplicated dental extractions, prevent, recognize and treat accidents and complications that occur when performing dental extractions.

Practical activity grade (dental extractions) – 10% from the final grade;
CBL- 20% from the final grade

Final theoretical exam note – minimum 5; note < 5 = failed exam; Practical final exam note – minimum 5; note < 5 = failed exam; Final note – minimum 5; note < 5 = failed exam. Mandatory attendance at PA; 20% unmotivated absences are allowed (8 hours lp = 2 PAs). Absences from PA can only be recuperated during the school year or summer practice, depending on the schedule of the PA's tutor.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

Tooth extractions

13. Appointment timetable (for students)

Șef l dr Bereczki-Temistocle Despina-Luciana	tuesday 8:00-9:00

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Infectious diseases			
2.2 Course coordinator: Șef l dr Sincu-Bodnar Nina-Ioana			
2.3 Practical activities coordinator(s): Sef lucrari dr Bodnar Nina-Ioana, asist univ drd Manasturean Cristina, asist univ drd Fleseriu Tudor			
2.4 Year of study: IV	2.5 Semester: 2	2.6 Type of evaluation: E	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: None required
4.2 competency: None required

5. Conditions

5.1 for lectures: on site
5.2 for practical activities: on site

6. Specific competencies acquired

6.1 professional competencies: The course is addressed to students in the 4th year of Dental Medicine. At the end of the course, the students will acquire general knowledge about infectious diseases, will know principles of diagnosis and treatment in parenteral, nosocomial infections, infections in the oro-cervical region, systemic infections, infectious diseases with cardinal symptoms in the oral cavity, as well as peculiar features of infections in immunocompromised hosts.
6.2 transversal competencies: Integration of assimilated knowledge with the purpose of recognition and diagnosis of an infectious disease, curative and prophylactic treatment measures in emerging and reemerging infectious diseases with an impact on population health. Students should be able to manage the patients with infectious nosocomial pathology, those suffering from infectious diseases manifested in the oral cavity and with systemic repercussions or patients with transmissible infectious diseases posing epidemiologic risk. Acquiring proper communication skills towards patients with infectious diseases, and integration into multidisciplinary teams.

6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s).
Conservative treatment of dento-periodontal structures.
Diagnosis and interceptive treatment of dentomaxillary anomalies.
Prosthetic restoration of dental arches.
Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.
Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Knowledge regarding communicable and non-communicable infectious diseases; identification, diagnosis, treatment and preventive measures in infectious diseases.

7.2 Specific objectives:
Identifying the nosocomial character of an infection, the application and the explanation of the preventive measures in nosocomial infections. Knowing how the hepatitis viruses A, B, C, D, E, as well as HIV, are transmitted. Prescribing and interpreting virological examinations in infections with these viruses. Knowing the principles of prophylaxis and treatment.Information and counseling on the prevention and parenteral transmission of HIV. Knowledge about detecting an HIV infection in the dentist's office: specific manifestations in the oral cavity. Knowledge of the terms: systemic inflammatory response syndrome, bacteraemia, sepsis, septic shock. Emergency identification and management planning of sepsis. The role of dental focal infections in generating systemic cardiovascular and CNS manifestations and their management. Principles of etiological treatment in infectious diseases; the main classes of antimicrobial agents.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Infectious process. Classification of infectious diseases. Emerging and re-emerging infections. Particularities of prophylaxis and etiological therapy in odontogenic infections.	oral + multimedia presentation	None	PUO-pyrexia of unknown origin. Immunisation	2
2	Oro-cervical bacterial infections	oral + multimedia presentation	None	Oral disorders. Dysphagia	2
3	Oro-cervical viral and fungal infections	oral + multimedia presentation	None	Infectious diseases of childhood. Candidiasis	2
4	Systemic bacterial infections with oro-pharyngeal entry gate.	oral + multimedia presentation. MCQ assessing the knowledge acquired from the previous lectures	None	Septicaemia	2
5	HIV/AIDS infection. Oropharyngeal and facial manifestation of HIV infection.	oral + multimedia presentation	None	HIV	2
6	Acute viral hepatitis with parenteral and enteral transmission.	oral + multimedia presentation	None	Acute liver disease. Hepatomegaly. Jaundice.	2
7	Intracranial hypertension syndrome of infectious origin. Acute meningitis. Acute encephalitis.	oral + multimedia presentation	None	Meningitis. Headache. Raised intracranial pressure.	2

Bibliography
1. Georgescu AM, Tilea B, Chiriac C (sub red): Infectious diseases. University Press Tirgu Mures publishing house, 2014, 258 pg, ISBN 978-973-169-318-7
2. Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
3. Course notes

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Streptococcal infections – clinical manifestations.	case report, images from our clinical practice	None	Infectious diseases of childhood. Oral disorders. Dysphagia	1
2	Herpes-virus infections.	case report, images from our clinical practice	None	Bullous/vesicular skin eruption	1
3	Mumps - clinical manifestations and differential diagnosis challenges	case report, images from our clinical practice	None	Parotid swelling	1
4	Respiratory viral infections. Influenza. SARS-CoV-2 infection.	case report, images from our clinical practice	None	Respiratory tract infection	1

5	Diagnosis of acute pharyngitis.	case report, images from our clinical practice	None	Oral disorders	2
6	Acute viral hepatitis.	case report, images from our clinical practice	None	Acute liver disease. Hepatomegaly. Jaundice.	2
7	HIV/AIDS infection. Clinical aspects of oral cavity diseases in HIV/AIDS infections.	CBL	None	HIV	2
8	Antibiotic therapy in dental practice.	case report, images from our clinical practice	None	Drug reactions	1
9	Post-exposure prophylaxis	case report, images from our clinical practice	None	Immunisation	1
10	Nosocomial infections.	case report, images from our clinical practice	None	Acute renal disease	1
11	Infections with digestive entry gate.	case report, images from our clinical practice	None	Loose stools	1

Bibliography
1. Georgescu AM, Tilea B, Chiriac C (sub red): Infectious diseases. University Press Tirgu Mures publishing house, 2014, 258 pg, ISBN 978-973-169-318-7
2. Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
3. Course notes

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

- demographic and climatic changes help maintain infectious diseases up-to-date
- the appearance of emerging and reemergent diseases with particular epidemiological impact
- alarming increase in microbial resistance to antibiotics
- particularities of infectious diseases in immunocompromised hosts.
- the impact of decisions upon infectious pathology on the general well-being of the population.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Theoretical knowledge assessment (information acquired from lectures and individual study)	MCQ (multiple question test)	20
- practical activities	The ability to correctly manage a clinical case from the curriculum	CBL	10
Final evaluation			
- theoretical final exam	Acquiring theoretical knowledge regarding clinical findings, positive and differential diagnosis, therapeutic, curative and prophylactic measures regarding infectious diseases.	MCQ test – multiple choice questions	60
- practical final exam	The ability to identify the main signs and symptoms of the studied pathologies, in order to establish the investigation and treatment plan.	MCQ test – multiple choice questions	10

Minimal performance standards:
Minimum Performance Standard:
- recognizing infectious diseases
- managing an infectious disease in the dental practice
Minimum grade for passing the theoretical and practical exam, as well as the evaluations during the module is 5.
No absences are allowed at the practical activities.

CLINICAL ABILITIES
- to perform the medical history of the patient
- to perform the physical examination
- hierarchical representation of differential diagnosis lists
- enumerating and supporting the elements of positive diagnosis for the clinical conditions included in curriculum
TECHNICAL ABILITIES:
- collecting pharyngeal swab
PARACLINICAL ABILITIES:
- CBC results: interpretation
- coagulation test results: interpretation
- peripheral blood smear: interpretation
- urinalysis: interpretation

- plasma biochemistry: interpretation
- biochemical results from CSF: interpretation
- acid base balance: interpretation
- interpretation of different cultures and antibiotic sensitivity tests (blood culture, CSF, other bodily fluids)
- interpretation of serological tests
- parasite detection tests - result interpretation
THERAPEUTIC RECOMMENDATIONS
- identification of therapeutical objectives and priorities in a particular case
- to perform a correct therapeutical prescription for patients from different categories (suffering from infectious disease pathology in the oro-cervical region)
- selecting the right route of administration and optimal therapeutic form of medication in a specific case
PROPHYLAXIS
- Educating/counseling the patient for behavioral risk factors and promoting a healthy lifestyle
- Primary, secondary and tertiary prevention plan in a particular situation
COMMUNICATION
- To complete the medical history, physical examination, and medical documents of a patient
- Explaining the diagnostic and therapeutic procedures and obtaining the patient's consent
- To note the patient's daily evolution
- formulating the recommendations at discharge in verbal and written form
- oral case presentation of an infectious disease pathology in the oro-cervical region

MUST SEEN CLINICAL SITUATION LIST:
1. Oropharyngeal streptococcal infections
2. Oropharyngeal viral infections
3. Mumps
4. Influenza
5. Acute viral hepatitis
6. Oral manifestations in HIV infection
7. Acute meningitis
8. Encephalitis
9. Sepsis with oropharyngeal portal of entry

11. Must seen clinical situation list

1. Oropharyngeal streptococcal infections
2. Oropharyngeal viral infections
3. Mumps
4. Influenza
5. Acute viral hepatitis
6. Oral manifestations in HIV infection
7. Acute meningitis
8. Encephalitis
9. Sepsis with oropharyngeal portal of entry

12. Clinical / practical abilities

CLINICAL ABILITIES
- to take the patient's medical history 2.1
- to perform the physical examination 2.2
- hierarchical representation of differential diagnosis lists 2.10
- enumerating and supporting the elements of positive diagnosis included in the curriculum 2.11
TECHNICAL ABILITIES:
- collecting pharyngeal swab 3.8
PARACLINICAL ABILITIES:
- CBC - written results: interpretation 4.3
- coagulation test - written results: interpretation 4.4
- peripheral blood smear - written results: interpretation 4.6
- urinalysis – written results: interpretation 4.8
- plasma biochemistry – written results: interpretation 4.10
- biochemical tests from CSF – written results: interpretation 4.11
- acid base balance – written results: interpretation 4.12
- various cultures and antibiotic sensitivity tests (blood culture, CSF, other bodily fluids) – written results: interpretation 4.15
- serological tests – written results: interpretation 4.19
- parasite detection tests - written results: interpretation 4.21
THERAPEUTIC RECOMMENDATIONS
- identification of therapeutical objectives and priorities in a particular clinical case 6.1
- to perform a correct therapeutical prescription for various categories of patients (with infectious disease pathology in the oro-cervical region) 6.2
- selecting the right route of administering the treatment and the optimal therapeutic form of the medication in a particular clinical case 6.5
PROPHYLAXIS
- to educate / counsel the patient regarding behavior/lifestyle risk factors and how to alter these and promote a healthy lifestyle 7.1- 0

- primary, secondary and tertiary prevention plan in a particular clinical situation 7.6- 1 COMMUNICATION - To complete the medical history and physical examination in the patient's medical documents 8.1- 1 - to explain the diagnostic and therapeutic procedures and to obtain the patient's informed consent 8.2- 1 - To note the patient's daily evolution 8.3- 3 - to formulate the recommendations at discharge in verbal and written form 8.9- 1 - oral case presentation of a case of infectious disease pathology in the oro-cervical region 8.13- 1

13. Appointment timetable (for students)

Şef l dr Sincu-Bodnar Nina-Ioana	Tuesday 14-16 (2-4 p.m.)

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
ROMÂNIA
UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Ophthalmology			
2.2 Course coordinator: Șef l dr Tripon Robert-Gabriel			
2.3 Practical activities coordinator(s): Șef l dr Tripon Robert-Gabriel			
2.4 Year of study: IV	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
3.4 Total hours in curriculum: 28	3.5 lectures: 14	3.6 practical activities: 14
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities:		
- examinations: 1		
- other activities:		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: x
4.2 competency: x

5. Conditions

5.1 for lectures: x
5.2 for practical activities: x

6. Specific competencies acquired

6.1 professional competencies: - C1 Identification of eye diseases, establishing a presumptive diagnosis, recognition of ophthalmic emergencies - C2 Knowing the therapeutic plan of diseases with positive diagnosis - C3 Prophylaxis measures for avoiding the illness of congener eye or of the community to which it belongs the patient - C4 Guidance of patients at risk to specialized ophthalmologic screening units - C5 The ability to participate to team research of ophthalmologic issues
6.2 transversal competencies: Multidisciplinary team work, understanding the objective of the activity, the assignment of specific duties to each specialty, the sequencing of work, verbal-written communication skills, linguistic skills to develop and present projects and to communicate with the patient as well as with team members.
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
Acquisition of basic knowledge of general ophthalmology

7.2 Specific objectives:
1. Identify ophthalmic emergencies, drawing up an investigational plan for establishing finally the diagnostic of certainty by the eye specialist physician.
2. Positive diagnosis of uncomplicated eyelid or conjunctival diseases, development of a therapeutic drug plan, proper monitoring of the disease, recognition of unfavorable evolution and referring the patient to the ophthalmologist.
3. Appropriate monitoring of the therapeutic plan initiated by ophthalmologist.
4. Initiating preventive measures within a community when a contagious eye disease occurs.
5. Prophylaxis measures for avoiding the illness of the congener eye.
6. Referral to specialized screening of patients at risk for eye disease.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Orbital and lachrimal sistem pathology	Oral presentation and PowerPoint	x	oedema, orbital swelling, brain tumor, red eye, visual impairment, trauma to head, tyroid disorders, inflammatory arthritis,	2
2	Eyelids diseases	Oral presentation and PowerPoint	x	oedema, allergic disorders, lymphoproliferative disorders, cranial nerve disorders, skin cancer, skin infections, skin ulcerations	2
3	Pathology of the conjunctiva	Oral presentation and PowerPoint	x	oedema, allergic disorders, inlammatory arthritis, lymphoproliferative disorders, red eye	2
4	Pathology of the cornea	Oral presentation and PowerPoint	x	brain tumor, red eye, visual impairment, visual loss, cranial nerve disorders	2
5	Lens disorders	Oral presentation and PowerPoint	TBL	agression/violence, visual impairment, visual loss, diabetes mellitus, trauma to head	2
6	Glaucoma	Oral presentation and PowerPoint	x	headache, red eye, visual impairment, visual loss, diabetes mellitus, glaucoma	2
7	Red eye, ophthalmological emergencies	Oral presentation and PowerPoint	x	agression/violence, falls, oedema, allergic disorders, cerebrovascular disease, red eye, visual impairment, visual loss, glaucoma, hypertension, poisoning, septicaemia	2

Bibliography
Mandatory bibliography:
Kanski's Clinical Ophthalmology, 9th Edition., author John F. Salmon, publisher Elsevier, 2019, ISBN 9780702077111
Karin Horvath, Florina Vultur, Gh. Muhlfay: Ophthalmology-Lecture notes, Editura University Press, UMF TgMures, 2014
Support bibliography:
Jack J. Kanski, Clinical Ophthalmology: A Systematic Approach, 7th Edition, 2011
American Academy of Ophthalmology, Basic and Clinical Science Course, 2010-2011

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Presenting ophthalmological office, equipment and medicinal substances used in ophthalmology. Case presentation from orbital pathology	Practical demonstrations, case presentation	x	oedema, orbital swelling, brain tumor, inflammatory arthritis, red eye, visual impairment, tyroid disorders, trauma to head	2
2	Examination of the eyelids, demonstrations, case presentation	Practical demonstrations, case presentation	x	oedema, allergic disorders, lymphoproliferative disorders, cranial nerve disorders, skin cancer, skin infections, skin ulcerations	2
3	Examination of the conjunctiva, learning examination maneuvers, therapeutic maneuvers (subconjunctival injection etc), case presentation	Practical demonstrations, case presentation	x	oedema, allergic disorders, inlammatory arthritis, lymphoproliferative disorders, red eye	2

4	Slit lamp examination of the cornea, case presentations, practical demonstrations (corneal foreign body removal, etc.)	Practical demonstrations, case presentation	x	brain tumor, red eye, visual impairment, visual loss, cranial nerve disorders	2
5	Cataract (examination, diagnosis, surgery)	Practical demonstrations, case presentation	CBL	agression/violence, visual impairment, visual loss, diabetes mellitus, trauma to head	2
6	Ocular tension, tonometry, computed perimetry, examination of glaucomatous patient	Practical demonstrations, case presentation	x	headache, red eye, visual impairment, visual loss, diabetes mellitus, glaucoma	2
7	Examination of the patient with ocular trauma, interdisciplinary investigations, tests, laboratory analysis, preparation for surgery	Practical demonstrations, case presentation	x	agression/violence, falls, headache, oedema, squint, visual impairment, visual loss, trauma to head	2

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Support bibliography:
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American Academy of Ophthalmology, Basic and Clinical Science Course, 2010-2011

9. Correlations between the contents of the discipline and the expectations of the community representatives, professional associations and representative employers in the domain

Acquired ophthalmologic knowledges will serve to adequate recognition of ophthalmic emergencies, the presumptive diagnosis and proper guidance of the patient to appropriate specialist.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	Written evaluation	10
- practical activities	CBL	Oral evaluation	20
Final evaluation			
- theoretical final exam	Knowledge of the material from theoretical lectures and practical activities	Written evaluation	70
- practical final exam	x	x	0

Minimal performance standards:
Knowing of minimum 50% from the presented subjects.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef l dr Tripon Robert-Gabriel	30 de minute după fiecare curs / activitate practică

Head of departament Course coordinator Practical activities coordinator(s)

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
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UNIVERSITATEA DE MEDICINĂ, FARMACIE, ȘTIINȚE ȘI TEHNOLOGIE „GEORGE EMIL PALADE" DIN TÂRGU MUREȘ

Syllabus

academic year: 2024 - 2025

1. Data regarding the program

1.1 Higher education institution: 'George Emil Palade' University of Medicine, Pharmacy, Sciences and Technology of Târgu Mureș
1.2 Facultaty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: licence
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Otorhinolaryngology			
2.2 Course coordinator: Prof dr Neagoș Adriana			
2.3 Practical activities coordinator(s): Prof dr Neagoș Adriana			
2.4 Year of study: IV	2.5 Semester: 2	2.6 Type of evaluation: C	2.7 Type of discipline: Obl

3. Total estimated time (hours per semester of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 2	3.3 practical activities: 2
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- supplemental documentation at the library, from specialized information portals and in the field: 3		
- preparation for seminaries / laboratories, homework, reports, portfolios and essays: 3		
- tutorial activities: 3		
- examinations: 3		
- other activities: 3		
3.8 Total hours of individual study: 22		
3.9 Total hours: 50		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: According Rules
4.2 competency: According Rules

5. Conditions

5.1 for lectures: Rooms equipped with videoprojector and PC,
5.2 for practical activities: Treatment rooms as well as demnstration room in the ENT Clinic

6. Specific competencies acquired

6.1 professional competencies: Identify objectives to be achieved, resources available, their closing,conditions, stages of work, working
6.2 transversal competencies: time,and deadlines - Identify roles and responsibilities within a multidisciplinary team and application techniques and effective work relationships within the team and the relationship with the patient - Awareness of the need for continuous training - Familiarity with the use of medical information systems - Design, Layout and support in a Romanian specialty papers on a current topic in the field, using different information sources and tools
6.3 related to the study program: Disease state identification and accurately diagnosing dental condition(s). Conservative treatment of dento-periodontal structures. Diagnosis and interceptive treatment of dentomaxillary anomalies. Prosthetic restoration of dental arches. Diagnosis,evolution and clinical examination of patients with maxillofacial surgical conditions.

Managing the theoretical and legislative bases of the health care systems operating in Romania, as well as the managerial ones regarding the dental offices.

7. Objectives of the discipline (based on the grid of specific competencies)

7.1 General objective:
estabčish the clinical diagnosis, correct clinical examination, clinical assessment of the patient with

7.2 Specific objectives:
Training students in ENT pathology problems
• Harmonization topics in accordance with the requirements in this field in the world for effective cooperation with leading centers in the field
• Encourage the research initiatives and providing support for their achievement
•Deepening diseases that are considered highly topical issues (laryngeal tumors, allergic pathology, congenital deafness, respiratory pathology sleep
•Training students to use existing diagnostic and therapeutic algorithms

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	.Knowlegde of anatomy, phisiology and diagnostical methods of acustico-vestibular system a. Auditory System anatomy b. Auditory System phisiology c. Diagnostical Methods of auditory and vestibular function	Course with ppt presentation	Using of interactive teching methods, discussions with students as well as ppt presentations	Deafness, Dizziness, Meningitis, Otitis media,nerves disorders	2
2	Acustico-vestibular System inflammatory Pathology a. External otitis b. Otitis media without effusion c. Suppurate Otitis media d. Complications of Otitis media e. Hearing loss classification f. Perpherical Ffacial Nerve Phalsy	Course with ppt presentation and TBL	Using of interactive teching methods, discussions with students as well as ppt presentations	Deafness, Dizziness, Vomiting, Otitis Media, Nerve disorders	2
3	Nose and paranasal sinusus anatomy, phisiology , as well as olphactoy and respiratory function investigations methods a. Nose and Paranasal sinus anatomy b. Nasal phisiology	Course with ppt presentation	Using of interactive teching methods, discussions with students as well as ppt presentations	Oedema, Headache	2
4	4.Inflamatory and tumoral nose and paranasal sinusis Pathology a. Acute and Chronical Sinusities b. Nasal and sinuses tumors	Course with ppt presentation and verificationof knowledge in TBL System	Using of interactive teching methods, discussions with students as well as ppt presentations	Preoperative Care, postoperative care, Tuberculosis, Headach, Orbita inflammation	2
5	5.Nose Breathing disorders and allergies inENT a. Nose breathing disorders b. Sleep breathing disorders, Obstructive Sleep Apnea c. Allergic Rhinitis and Allergical Rhinosinusities	Course with ppt presentation	Using of interactive teching methods, discussions with students as well as ppt presentations	Oedema, Sleep disorders. Fatigue, Preoperative and Postoperative care, Allergic disorders, Sudden death	2
6	6 Pharingeal, Esofageal and Laringeal Anatomy , phisiology; Esofageal and tracheo-bronchial foreign bodies a. Pharingeal Anatomy and Phisilogy b. Larigeal Anatomy and	Course with ppt presentation	Using of interactive teching methods, discussions with students as well as ppt presentations	Cyanosis, Dysphagia, Oedema Palpitation Preoperative Care Postoperative Care	2