



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Zazgyva Ancuța-Marilena			
2.3 Practical activities coordinator(s): Șef I dr Zazgyva Ancuța-Marilena			
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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 8		
- tutorial activities: 4		
- examinations: 4		
- other activities: 8		
3.8 Total hours of individual study: 44		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: Fără
4.2 competency: Fără

5. Conditions

5.1 for lectures: Fără
5.2 for practical activities: Fără

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 the molecular 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 (incl. 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 (incl. 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

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 and Molecular Biology”, Karp Gerald: 3-rd edition, John Wiley and Sons, New York, 2002
5. „Cell Biology”, Pollard T.D., Earnshaw W.C.: Saunders Elsevier, Philadelphia, 2008
6. 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 (incl. 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	Specimen examination in optical microscopy	-	-	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 (incl. 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. Multimedia presentation	-	-	2

Bibliography

1. „Cell Biology Practical Works Guide”, Mariana Cornelia Tilinca, Târgu Mureş, 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

Learning the basics of cell and molecular biology, with subsequent applications in the study of other morphological sciences

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 – it represents 40% of the final grade	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 one microscopic specimen) on the day of the theoretical exam	20
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)

Şef I dr Zazgyva Ancuța-Marilena	30 minutes after each course or practical activity

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physiology			
2.2 Course coordinator: Șef I dr Metz Erzsebet-Julia			
2.3 Practical activities coordinator(s): As. univ. drd. Halațiu Vasile Bogdan, As. univ. 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: 24		
- supplemental documentation at the library, from specialized information portals and in the field: 24		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 6		
- examinations: 6		
- other activities: 12		
3.8 Total hours of individual study: 84		
3.9 Total hours: 154		
3.10 Credits: 6		

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.	Oral and multimedia presentation. Development of logical diagrams on the blackboard, discussion with	-	Anemia, Rhesus haemolytic disease, transfusion of blood products, cyanosis, hepatomegaly, jaundice, acute liver disease/failure, chronic liver disease, gallbladder disease, breathlessness,	2

	Regulation of the red blood cell number. Hemoglobin. Iron metabolism. Blood types, blood transfusion.	students.		malabsorption, tiredness, palpitations, drug reactions.	
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 immune vigilance.	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
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	Oral and multimedia presentation. Development of logical diagrams on the blackboard,	-	Electrolyte and water balance, drug reactions, Acid base disturbance, acute renal disease/failure, anemia, chronic liver disease, disorders of lipid metabolism,	2

	the kidneys. Control mechanisms.	discussion with students.		hypertension, oedema, polyuria.	
10	Physiology of respiration. Ventilation. Perfusion. Alveolar gas exchange. Control of respiration.	TBL	TBL	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-operative 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.	TBL	TBL	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

- web-page of the Department of Physiology (http://fizioms.ro/edu/curs/curs_mde_I_2.html)

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	-	Anemia, cyanosis.	3

		activity			
5	Leucogram. Peripheral blood smear.	Oral presentation + laboratory activity	-	Immunisation, asthma, pruritus.	3
6	Counting of trombocytes. 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, reapiatory 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	Assessment of knowledge related to the discussed topic	Formative assessment - MCQ test - TBL (provisional)*	5
- practical activities	Assessment of knowledge acquired during the semester	Formative assessment – Written/MCQ/oral exam (provisional)*	25
Final evaluation			
- theoretical final exam	Assessment of theoretical knowledge gained during the semester	Summative assessment – Written/MCQ test (provisional)*	70

- practical final exam	-	-	0
Minimal performance standards: * The information presented at point 10 and below are all provisional. The exact method of the examination will be determined based on the epidemiological situation and the decisions of the University Management. Students are required to attend laboratory practices according to the schedule of groups and rooms. Students should have a proper theoretical background. Students will receive individual grades for all labs; in order to pass a laboratory practice, a minimum grade of 5.00 is required. Students who receive a grade lower than 5.00 are obliged to repeat the lab according to the schedule of the recuperations. The mean grade calculated from all the laboratory practices accounts for 5% of the final grade. 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, but only if the grade is at least 5.00. 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 20% of the final grade. Formative evaluation during the semester: Students will have TBL-type examinations. The average grade of these tests accounts for 5% of the final grade. This evaluation cannot be repeated during the exam sessions. Students who missed this evaluation will be awarded with the starting grade of the test (grade 1.00). This will be used for the calculation 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)

Sef I dr Metz Erzsebet-Julia	Thursday 10-11 AM

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Anatomy and embriology			
2.2 Course coordinator: Lecturer Trâmbițaș Cristian, PhD			
2.3 Practical activities coordinator(s): Lecturer Trâmbițaș Cristian, PhD, Lecturer dr. Nechifor Boila Alin, PhD			
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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 28		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 14		
- examinations: 7		
- other activities: 7		
3.8 Total hours of individual study: 84		
3.9 Total hours: 154		
3.10 Credits: 6		

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 acquainted 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 phylogenesis 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		Osteoarthritis. Osteomyelitis. Osteoporosis.	2
2	General arthrology and myology. Biomechanics of joints and muscles	Oral presentation, Powerpoint presentation, Video materials		Movement disorders, joint pain, joint swelling	2
3	The articulated skeleton (vertebral column, osteothorax, pelvis)	Oral presentation, Powerpoint presentation, Video materials		Vertebral pathology Thoraco abdominal trauma	2
4	Upper and lower limb muscles	Oral presentation, Powerpoint presentation, Video materials		Movement disorders	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. Lumbosacral plexus	Oral presentation, Powerpoint presentation, Video materials		Peripheral vascular disorders	2
7	Application of the knowledge on clinical cases	TBL		Thromboembolic disease Pain management	2

8	A topographic synthesis of the walls of the cavities of the torso. A topographic synthesis of the walls of the cavities of the torso. The zones of lesser resistance.	Oral presentation, Powerpoint presentation, Video materials		Muscular disorders. Hernia	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 hepatic 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		Pain management Trauma to chest/abdomen	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. 3. http://anatomiemd.umftgm.ro					

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		Joint pain Inflammatory arthritis Oral disorders (incl. Caries) Osteomyelitis	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		Joint pain Orbital swelling Osteomyelitis Malformations of lip/palate	3
3	The bones of the superior limb. Muscles of the superior limb.	Demonstrations on preparats human corpse		Joint pain Inflammatory arthritis Osteomyelitis	3
4	Vessels of the superior limb. Regions of the shoulder girdle. Nerves of the superior 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		Peripheral vascular disorders Peripheral nerve disorders Movement disorders	3
5	The bones of the inferior limb. Muscles of the inferior limb.	Demonstrations on preparats human corpse		Joint pain Inflammatory arthritis Movement disorders	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		Peripheral vascular disorders Peripheral nerve disorders	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		Respiratory tract infection Pneumothorax	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		Chest pain Pleural effusion	3
10	Anatomy of the stomach, of the liver and of the pancreas. The hepatic compartment.	Demonstrations on preparats human corpse		Pericardial disease Peptic ulcer	3
11	The compartment of the stomach. Descriptive anatomy of the intestines. The inframezocolic compartment.	Demonstrations on preparats human corpse		Pericardial disease Peptic ulcer	3
12	Descriptive anatomy of the kidneys and urinary ways.	Demonstrations on preparats human corpse		Urinary incontinence Retention of urine	3
13	Anatomy of the retroperitoneum	Demonstrations on preparats human corpse		Rectal bleeding	3
14	Application of the knowledge on clinical cases	Demonstrations on preparats human corpse		Trauma to chest/abdomen Rectal bleeding	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. 3. http://anatomiemd.umftgm.ro					

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	TBLX2	10
- practical activities	Complex seminar of osteology (cranium)	Practical examination	20
Final evaluation			
- theoretical final exam	General orientation, knowledge of details, terminology specific for the science, logical morphological thinking. Rewarding the knowledge regarding the details and assessing the faults regarding general aspects	Multiple choice test	40
- practical final exam	Practical examination On-route check, Midterm seminar	Practical examination. On the cadaver and museum	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 will be used in his further day-by day work			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Lecturer Trâmbițaș Cristian, PhD	

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Biophysics. Biophysics in dentistry			
2.2 Course coordinator: Șef I dr. Moldovan Mircea			
2.3 Practical activities coordinator(s): Șef I dr. Moldovan Mircea			
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: 12		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 0		
- 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 responsibilities 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 biological 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	TBL 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. Irradiation 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	TBL 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 1. Moldovan Mircea, Nicolaescu Ioan, Biophysics Laboratory Notebook and Laboratory Reports, University Press, Târgu Mureş, 2009 2. Nicolaescu Ioan, Moldovan Mircea, Biophysics, University Press, Târgu Mureş, 2010					

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	-	n/a	2

Bibliography

1. Moldovan Mircea, Nicolaescu Ioan, Biophysics Laboratory Notebook and Laboratory Reports, University Press, Târgu Mureș, 2009
2. Nicolaescu Ioan, Moldovan Mircea, Biophysics, University Press, Târgu Mureș, 2010

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 team base learning (TBL1) and 10% 2nd team base learning (TBL2)	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	written examination	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: The minimum passing grade for theoretical exam and practical exam is 5 (five). FG-final grade weight of the grades: 10% 1st team base learning (TBL1) 10% 2nd team base learning (TBL2) 10% lab activity (LA) 20% lab exam (LE) 50% theoretical exam (TE) $FG = 0,1 \cdot TBL1 + 0,1 \cdot TBL2 + 0,1 \cdot LA + 0,20 \cdot LE + 0,5 \cdot TE$			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr. Moldovan Mircea	On Tuesday 5 PM-7 PM.

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: General biochemistry			
2.2 Course coordinator: Conf dr Nemes-Nagy Enikő			
2.3 Practical activities coordinator(s): Conf dr Nemes-Nagy Enikő, Asist. univ. dr. Tripon Robert 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: 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: 15		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 2		
- examinations: 2		
- other activities: 4		
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: 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 in 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: Identification 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 in 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	The importance of Biochemistry. The structure of an eukaryotic cell. Standard and non-standard amino acids: structure, properties, biological role. Peptides: examples, biological importance and properties of peptides	Oral presentation	Methods of learning biochemical structures	Essential amino acids and nutrition, biological role of biogenic amines	2
2	Proteins: biological role, structural levels of proteins, properties, separatory techniques of proteins, pathology. Heme-proteins: Structures and oxygenation of myoglobin and hemoglobin. Derivatives and polymorphism of hemoglobin. Molecular pathology of hemoglobin	Oral presentation	Separation of proteins by chromatography and electrophoresis	Thalassemias and diseases caused by pathological hemoglobin derivatives	2
3	Nucleic acids: structure, purine and pyrimidine nucleobases, nucleosides, nucleotides and derivatives, polynucleotides (DNA, RNA). Enzymes: structure, specificity. Kinetics of enzymatic reaction. Regulation of enzyme activity. Mechanisms of enzyme catalysis. Diagnostic significance of plasma enzyme levels.	Oral presentation. Multiple choice test	Genetic diagnosis and genetic engineering. Types of enzyme catalysis TBL	Genetic diseases caused by mutations. Role of enzymes in clinical diagnosis	2
4	Hydrosoluble (B and C) vitamins and coenzymes (NAD ⁺ , NADP ⁺ , FMN, FAD, CoA-SH, lipoic acid, biotin, TPP, tetrahydrofolate, B12 coenzyme, PLP, PMP): structure, role, pathology. Liposoluble vitamins (A, D, E, K): structure, biological role, pathology. Oxidative stress and antioxidants	Oral presentation	Visual cycle, biosynthesis of vitamin-K dependent coagulation factors	Malabsorption, malnutrition, hemeralopia, scurvy, rickets, osteomalacia, osteoporosis, prevention of thrombosis by anti-vitamin K drugs	2
5	Bioenergetics and metabolism. Characteristics of metabolic pathways. Biochemistry thermodynamics. Macro-energy components: ATP, phosphagen. Minerals involved in the metabolism	Oral presentation	Micro-and microelements in diet and supplements	Deficiency of minerals	2

6	Oxidative decarboxylation of alpha-keto acids: mechanism, regulation, biological role Citric acid cycle. Localisation in central pathways of metabolism, mechanisms, regulation. Amphibolic role of the citric acid cycle. Anaplerotic reactions	Oral presentation	Relationship between central metabolic pathways	Vitamin deficiencies and related metabolic diseases based on malfunction of coenzymes	2
7	Biological oxidation. Mitochondrion respiratory chain: mechanism, localisation, components, inhibitors. Oxidative phosphorylation: theories, uncoupling of oxidative phosphorylation, pathology	Oral presentation	Inhibitors of the respiratory chain	Poisoning, thermogenesis	2

Bibliography

1. Stefan Hobai: Biochemistry course, vol. I, II Litografia UMF 2009-2011
2. Nemes-Nagy Enikő, Fazakas Zita: Medical Biochemistry for General Medicine and Dentistry Students, vol. I, 2014
3. Lehninger A. L., Nelson D. L., Cox M. M.: Principles of Biochemistry, 7th Edition, W. H. Freeman Macmillan Learning, New York, 2017
4. Berg J.M, Tymoczko J.L, Stryer L.: Biochemistry, 7th Edition, W. H. Freeman & Co, New York, 2012

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Organisation of the biochemistry laboratory. General laboratory safety rules. Instruments and devices used in a biochemistry laboratory. Basic operations used in the laboratory.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Glassware used in the laboratory	Effect of toxic and caustic substances used in the laboratory	2
2	The concept of pH. Buffer systems. Colorimetric and potentiometric determination of pH. Buffer capacity.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Changing the buffer capacity after dilution	Parameters of blood gas analyzer. Acid-base imbalances	2
3	Preparation of percent, molar and normal solutions. Preparation of 0,1 normal HCl solution, determination of the correction factor. Errors of volumetric techniques. Titration of a NaOH solution with the prepared HCl solution. Preparation of a 2g% NaCl solution and normal saline solution (0.9% NaCl solution).	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of titration	Medical applications of saline solution (0.9% NaCl)	2
4	Colour reactions for amino acids and proteins (biuret, ninhydrin, xanthoproteic, reaction for sulfur-containing amino acids, Pauly reaction). Precipitation reactions (using heavy metal ions, organic acids).	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of heating solutions in test tubes	Identification of amino acids in urine samples in enzymopathies	2
5	Determination of amino acid concentration by Sørensen method.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of neutralization using acid-base indicator	Role of amino acids in nutrition	2
6	Spectrophotometry. Total protein determination from blood serum by biuret method	Individual study, followed by oral presentation (online learning)	Technique of using the spectrophotometer	Absolute and relative hypo- and hyperproteinemia	2

		or practical experiment (onsite)			
7	Chemical composition and mineralization of teeth.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of using a balance for measurement of teeth fragments	Dental pathologies related to minerals present in the hard tissues	2
8	Determination of calcium by photometric method. Determination of serum magnesium by Mann-Yoe method.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of using automatic pipettes	Hypo- and hypercalcemia, hormonal disorders, hypo- and hypermagnesemia	2
9	Determination of inorganic phosphate by Briggs method. Determination of fluoride by potentiometric method.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of filtration. Technique of using ion selective electrodes	Hypo- and hyperphosphatemia. Consequences of fluoride deficiency (caries) and excess (fluorosis)	2
10	Determination of serum total and direct bilirubin concentration (van den Bergh reaction)	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Formation of azo pigments	Jaundice of different types	2
11	Determination of blood glucose level by the method involving glucose oxidase. Determination of glycated hemoglobin by chromatographic method (dem.). Utilization of the glucometer.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of using the glucometer and performing glucose tolerance test	Glucose intolerance and diabetes mellitus	2
12	Determination of serum iron concentration by spectrophotometric method. Assay of blood hemoglobin as oxyhemoglobin	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of reverse pipetting	Iron deficiency anemia	2
13	Determination of pathologic urine compounds (glucids, ketone bodies, proteins, blood, bile pigments, bile salts). Rapid laboratory tests	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Technique of using urine test strips	Kidney and hepatic diseases	2
14	Determination of serum vitamin C	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Antioxidants	Scurvy and its manifestations in the oral cavity	2

Bibliography

Fazakas Zita, Nemes-Nagy Enikő, Balogh-Sămărghișan Victor, David Eliza, Uzun Cosmina: Handbook of Biochemistry Practical Work, Litografia UMF Târgu Mureș, 2013

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	Correlation of biochemistry with functional aspects. Knowledge regarding the physiological role of metabolic processes	Team-based learning (TBL) in case of onsite activity, test on the platform in case of online learning	10
- practical activities	The degree of accommodation with laboratory techniques. Theoretical knowledge necessary for understanding the principles of laboratory methods Linking knowledge acquired at the course with the practical aspects	Grades on the experimental results (in case of onsite activity), test on the platform (in case of online learning) Final practical evaluation at the last practical activity: written exam from the theoretical part and experiments (in case of onsite activity), test on the platform (in case of online learning)	20
Final evaluation			
- theoretical final exam	Correlation of biochemistry with functional aspects. Knowledge regarding the physiological role of metabolic processes	Written exam (test and redactional part) in case of onsite exam, test on the platform in case of online learning	70
- practical final exam	-	-	0
Minimal performance standards: Knowledge on the general aspects regarding the structure of biomolecules in correlation with their biological role. General knowledge on metabolic pathways and their physiological role in relationship with pathological aspects.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Nemes-Nagy Enikő	Associate Professor Nemes-Nagy Enikő Monday 15-16

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Histology. Cytology			
2.2 Course coordinator: Lecturer Nechifor-Boila Adela-Corina, MD, PhD			
2.3 Practical activities coordinator(s): Lecturer Adela Nechifor-Boila, MD, PhD, Lecturer Laura Chinezu, MD, PhD			
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: 18		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 2		
- 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:
-
5.2 for practical activities:
-

6. Specific competencies acquired

6.1 professional competencies: Familiarization of the students with the morphological study of the human tissues, with special emphasis on the tooth, its structures and the oral cavities
6.2 transversal competencies: Acquiring research-related 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:

Recognition of the normal structures of the human body, with emphasis on the oral cavity.

7.2 Specific objectives:

Recognizing the histological structure of the tooth and surrounding tissues and linking it with the functional study

8.1 Content of lecture, semester 1

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).	TBL	-	-	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.	TBL	-	-	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

1. Laura Chinezu, Simona-Tunde Pataki, Adela Nechifor-Boilă, Adrian Năznea, Angela Borda (editor): "Histology of the tissues" Editura University Press Tîrgu-Mureş 2017, 191 pg, ISBN 978-973-169-505-1
2. Borda A, Moldovan C, Marcu S - Histology of the Organs, Litografia UMF, 2012
3. Michael H. Ross, Wojciech Pawlina: Histology a text and atlas, with correlated cell and molecular biology, seventh edition; Ed: Wolters Kluwer/Lipponcott Williams&Wilkins, 2015.
4. Daniel Chiego: Essentials of Oral Histology and Embryology, A Clinical Approach, 5th Edition, Elsevier, 2018.

8.2 Content of laboratory, semester 1

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	Practical exam.	Practical exam.	-	-	2

Bibliography

Mandatory:

1. Borda Angela, Eموke Fulop, Gliga Camelia, Loghin Andrada, Marcu Simona, Moldovan Cosmin. Histology Practical Works Guide, Editura University Press, Tîrgu Mureş, 2013
2. Michael H. Ross, Wojciech Pawlina: Histology a text and atlas, with correlated cell and molecular biology, seventh edition; Ed: Wolters Kluwer/Lipponcott Williams&Wilkins, 2015.

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 histological structure of the tooth and surrounding tissues and linking it with the functional study

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge about the normal structure Knowledge about the relation between structure, function and pathology	Written examination consisting of multiple choice questions(2xTBL)	10
- practical activities	Recognition of various tissues under the microscope and using the virtual slide system.	1. Virtual slide test. 2. Questions on histology slides 3. Recognition and description of microscopic structures on classic slides, differential diagnosis, performing of the drawing, with labeling of the figures.	30
Final evaluation			
- theoretical final exam	Knowledge about the normal structure Knowledge about the relation between structure, function and pathology	Examination – ritten examination consisting of multiple choice questions.	60
- practical final exam	-	-	0
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)

Lecturer Nechifor-Boila Adela-Corina, MD, PhD	Tuesday, 10.00-12.00

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Conf dr Han Bianca-Oana, Lect dr Nicolae Cristina			
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: 0	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: 5		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- 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:
Videoproiector

6. Specific competencies acquired

6.1 professional competencies: Studentul va prezenta, la nivel începător, următoarele abilități: -citirea corectă și fluentă, precum și înțelegerea conținutului și ideilor generale ale unui text simplu -înțelegerea mesajelor receptate pe cale auditivă -vorbierea cu respectarea regulilor gramaticale și de pronunție -cunoașterea și utilizarea corectă a unui vocabular de bază
6.2 transversal competencies: Utilizarea limbii române ca mijloc de comunicare cu alți vorbitori ai acelei limbi, în situații 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, naționalitate, țară) Pronumele personal, verbul „a fi”	Comunicare și relaționare interpersonală, conversație, explicații; PBL; TBL	-	-	4
3	Date personale (vârstă, adresă, profesie) Mulțumiri și 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 Conversația telefonică	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

1. Bălănescu, Olga, Limba română pentru străini, Editura Ariadna, București, 2006
2. Dafinoiu, CV, Pascale, LE, Limba română - manual pentru studenți străini, Ed. Univ. București, 2015
- Hedeșan, Otilia (coordonator), Jebelean, Elena, Leucutia Florentina, Musat, Nicoleta, Percec, Dana, Popa, Corina Bun venit în România! Manual de limba română și de orientare culturală, Imprimeria MIRTON, Timișoara, 2008
3. Kohn, Daniela, Puls. Manual de limba română pentru străini. Curs A1-A2, Polirom, Iași, 2009
4. Geană, Ionuț, Limba română pentru străini, Editura Univers, București, 2014
5. Mandelbrojt-Sweeney, M., Limba engleză pentru medici și asistente, Polirom, București, 2006
6. Platon, Elena, Sonea, Ioana, Vilcu, Dina Manual de limba română ca limbă străină (RLS), Casa Cărții de Știință, 2012

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

Cunoașterea limbii române va facilita comunicarea cu pacienții și personalul medical în timpul stagiilor de practică și integrarea în comunitatea locală

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	-	-	0
- practical activities	Abilitatea de a înțelege și completa exerciții de multiple choice, potrivire, folosirea corectă a numărului, articolului verbelor învățate	Test scris care cuprinde exerciții de vocabular și gramatică	50
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	Abilitățile de citire, vorbire, receptarea și transmiterea de mesaje pe cale orală	Verificare orală - extragerea unui bilet care cuprinde citirea unui text, răspuns la întrebări, 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 și fără greșeli mari la nivelul organizării discursului

și al folosirii structurilor gramaticale necesare comunicării.

11. Appointment timetable (for students)

Conf dr Han Bianca-Oana	luni 10-12
Lect dr Nicolae Cristina	Saptamanal, joi 15-16

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical terminology			
2.2 Course coordinator: Șef I 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 seminars / 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

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. Gyls, 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	TBL (2x10%) Active participation during lectures (10%)	Active participation	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	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)

Şef I dr Varga Andreea

Thursday, 16.00-16.30

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: First aid measures / Communication skills			
2.2 Course coordinator: Șef I dr Lazăr Alexandra-Elena			
2.3 Practical activities coordinator(s): dr. Almasy Eموke, dr. Branea Oana			
2.2 Course coordinator: Șef I dr Petrișor Marius-Daniel			
2.3 Practical activities coordinator(s): Șef I dr Petrișor Marius-Daniel			
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: 5		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 1		
- 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: Basic anatomy and physiology knowledge
4.2 competency: NA

5. Conditions

5.1 for lectures: Internet access
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 which implies first aid measures. Will be able to recognize respiratory and cardiac arrest, traumatic and neurologic emergencies. Will be able to execute first aid measures in the above mentioned situations.
6.2 transversal competencies: After this course the student will recognize the specific cases where he is legally bound to intervene, will know his level of competency and will be trained to activate the emergency system 'survival chain'. The student will know

the ethical and legal aspects of his intervention, identifying the priorities and his role in a certain 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:

Theoretical and practical first aid knowledge assimilation according to the latest guidelines.

7.2 Specific objectives:

Cardiac arrest recognition, resuscitation initiation for adults, children and infants, including some particular situations: asphyxiation, drowning, electrocution, bleeding, fainting, fractures, trauma.

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	NA	Cardio-respiratory arrest, sudden death, infant's sudden death	1
2	Cardio-respiratory arrest diagnosis. Resuscitation history. Chain of survival. Rescuers risks	Oral presentation Multimedia presentation	NA	Cardio-respiratory arrest, sudden death, infant's sudden death	1
3	Adult Cardio- respiratory arrest resuscitation guidelines. Foreign body airway obstruction: diagnosis and first aid protocols in adults.	Oral presentation Multimedia presentation	NA	Cardio-respiratory arrest, sudden death, stridor	1
4	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	NA	Cardio-respiratory arrest, sudden death, infant's sudden death, stridor	1
5	Automatic external defibrillation. Special situation resuscitation: drowning, electrocution, pregnancy, hypothermia.	Oral presentation Multimedia presentation	NA	Rhythm abnormalities, hypothermia.	1
6	Shock. Hemorrhage. Diagnosis and first aid protocols.	Oral presentation Multimedia presentation	NA	Shock	1
7	Trauma. Acute coronarian 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	NA	Thoracic and abdominal trauma, head trauma, limb trauma, spine trauma. Ischemic cardiac pathology. Diabetes. Epilepsy.	2
8	Introduction in communication. Definition, Description, Importance	Oral presentation Multimedia presentation	-	communication	2
9	Types of communication. Non-verbal communication. Body languages signals.	Oral presentation Multimedia presentation	-	communication	2
10	The presentation and the discourse in communication.	Oral presentation Multimedia presentation	-	communication	1

11	Theoretical exam	Online assessment	-	-	1
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	1
2	Airway, foreign body airway obstruction protocol, lateral safety position in adults, children and infants.	Practical activities Multimedia presentation	CBL	Dyspnea	1
3	Adult Basic life support	Practical activities Multimedia presentation	CBL	Cardio- respiratory arrest	1
4	Adult Basic life support	Practical activities Multimedia presentation	CBL	Cardio- respiratory arrest	1
5	Children and infants basic life support	Practical activities Multimedia presentation	CBL	Cardio- respiratory arrest	1
6	Children and infants basic life support	Practical activities Multimedia presentation	CBL	Cardio- respiratory arrest	1
7	Trauma - fracture splinting, victim mobilization, transportation. First aid in hemorrhages.	Practical activities Multimedia presentation	CBL	Thoracic and abdominal trauma, head trauma, limb trauma, spine trauma.	2
8	General communication, teamwork. The psychological model of communication	Demonstration, work in small groups.	-	communication	2
9	Presentation and application the discourse in the communication process.	Demonstration, work in small groups.	-	communication	2
10	Application of the collaborative relation in the act of communication.	Demonstration, work in small groups.	-	communication	1
11	Practical exam	MCQ test / the use of a communication protocol	-	-	1

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 the 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	NA	TBL	15
- practical activities	NA	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 diagnosis 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)

Şef I dr Lazăr Alexandra-Elena	FRIDAY 8-12
Şef I dr Petrişor Marius-Daniel	marti, joi: 18-20

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Hygiene and health education			
2.2 Course coordinator: Conf dr Nădășan Valentin			
2.3 Practical activities coordinator(s): Conf dr Nădășan Valentin, Șef I dr Ferencz Jozsef-Lorand			
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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 28		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 10		
- examinations: 4		
- other activities: 0		
3.8 Total hours of individual study: 84		
3.9 Total hours: 126		
3.10 Credits: 2		

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 for conducting TBL examination.
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 a 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. TBL	-	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. Sources and nutritional value.	Oral and multimedia presentation	-	Weight gain, Weight loss, Constipation, Malnutrition, Disorders of calcium and vitamin D metabolism, Oral disorders (incl. Caries)	2
Bibliography - Tarcea M.: Environmental Hygiene, Course for English students, under edition, 2012 - Frumkin H, Ed. Environmental Health: From Global to Local. San Francisco: Jossey Bass, 2005. - 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 pollution. 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,	Oral, multimedia presentation, practical activities	-	Loose stools, Vomiting, Abdominal pain	2

	beverages.				
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

1. Ábrám Z., Tarcea M., Finta H. et al – Hygiene Practical laboratory Guide, under edition, UMF Târgu Mureș, 2012

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.	TBL	10
- practical activities	Assessment of knowledge and ability to apply it individually and in a team.	CBL1 and CBL2	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:

Minimal performance standard: 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)

Conf dr Nădășan Valentin	Monday 10-12, Wednesday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department:
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Behavioural sciences			
2.2 Course coordinator: Conf dr Pașca Maria-Dorina			
2.3 Practical activities coordinator(s):			
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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations: 0		
- 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:
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Conf dr Pașca Maria-Dorina	

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Bioethics and medical deontology			
2.2 Course coordinator: Conf dr Pașca Maria-Dorina			
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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities: 0		
- examinations: 0		
- 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:
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Conf dr Pașca Maria-Dorina	

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Șef I dr Țurcanu Dana-Simona			
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 year of didactic activities)

3.1 Hours per week: 4	3.2 lecture: 0	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: 0		
- supplemental documentation at the library, from specialized information portals and in the field: 0		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 40		
- tutorial activities: 4		
- examinations: 8		
- other activities: 4		
3.8 Total hours of individual study: 56		
3.9 Total hours: 112		
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 aesthetics 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 competitions

8.1 Content of laboratory, semester 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	a) Athletics – the school of running b) Basketball – checking the initial level of acquiring the basic elements	explication, demonstration, repetition	-	-	2
3	a) Athletics – speed running, standing and crouching start b) Volleyball - checking the initial level of acquiring the basic elements	explication, demonstration, repetition	-	-	2
4	a) Basketball – repeating the elements of moving in the court	explication, demonstration, repetition	-	-	2
5	a) Athletics – developing speed in endurance running b) Volleyball – fundamental positions in volleyball, moving in the field, high passes	explication, demonstration, repetition	-	-	2
6	a) Athletics – developing leg strength with different jumping exercises b) Basketball - repeat the dribbling, ball catching and passing	explication, demonstration, repetition	-	-	2
7	a) Swimming – teaching the basic elements a) Aquagym b) Basketball – teaching game, man to man defense	explication, demonstration, repetition	-	-	2
15	a) Volleyball – combination of passes in formation of 2-3 players b) Basketball –improving the one to one defense play	explication, demonstration, repetition	-	-	4
16	a) Basketball – learning the fast break attack b) Volleyball –repeat the service and reception of service, teaching game with reception of service	explication, demonstration, repetition	-	-	4
17	a) Basketball – repeating the fast break and defense in case of fastbrake b) Volleyball – saving the ball from the net, teaching game with tactical elements	explication, demonstration, repetition	-	-	4
18	a) Athletics – developing the speed running technique, developing the speed b) Basketball – normal and aggressive guarding in the man to man system of defense	explication, demonstration, repetition	-	-	4
19	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	-	-	4
20	Testing the students who where absent at the tests	activity evaluation	-	-	4
21	End of school year, conclusion of the school report; recommendations for the sporting activity during the holidays.	conclusion	-	-	4

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 sportului, 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
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7. Badau D. ↯ Metodica disciplinei sportive ↯ handbal, Ed. Universitatii Transilvania din Brasov, 2009
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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

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

Șef I dr Țurcanu Dana-Simona	Turcanu Dana monday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Conf dr Han Bianca-Oana, Lect dr Nicolae Cristina			
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: 4	3.2 lecture: 0	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: 5		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- 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:
Videoprojector

6. Specific competencies acquired

6.1 professional competencies: Studentul va prezenta, la nivel începător-intermediar (A2), următoarele abilități: -citirea corectă și fluentă, precum și înțelegerea conținutului și ideilor generale ale unui text simplu -înțelegerea mesajelor receptate pe cale auditivă -vorbitura cu respectarea regulilor gramaticale și de pronunție -cunoașterea și utilizarea corectă a unui vocabular de bază și semi-specializat
6.2 transversal competencies: Utilizarea limbii române ca mijloc de comunicare cu alți vorbitori ai acelei limbi, în situații 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	Casa, încăperi, obiecte de mobilier Baia, obiecte de toaletă	Expunerea, rezolvarea unor probleme/PBL, exerciții, conversație; TBL	-	-	4
2	Anunțuri: închirierea unui apartament. Verbul: indicativul prezent Descrierea casei sau a apartamentului. Verbul „a plăcea”	Expunerea, rezolvarea unor probleme/PBL, exerciții, conversație; TBL	-	-	4
3	Programul zilnic, igiena personală. Diateza reflexivă, pronumele reflexiv Familia. Adjective și pronume posesive	Expunerea, rezolvarea unor probleme/PBL, exerciții, conversație; TBL	-	-	4
4	Descrierea unui membru din familie.Caracteristici fizice.Gradele de comparație ale adjectivului Mâncare și băutură. Obiecte din bucătărie. Verbele neregulate	Expunerea, rezolvarea unor probleme/PBL, exerciții, conversație; TBL	-	-	4
5	La restaurant. Meniu, obiceiuri culinare Profesii. Abilități. Verbul: conjunctivul prezent	Expunerea, rezolvarea unor probleme/PBL, exerciții, conversație; TBL	-	-	4
6	Stil de viața. Citește, scrie, învață! Modul imperativ, singular și plural Calități și defecte,hobby-uri.Verbul	Expunerea, rezolvarea unor probleme/PBL, exerciții, conversație; TBL	-	-	4
7	Exerciții. Recapitulare Test de verificare	Rezolvarea unor probleme, conversația, dialogul, munca pe perechi și în grup,	-	-	4

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- Hedeșan,Otilia(coordonator),Jebelean,Elena, Leucutia Florentina, Musat, Nicoleta, Percec,Dana, Popa,Corina Bun venit in România!Manual de limba română și de orientare culturală ,Imprimeria MIRTON,Tișișoara, ,2008
3. Kohn,Daniela, Puls.Manual de limba română pentru străini .Curs A1-A2,Polirom,Iași,2009
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6. Platon,Elena ,Sonea,Ioana ,Vilcu,Dina Manual de limba română ca limbă străină(RLS),Casa Cărții de Știință,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	Abilitatea de a intelege si completa exercitii de multiple choice, potrivire, folosirea corecta a vocabularului și a regulilor gramaticale învățate	Testare orală - exercitii de vocabular si gramatica	50
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	Abilitățile de citire, vorbire, receptarea și transmiterea de mesaje pe cale orală și scrisă, în mod corect	Verificare orală și scrisă	50

Minimal performance standards:

-

11. Appointment timetable (for students)

Conf dr Han Bianca-Oana	luni 10-12
Lect dr Nicolae Cristina	joi, 15-16

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Neuroanatomy and cervical anatomy			
2.2 Course coordinator: Șef I dr Nechifor-Boila Ioan-Alin			
2.3 Practical activities coordinator(s): Șef I dr Nechifor-Boila Ioan-Alin			
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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 28		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 12		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 84		
3.9 Total hours: 154		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular: NA
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: A blackboard of min. 5 m2, colored chalks, projecting device, inclusive an adequate software for presenting static and motion pictures, a properly processed and preserved corpse, a proper number of correctly prepared preparats, models, casts, skeleton, large sized mobile posters

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 dentistic 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: Acquiring notions of general anatomy, the functional and topographic structure of the head and neck. Learning the bases of the ontogenesis of the human body. The student becomes knowledgeable and versed in the organizational, developmental and functional principles of the body. The student develops skills to be oriented on the surface and in the depths of the human body. He also will be able to understand the interrelations between different systems and subsystems. 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 will be used in his further day-by-day work.
7.2 Specific objectives: Learning the skeletal, muscular, vascular, peripheral nervous, digestive, respiratory, excretory and reproductive systems. Interpreting the knowledge from a functional point of view, getting familiar with the notions and processes of the general and special embryology. Acquiescing the regional and applied anatomy of the limb and trunk.

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 of 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 of 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	Aggression. 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	TBL	NA	NA	2
8	The functional anatomy of the pharynx and larynx	oral presentation PPT	NA	Disphagia. 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 infratemporal and pterygopalatine regions	oral presentation PPT	NA	Degenerative disorders of the neuraxis.	2
13	Cephalo-cervical and cervico-thoracic vasculo-nervous passageways	oral presentation PPT	NA	Trauma of the NS	2
14	Application of the knowledge on clinical cases	TBL	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.

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	Human corpse is needed	NA	3
2	The basal nuclei and the third ventricle. The the lobes and the surface of the cerebral cortex	Ppt presentation, lab specimens	Human corpse is needed	NA	3
3	The interhemispheric matter and the lateral ventricles. The sectional anatomy of the brain	Ppt presentation, lab specimens	Human corpse is needed	NA	3
4	SEMINAR: The central nervous system practicals: The muscles of the neck. The suboccipital region	Seminar, Ppt presentation, lab specimens	Human corpse is needed	NA	3
5	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	Human corpse is needed	NA	3
6	The III., IV. and VI. cranial nerves. The lateral cervical region. The V. cranial nerve. The region of the carotic triangle. The VII., VIII. and IX. cranial nerves. The prevertebral region and the lesser supraclavicular fossa. The X., XI. and XII. cranial nerves. The submental region.	Ppt presentation, lab specimens	Human corpse is needed	NA	3
7	Application of the knowledge on clinical cases	Revision	NA	NA	3
8	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
9	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
10	The nasal, the palpebral and zygomatic regions. The retrocapsular compartment of the orbit. The vascular supply of the brain. The epicranial regions. The meningeal sheaths	Ppt presentation, lab specimens	NA	NA	3
11	The region of the inner skull base. The sublingual region. The inner ear.	Ppt presentation, lab specimens	NA	NA	3
12	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
13	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

14.	Application of the knowledge on clinical cases overview.	Revision	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.

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

NA

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Specific to the discipline	TBL	10
- practical activities	Specific to the discipline	Seminar	30
Final evaluation			
- theoretical final exam	Specific to the discipline	Multiple choice quiz	40
- practical final exam	Specific to the discipline	Practical exam	20
Minimal performance standards:			
NA			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Nechifor-Boila Ioan-Alin	Department of Anatomy, Friday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Biochemistry of the oral cavity			
2.2 Course coordinator: Conf dr Nemes-Nagy Enikő			
2.3 Practical activities coordinator(s): Conf. dr. Nemes-Nagy Enikő			
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: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 15		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 2		
- examinations: 2		
- other activities: 2		
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: 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 in 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: Identification 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 in 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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Carbohydrates. Monosaccharides: isomerism, derivatives. Disaccharides. Structural and storage polysaccharides. Digestion of carbohydrates. Glycoproteins, glycosaminoglycans, proteoglycans and peptidoglycans: structure, biological role, pathology. Glycolysis and gluconeogenesis. Localisation in metabolism of carbohydrates, mechanism, energetics, regulation. Glucose cycles. Entrance of fructose and galactose into glycolysis. Pathology	Oral presentation	Blood groups	Enzyme deficiencies involved in the metabolism of carbohydrates and their pathological consequences	2
2	Minor pathways of glucose metabolism. Localisation in metabolism of carbohydrates. Pentose phosphate pathway: mechanism, control, role in erythrocyte, pathology. Glucuronate pathway: mechanism, biological importance. Glycogen metabolism. Glycogenesis: mechanism, control. Glycogenolysis: mechanism, control. Diseases of glycogen storage	Oral presentation	Detoxification	Hepatic diseases, hypo-and hyperglycemia	2
3	Representatives and biological role of lipids. Fatty acid β -oxidation: mechanism, regulation, energetics, pathology. Oxidation of unsaturated and odd-number fatty acids. De novo fatty acid biosynthesis: mechanism, regulation, biological role. Elongation and desaturation of fatty acids: mechanism, biological role. Eicosanoid metabolism: biosynthesis and biological role of prostaglandins, thromboxanes and leukotrienes; pathology	Oral presentation	Local hormones	Inflammation, allergic diseases	2
4	Metabolism of triacylglycerols. The role of the adipous tissue in the biosynthesis, storage and mobilisation of triacylglycerols. Metabolism and biological role of phospholipids. Maturation of fetal lungs:	Oral presentation, multiple choice test	Oxidative stress, oxidized LDL TBL	Diabetes mellitus	2

	physiology and pathology. Metabolism of sphingolipids, biological role and pathology. Metabolism of lipoproteins. Digestion, absorption and transport of lipids. Ketone body metabolism: mechanism, regulation, biological role. Diabetes mellitus				
5	Biosynthesis of cholesterol: mechanism, regulation, biological role. Conversion of cholesterol to steroid hormones: mechanisms, biological role. Conversion of cholesterol to bile acids: mechanisms, biological role. Conversion of cholesterol to D vitamin: mechanism, biological role, pathology	Oral presentation	Hypercholesterolemia	Disorders of lipid metabolism, atherosclerosis, gallstones	2
6	Metabolism of nucleotides: mechanism, regulation, role, pathology (gout, orotic aciduria). Heme metabolism: mechanism, biological role, pathology (porphyrias, jaundices) Amino acid metabolism: pathways of amino acid degradation, conversion of amino acids to specialized products. Diagnosis and treatment of metabolic diseases. The biochemical aspects of fetal development. Urea cycle: mechanisms, regulation, biological role, pathology	Oral presentation	Neurotoxicity of NH ₃	Gout. Porphyrias, jaundices. Nutrition diseases. Congenital diseases	2
7	Genetic biochemistry: replication, transcription, translation, posttranslational changes, regulation of gene expression Factors that influence the cariogenesis. Theories of caries formation Biochemistry of pellicle, dental plaque and dental calculus. Composition of the saliva	Oral presentation	Factors inducing caries	Relationship between biochemical processes and oral cavity diseases.	2

Bibliography

1. Stefan Hobai: Biochemistry course, vol. I, II Litografia UMF 2009-2011
2. Nemes-Nagy Enikő, Fazakas Zita: Medical Biochemistry for General Medicine and Dentistry Students, vol. I, 2014
3. Lehninger A. L., Nelson D. L., Cox M. M.: Principles of Biochemistry, 7th Edition, W. H. Freeman Macmillan Learning, New York, 2017
4. Berg J.M, Tymoczko J.L, Stryer L.: Biochemistry, 7th Edition, W. H. Freeman & Co, New York, 2012

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Influence of substrate concentration on the speed of enzymatic reactions Effect of pH, temperature and some ions on enzyme activity. Enzyme specificity.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Techniques used in enzymology	Diseases based on enzymatic disorders	2
2	Determination of serum amylase activity by standard method	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Salivary and pancreatic amylase	Diseases of salivary glands and pancreas	2
3	Determination of serum transaminase activity: GPT, (GOT).	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	GPT activity measurement	Hepatic diseases, dynamics of enzyme activity in acute myocardial infarction	2
4	Determination of serum triglyceride concentration. Determination of serum beta-lipoprotein concentration by Burnstein method.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Electrophoresis of lipoproteins	Dyslipidemias	2

5	Measurement of serum total and HDL-cholesterol concentration.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Determination of lipoproteins and calculation formula	Disorders of lipid metabolism	2
6	Determination of serum creatinine by Jaffe method. Determination of urea by enzymatic method.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Relationship between creatinine and muscular metabolism	Kidney diseases, hepatic diseases	2
7	Determination of uric acid in the urine by enzymatic method.	Individual study, followed by oral presentation (online learning) or practical experiment (onsite)	Urinary stones	Gout disease, lithiasis	2

Bibliography

Fazakas Zita, Nemes-Nagy Enikő, Balogh-Sămărghițan Victor, David Eliza, Uzun Cosmina: Handbook of Biochemistry Practical Work, Litografia UMF Târgu Mureș, 2013

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	Correlation of biochemistry with functional aspects. Knowledge regarding the physiological role of metabolic processes	Team-based learning (TBL) in case of onsite activity, test on the platform in case of online learning	10
- practical activities	The degree of accommodation with laboratory techniques. Theoretical knowledge necessary for understanding the principles of laboratory methods Linking knowledge acquired at the course with the practical aspects.	Grades on the experimental results (in case of onsite activity), test on the platform (in case of online learning) Final practical evaluation at the last practical activity: written exam from the theoretical part and experiments (in case of onsite activity), test on the platform (in case of online learning)	20
Final evaluation			
- theoretical final exam	Correlation of biochemistry with functional aspects. Knowledge regarding the physiological role of metabolic processes	Written exam (test and redactional part) in case of onsite exam, test on the platform in case of online learning	70
- practical final exam	-	-	0
Minimal performance standards: Knowledge on the general aspects regarding the structure of biomolecules in correlation with their biological role. General knowledge on metabolic pathways and their physiological role in relationship with pathological aspects.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Nemes-Nagy Enikő	Associate professor Nemes-Nagy Enikő Monday 15-16

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD 2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Teeth and dental arches morphology. Masticatory function			
2.2 Course coordinator: Prof dr Székely Melinda-Gyöngyi			
2.3 Practical activities coordinator(s): Lecturer dr. Borş 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: 16	3.2 lecture: 4	3.3 practical activities: 12
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: 5		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 1		
- examinations: 6		
- other activities: 1		
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: Multimedia equipment for online practical work. 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.

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: - Acquisition of skills and abilities necessary for dental practice. - This discipline provides an 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 preclinical 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.	Team-Based Learning (TBL) + 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.	Team-Based Learning (TBL) + 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 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., Borş A.: Morphology of Teeth and Dental Arches – Course for Students. University Press, UMFST Tg.Mureş, 2019. References (facultative): 1. Bereşescu G.: Dinții umani permanenți. Editura University Press, Tîrgu-Mureş, 2011. 4. Székely M.: A fogak és fogívek funkcionális morfológiája – ediția 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 + test.	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 + grade of test	-	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, Laboratory Report.	-	6
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 + test.	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 + grade of test	-	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

Bratu D., Leretter M.A., Colojoară Carmen, Romînu M.: Dinții umani permanenți – morfologie, desen și modelaj. Editura Signata, Timișoara, 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	TBL 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 multiple choice test.	50
- practical final exam	Practical knowledge and skills joint with theory.	Practical exam including response to a question.	20
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 TBL course 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 (1 hour/week)

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: F1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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: Associate professor PhD. Tanase Corneliu			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I	2.5 Semester: 2	2.6 Type of evaluation: V	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: 15		
- supplemental documentation at the library, from specialized information portals and in the field: 15		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- 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:
-
5.2 for practical activities:
-

6. Specific competencies acquired

6.1 professional competencies:
- familiarizing the students with the 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:
The graduate will be able to:
- 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	Introduction to ethics and academic integrity - terms and definitions, responsibilities and academic rights	lecture, problematization; interactive course supported by powerpoint presentation	-	-	2
2	Intellectual property and copyright	lecture, problematization; interactive course supported by powerpoint presentation	-	-	2
3	Lack of academic integrity, examples of dishonest behavior	lecture, problematization; interactive course supported by powerpoint presentation	-	-	2
4	Plagiarism. Forms of plagiarism	TBL	-	-	2
5	Identification of plagiarism. Consequences and sanctions of plagiarism	lecture, problematization; interactive course supported by PowerPoint presentation	-	-	2
6	Other forms of academic dishonesty	lecture, problematization; interactive course supported by powerpoint presentation	-	-	2
7	The social effects of lack of academic integrity	lecture, problematization; interactive course supported by powerpoint presentation	-	-	2

Bibliography

1. Course support in electronic format;

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 predictors 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 dishonesty and educational opportunity, în Liberal Education, 91, pp. 26–32.

4. Park, C. 2003 - In Other (People's) Words: plagiarism by university students-literature and lessons, în Assessment & Evaluation in Higher Education, 28 (5), pp. 471 – 488.

5. Universal Declaration of Human Rights, http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/rum.pdf

6. Glendinning, I. 2014 „Plagiarism policies in Romania, <http://plagiarism.cz/ippheae/files/D2-3-23%20RO%20IPPHEAE%20CU%20Survey%20Romania%20Narrative.pdf>

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: Minimum performance standard: Minimum performance standard: Promoting knowledge verification (note 5). Fulfillment of all school obligations according to the regulations in force. Acquiring knowledge about ethics and academic integrity. Assessment method - Exam in the form of a grid test, about 20 questions, with 4 answer options, one or two correct answers. An ex officio point. Knowledge of grade 5 - correct answer to at least 40% of the questions. Knowledge for grade 10 - the correct answer to 100% of the questions.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Associate professor PhD. Tanase Corneliu	Friday, 8-9

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: I+II	2.5 Semester: 2	2.6 Type of evaluation: V	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 seminars / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 0		
- examinations: 0		
- 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:
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:
-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 which matches the 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 which 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. Prophylactic 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.	Team-Based Learning (TBL). 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 mouthguards 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

References (mandatory):

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.

References (facultative):

1. Molnar-Varlam C., Bică C., Borș A.: Materiale dentare folosite în stomatologia pediatrică. Editura University Press, Târgu Mureș, 2016.

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

-Dental Material Science has been recorded an explosion of news in pediatric dentistry and orthodontics that gave rise to new technologies that have to be known and applied by the dentist. Critical applying in pediatric practice of dental materials appeared after the dynamic development of modern techniques constantly changing and developing.

-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 specificity of the materials used in pediatric dentistry and orthodontics.

-The dentist should be able to choose the varieties device, to select the material that best suits to the given clinical situation, which meets the requirements of the patient, that would be durable and cost effective and that has specificity for temporary or permanent young teeth.

Training of transversal and professional competencies specific to the pediatric dental materials study program involves reading the contents covered by this discipline.

Comparative analysis of the main theoretical approaches and elaboration of typical models in the field of dental materials used in children dental treatments meets the expectations expressed by trainers, professional associations and employers.

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.	Team-Based Learning (TBL)	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 pediatric 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 I dr Borș Andrea-Izabella	Tuesday 10-12 Friday 16-18

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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: 2	2.6 Type of evaluation: V	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: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 4		
- 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:
At least 30 attendants.
5.2 for practical activities:
Not the case.

6. Specific competencies acquired

6.1 professional competencies:
- Description of concepts specific to nutrition and diet.
- Analysis of dental health issues related to food and nutrition.
- Evaluation of nutrition status and nutrition needs during the life cycle and oral illnesses.
- Plan elaborate specific menus linked to oral pathology
- Implementation of projects, ability to collect information, and to train health education on various topics in patients, in order to promote the population health status.
6.2 transversal competencies:
- To monitor the child's dental development based on healthy nutrition, also education in school-related to preventive oral medicine.
- To identify roles and responsibilities in a multidisciplinary team and specific projects, with proper evaluation and

enforcement of ethics and professional ethics - To know how to elaborate on the effective use of information sources and communication, for professional training and personal development. - To identify lifestyle health risks and the proper ways to prevent them.
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 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 illnesses related 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, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2
2	Dietary assessment. Digestion, absorption and metabolism of food and nutrients and dental impact.	Oral presentation and multimedia, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2
3	Dietary reference and nutrients and caloric intakes for the body. Major food sources recommended in oral pathology and cooking techniques	Oral presentation and multimedia, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2
4	Diet recommendations during life cycle for healthy teeth: children, teenagers, adults, senior, athletes and pregnant women. + TBL.	Oral presentation and multimedia, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2
5	Diets and menus recommended in various oral and dental illnesses like: caries, edentations, trush, granulomatosis, dermatosis, candidiasis or viral infections.	Oral presentation and multimedia, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2
6	Diets and menus recommended in cancer.	Oral presentation and multimedia, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2
7	Diets and lifestyle practices recommended in diabetes, heavy metals poisoning, fluorosis or xerostomia.	Oral presentation and multimedia, student-centered, and problems-centered teaching methods. Interactive discussions with students.	-	-	2

Bibliography

1. Mahan LK, Escott-Stump S. - Krause's Food, Nutrition, and Diet Therapy. 14th ed. W.B. Saunders Co, Philadelphia, 2014.

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 for the population.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Interactive debates (20%).	TBL type evaluation, based on the level of knowledge and implication. (10%)	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Essays based on various nutrition themes. (70%)	Paperwork evaluation based on the topic, originality, references, etc.	70
- practical final exam	-	-	0
Minimal performance standards:			
- In order to pass the subject, the average of the theoretical and practical test must be at least 5.00 (but also separately, the theoretical and practical exam must be at least grade 5).			
- For promotion, the student must know the basics in dietetics and nutrition, identify the major sources of each nutrient (carbohydrates, lipids, proteins, vitamins, minerals) and explain the role of diet in maintaining health and preventing chronic diseases.			
- To have basic knowledge of determinants of health that are interconnected with dental and oral health.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Tarcea Monica	Monday 6-8 pm.

Head of department

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Clinical, topographic and imaging anatomy			
2.2 Course coordinator: Prof dr Brinzaniuc Klara			
2.3 Practical activities coordinator(s): Șef I DrNechifor-Boilă Ioan Alin			
2.2 Course coordinator: Șef I dr Nechifor-Boila Ioan-Alin			
2.3 Practical activities coordinator(s): Șef I DrNechifor-Boilă Ioan Alin			
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: 2		
- supplemental documentation at the library, from specialized information portals and in the field: 1		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 1		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 6		
3.9 Total hours: 62		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: None
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 picture
5.2 for practical activities: Preparats, human corpse, digital projector and screen

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 dentistic 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 acquainted 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 phylogenesis 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	Hominization and humanization of the head. Phylogenesis of the dentomaxillary apparatus.	PPT presentation	NA	Oral disorders (incl. Caries)	2
2	Development of the oral cavity and face. Development of the palate. Development of the teeth. Development of the branchial region and derivatives	PPT presentation	NA	Oral disorders (incl. Caries)	2
3	Clinical and topographical anatomy of the oral cavity, of the maxillary sinuses. Anatomy of the periodontium and the alveolar arch. Articulation of the teeth.	PPT presentation	NA	Oral disorders (incl. Caries)	2
4	Clinical and topographical anatomy of the trigeminal nerve	PPT presentation	NA	Cranial nerve disorders	2
5	Clinical and topographical anatomy of the facial nerve	PPT presentation	NA	Cranial nerve disorders	2
6	Clinical and topographical anatomy of the temporomandibular joint.	PPT presentation	NA	Oral disorders (incl. Caries)	2
7	Application on clinical cases	TBL	NA	Oral disorders (incl. Caries)	2
8	Clinical and topographical anatomy of the arteries and veins designating the head and neck	PPT presentation	NA	Oral disorders (incl. Caries)	2
9	Clinical anatomy of the infratemporal region	PPT presentation	NA	Oral disorders (incl. Caries)	2
10	Clinical and topographical anatomy of the peripharyngeal spaces	PPT presentation	NA	Oral disorders (incl. Caries)	2
11	Clinical anatomy of the pterygo-palatine region	PPT presentation	NA	Oral disorders (incl. Caries)	2

12	Anatomy of the salivation process, the voice and speech	PPT presentation	NA	Dysphagia	2
13	Clinical and topographical interactions between the different regions of the head and neck.	PPT presentation	NA	Dysphagia	2
14	Application on clinical cases	TBL	NA	NA	2
Bibliography 1. Romanes: Cunningham's Practical Anatomy vol I.-II,-III, 2. Ioan Alin Nechifor-Boila, Zoltan Lorinczi, Klara Branzaniuc, Neuroanatomy 3. Sadler: Langman's Embryology					

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Orifices of the neurocranium and their content	PPT presentation, lab specimens	NA	Migraine	2
2	The gnathomotor muscles and their relationships	PPT presentation, lab specimens	NA	Osteoarthritis	2
3	Development of the face. Anomalies	PPT presentation, lab specimens	NA	Normal child development	2
4	The anatomy of the cheek. The region of the oral vestibule	PPT presentation, lab specimens	NA	Oral disorders (incl. Caries)	2
5	Anatomy of the tongue and of the floor of the mouth. The Sulcus lateralis linguae. Anatomy of the gum and oral mucosa. The retromolar region.	PPT presentation, lab specimens	NA	Oral disorders (incl. Caries)	2
6	The development of the teeth. Anomalies	PPT presentation, lab specimens	NA	Normal child development	2
7	Application on clinical cases	PA test	NA	NA	2
8	TMJ and its entourage.	PPT presentation, lab specimens	NA	Oral disorders (incl. Caries)	2
9	The regional nociceptive innervation of the head and neck. Neuralgic points	PPT presentation, lab specimens	NA	Migraine	2
10	The isthmus of the throat. The amygdalian compartment. The palatine region	PPT presentation, lab specimens	NA	Dysphagia	2
11	Perioral vasculo-nervous passageways. Exo-endocranial vascular anastomoses	PPT presentation, lab specimens	NA	Oral disorders (incl. Caries)	2
12	The pterygomandibular space. The buccal fat pad	PPT presentation, lab specimens	NA	Oral disorders (incl. Caries)	2
13	Craniometry on isolated bone and in live. Anomalies. Evaluation of cervico-cephalic radiographies, CT and MR imagery	PPT presentation, lab specimens	NA	Oral disorders (incl. Caries)	2
14	Application on clinical cases	PPT presentation, lab specimens	Revision	NA	2

Bibliography
1. Romanes: Cunningham's Practical Anatomy vol I.-II,-III,
2. Ioan Alin Nechifor-Boila, Zoltan Lorinczi, Klara Branzaniuc, Neuroanatomy
3. Sadler: Langman's Embryology

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

None

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	In functie de specificul disciplinei	TBL	10
- practical activities	In functie de specificul disciplinei	Test quizz	10
Final evaluation			
- theoretical final exam	In functie de specificul disciplinei	Test quizz	50
- practical final exam	In functie de specificul disciplinei	Evaluare practica	30

Minimal performance standards:
Nu se aplica

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Brinzaniuc Klara	
Şef I dr Nechifor-Boila Ioan-Alin	Disciplina de anatomie, vineri 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Genetics			
2.2 Course coordinator: Prof dr Bănescu Claudia-Violeta			
2.3 Practical activities coordinator(s): Asist Bogliș Alina, Asist Balla Beata-Magdolna			
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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 14		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 2		
- examinations: 10		
- other activities: 4		
3.8 Total hours of individual study: 72		
3.9 Total hours: 100		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular: nu
4.2 competency: nu

5. Conditions

5.1 for lectures: nu
5.2 for practical activities: nu

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 consultation, 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	TBL	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,	2

				Monogenic diseases	

Bibliography
Csép K. Textbook of Genetics – Courses, University of Medicine and Pharmacy (O)
Csép K. Genetics Textbook – Practical sessions, University of Medicine and Pharmacy (O)
Tom Strachan, Andrew Read. Human Molecular genetics. CRC Press, 2019. ISBN: 9780815345893
Thompson & Thompson Genetics in Medicine, 8th edition. Robert Nussbaum, Roderick McInnes, Huntington Willard. Elsevier, 2016
Lyons Jones K, Crandall Jones M Del Campo M. Smith's Recognizable Patterns of Human Malformation. Saunders-Elsevier, 2013
Peter D Turnpenny & Sian Ellard. Emery's Elements of Medical Genetics. Elsevier, 2017, ISBN9780702066856

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 and Power Point presentation,	drawings + microscopy	Chromosomal disorders	2
2	The human karyotype. Karyotype preparation. Indications of karyotyping.	Oral presentation, Power Point presentation,	Individual 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,	Individual karyotyping, 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. Physiological traits with monogenic inheritance	Oral presentation, Practical demonstrations, Heredity of the blood groups	Problem solving. Calculation of recurrence risks in the offspring	Monogenic diseases, Rhesus hemolytic disease	2
6	Molecular cytogenetics. Principles and methods of molecular analysis: PCR, RFLP, sequencing	Oral presentation, Power Point presentation, video demonstration. Virtual lab	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, Explanations,	Problem solving, Calculation of recurrence risks in the offspring	Chromosomal disorders, Monogenic diseases	2

Bibliography Csép Katalin. Genetics Textbook – Practical sessions. University of Medicine and Pharmacy, 2010 Jones KL, Jones MC, del Campo M. Smith's Recognizable patterns of human malformations. Elsevier, 2013 Thompson & Thompson Genetics in Medicine by Robert L. Nussbaum, Robert Nussbaum & Roderick R. McInnes & Huntington F Willard. 2016, Elsevier					

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

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	According to the specifics of the domain - knowledge of theoretical basis of human genetics	TBL	10
- practical activities	According to the specifics of the domain - efficient use of medical genetics in the clinical practice	test, karyotyping	20
Final evaluation			
- theoretical final exam	According to the specifics of the domain - knowledge of theoretical basis of human genetics	Written exam – Test	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 knowledge of human and medical genetics, 5 at both the theoretical and practical exam. Absences from TBL activities will be graded with 1; there is no possibility to repeat this test, however, the student will have the possibility to take the exam.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Bănescu Claudia-Violeta	30 de minute după fiecare curs

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Immunology			
2.2 Course coordinator: Șef I dr Șular Floredana-Laura			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: I/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: 2		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 2		
- other activities: 0		
3.8 Total hours of individual study: 14		
3.9 Total hours: 28		
3.10 Credits: 2		

4. Prerequisites (where applicable)

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

5. Conditions

5.1 for lectures: on-line on the Blackboard platform
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: Understanding how the normal and pathological immune system works. Interpretation of the laboratory results acquired during the assessment of the specific and non-specific cellular and humoral immune system. Modern methods of laboratory diagnosis, their qualities and limitations.
6.2 transversal competencies: The Immunology discipline helps the student to integrate prior notions of physiology/pathophysiology and internal medicine, thus establishing useful correlations at the patient's bedside, to recommend and interpret laboratory investigations in the context of clinical data.

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 overall objective is to create for the students a logical thinking foundation on how to request and interpret laboratory results.

7.2 Specific objectives:
Highlight the pathogenic mechanisms that cause changes of the laboratory parameters in various diseases, diagnostic value of the laboratory tests, the correlations that can be established between the clinical context and the results provided by the laboratory.

8.1 Content of lecture, semester I/1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Specific and non-specific, cellular and humoral defense of the organism. The terms of antigen and antibody notions	Lecture+ .ppt presentation	Basic immunological terminology	Immunization, Immunodeficiency	2
2	The lymphoid cells and system. Biological identity of superior organisms– MHC class I and class II	Lecture+ .ppt presentation	The main assays used for evaluation will be introduced	myeloproliferative/ lymphoproliferative disorders, Immunization	2
3	Primary and secondary specific immune response	Lecture+ .ppt presentation	Basic immunological notions will be introduced	Immunization	2
4	Pathological immune reactions. Systemic and organ-related autoimmune disorders	TBL (Team-based learning)	The main investigations will be presented, their benefits and limitations	Allergic conditions, Asthma, Anaphylaxis, Drug reactions, Haemolytic disease in the Rh system, Oedema, connective tissue disorders, multiple sclerosis	2
5	Transplant immunity. Therapeutic tools in immune disorders	Lecture+ .ppt presentation	The main investigations will be presented, their benefits and limitations	Immunization, Immunodeficiency	2
6	Primary and secondary immunodeficiency syndromes	Evaluation during the semester Lecture+ .ppt presentation;	The main investigations will be presented, their benefits and limitations	Immunodeficiency, HIV	2
7	The immune response in cancer. Immune therapy in tumors	Lecture+ .ppt presentation	The main investigations will be presented, their benefits and limitations	Immunization, Immunodeficiency	2

Bibliography

1. Roderick Nairn, Matthew Helbert - Immunology for Medical students, Ed. 2, MOSBY- ELSEVIER, 2007
2. Abbas A. - Basic Immunology - Ed.3, Saunders, 2011

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

The results provided by the clinical laboratory, indispensable for any doctor - regardless of the specialty, provide 70% of the information necessary for the diagnosis, prognosis / monitoring of patients' health.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent

			of final grade
Evaluation during the semester			
- lecture	Correlation of structural aspects with the functional ones. Presentation of the pathological aspects in the light of normal or modified metabolism.	TBL - Multiple choice test, case study - 10% of final grade Evaluation during the semester - 20% of final grade	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Correlation of structural aspects with functional ones. Explaining the pathological aspects in the light of normal or modified metabolism.	Multiple choice test	70
- practical final exam	-	-	0

Minimal performance standards:

Minimal performance standards for passing the final theoretical evaluation :

1. Cellular elements of non-specific immune system. Phagocytosis. The complement system.
2. Physical, chemical and biological properties of antigens. Superantigens. Allergens
3. Immunoglobulins: structure, properties, coding, biosynthesis.
4. T and B lymphocytes, lymphocyte receptors. Primary and secondary lymphoid tissues.
5. Cellular markers of biological individuality: major histocompatibility complex class I and class II, structure, function
6. Antigen recognition, processing and presentation. Clonal selection and proliferation. Primary and secondary immune response
7. Tumor marker classification/ Classification of tumors. Immune response to neoplasias. Tumor immunotherapy.
8. Types of transplant; histocompatibility; pre-/post-transplant immunological/laboratory assessment of the patient
9. Immune mechanisms involved in graft rejection. Immunomodulation: immunostimulation, immunosuppression.
10. Hereditary and acquired immunodeficiencies. HIV/AIDS infection.
11. Pathologic immune reactions. Gell-Coombs classification; examples of characteristic immune pathology

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Şular Floredana-Laura	Through messages addressed at anytime through the Blackboard platform, 30 minutes after each lecture.

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: -
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Șef I dr Țurcanu Dana-Simona			
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: 0	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: 0		
- supplemental documentation at the library, from specialized information portals and in the field: 0		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 40		
- tutorial activities: 2		
- examinations: 4		
- other activities: 4		
3.8 Total hours of individual study: 50		
3.9 Total hours: 78		
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:
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 aesthetics 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	presentation - conversation	-	-	2
2	a) Athletics – the school of running b) Basketball – checking the initial level of acquiring the basic elements	-explication -demonstration - repetition	-	-	2
3	a) Athletics – speed running, standing and crouching start b) Volleyball - checking the initial level of acquiring the basic elements	-explication -demonstration - repetition	-	-	2
4	a) Basketball – repeating the elements of moving in the court	-explication -demonstration - repetition	-	-	2
5	a) Athletics – developing speed in endurance running b) Volleyball – fundamental positions in volleyball, moving in the field, high passes	-explication -demonstration - repetition	-	-	2
6	a) Athletics – developing leg strength with different jumping exercises b) Basketball - repeat the dribbling, ball catching and passing	-explication -demonstration - repetition	-	-	2
7	a) Swimming – teaching the basic elements a) Aquagym b) Basketball – teaching game, man to man defense	-explication -demonstration - repetition	-	-	2
8	a) Volleyball – combination of passes in formation of 2-3 players b) Basketball –improving the one to one defense play	-explication -demonstration - repetition	-	-	2
9	Basketball – repeating the throws on the goal from standing; rebound b) Volleyball – improving the offensive touch, teaching gam, repeating the service	-explication -demonstration - repetition	-	-	2
10	a) Athletics – improvement of arms and body strength with medicine ball b) Football	-explication -demonstration - repetition	-	-	2
11	a) Athletics – 4 x 4 relay running; fundamental exercises for javelin throw and shot put b) Handball –full field play, placement of the players on the semicircle	-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	-explication	-	-	2
13	Testing the students who where absent at the tests	-explication	-	-	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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2. Carstea G. ↪ Teoria si metodica educatiei fizice, Ed. An↪Da, Bucuresti, 2000
3. Hantiu I. ↪ Teoria educatiei fizice si sportului, note de curs, Univ. Oradea, 2012
4. Macovei S. ↪ Stretching, Ed AFIS, Bucuresti, 2012
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6. Filipescu, D., Gherghișan, D., Bologa, M., ↗ Educație fizică în învățământul 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. – Activitățile 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	-	-	0
Final evaluation			
- theoretical final exam	-	-	0
- practical final exam	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

Minimal performance standards:

1. Assist for at least 70% of the lessons, that means 20 attendances/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 swim 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)

Șef I dr Țurcanu Dana-Simona	Turcanu Dana Monday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2. Data regarding the discipline			
2.1 Name of discipline: Morphopathology			
2.2 Course coordinator: Asist Baniș Laura			
2.3 Practical activities coordinator(s):			
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: 112	3.5 lectures: 56	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 seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 13		
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:
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
Bibliography					

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Asist Baniás Laura	

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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. drd. Ciurea Cristina Nicoleta, As. drd. Moldovan Valeriu			
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: 40		
- supplemental documentation at the library, from specialized information portals and in the field: 1		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 0		
- examinations: 1		
- other activities: 1		
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:
1) Suspicion / recognition of etiology in bacterial infections
• proper requesting of microbiological analyses required for diagnosis
• understanding of bacteriological 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 periodonto-pathogenic bacteria
• Knowledge of the mechanisms by which bacteria causes the disease in the oral cavity

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 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, so to comply with the microbiological standards.

- Defining the principles of human antibiotherapy and of specific decontamination. Learning decontamination procedures (asepsis, disinfection, sterilization and antiseptics)

- 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 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, 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:

Acquiring knowledge about microbial biology, how the microbes cause disease, possibilities for prevention and treatment of infections

7.2 Specific objectives:

Knowledge about:

- Morphology, physiology and bacterial genetics
- The means by which bacteria cause disease
- the role of immune system in the defense against bacterial infections
- Knowledge about the diagnostic procedures used in bacterial infections, the factors influencing the diagnostic results, knowing the main indications for performing the bacteriological diagnosis
- Knowledge of the mechanisms by which antimicrobial substances exert their effect and the mechanisms by which bacteria develop resistance to antibiotics
- Knowledge of basic principles of immunization
- Knowledge of epidemiology
- basic knowledge about the bacteria involved in important human infections (morphology, caused diseases, pathogenesis, immunity, mode of transmission, prevention and treatment)
- Understanding the normal flora of the body, the terms of colonization, infection and carriage
- Understand 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	History of microbiology. The object and purpose of medical microbiology. Bacterial morphology.	Oral presentations PPT	-	structure of microorganisms	2
2	The structure of the bacteria. The chemical composition of the bacteria. Bacterial metabolism. The growth and multiplication of bacteria. Activity of physical, chemical and biological agents (antibiotics, bacteriocins, bacteriophage) on bacteria.	Oral presentations PPT	-	structure of microorganisms Antimicrobial therapy	2
3	Pathogenesis of bacterial infections. Host defense mechanisms. Prevention of infectious diseases.	Oral presentations PPT	-	immunisation immunodeficiency infection	2
4	Classification and nomenclature of bacteria. Gram-positive cocci (Staphylococcus, Streptococcus, Enterococcus). Gram-negative cocci (Neisseria meningitidis and Neisseria gonorrhoeae).	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 (incl. Caries), Otitis media, Respiratory tract infection, Septicaemia, Skin infections/infestations, Urinary tract infection, Disorders of pregnancy and deliver, Sexually transmitted diseases, Pregnancy loss	2
5	Gram-positive aerobic rods: Genus Corynebacterium. Genus Bacillus. Gram-negative aerobic, facultative anaerobic bacteria: Enteric pathogens: Escherichia, Shigella, Salmonella, Yersinia, Klebsiella, Proteus.	Oral presentations PPT	-	Gastroenteritis, Loose stools, peritonitis, Respiratory tract infection, Urinary tract infection, Skin infections/infestations	2
6	Curved Gram-negative bacteria: Genus Vibrio. Genus Campylobacter. Genus Helicobacter. Non-fermentative, aerobes, Gram-negative bacilli: Pseudomonas aeruginosa. Gram-negative coco-bacilli: Haemophilus influenzae	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	2
7	Spore-forming Gram-positive, anaerobic bacteria (Clostridium). Non-spore-forming anaerobic bacteria	TBL	-	Constipation, Dysphagia, Visual impairment, acne, Oral disorders (incl. Caries), Peripheral nerve disorders, peritonitis, septicemia	2
8	Bacteria that are not classified as Gram: Mycobacterium genus. Spirochetes: Treponema pallidum. Borrelia burgdorferi	TBL	-	Haemoptysis, meningitis, Peripheral nerve disorders, Sexually transmitted diseases, tuberculosis, Urinary tract infection	2
9	Normal flora of the human body. Normal flora of the oral cavity.	Oral presentations PPT	-	Normal flora	2
10	Oral ecosystem. Characteristics of dental plaque biofilm.	Interdisciplinary course	-	Normal flora	2

11	Microflora involved in periodontal disease	Oral presentations PPT	-	Oral disorders (incl. Caries)	2
12	Microbial flora involved in dental caries	Oral presentations PPT	-	Oral disorders (incl. Caries)	2
13	Etiology of dentoalveolar infections.	Oral presentations PPT	-	Oral disorders (incl. Caries)	2
14	Etiology of infections of the mouth and salivary glands.	Oral presentations PPT	-	Oral disorders (incl. Caries)	2

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1. Brooks G.F., Butel, J. S., Morse, S.A.: Jawetz, Melnick, Adelberg's Medical Microbiology, McGraw-Hill Medical, New York, 25th edition. 2010
2. Fritz H. Kayser, Kurt A. Bienz, Johannes Eckert, Rolf M. Zinkernagel: Medical Microbiology. Georg Thieme Verlag, Stuttgart, 2005
3. 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

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Labor safety in the laboratory. Decontamination. The bacteriological diagnosis scheme. The harvesting and transport of pathological samples	Practical activities, presentation	-	Decontamination, disinfection, antisepsis, asepsis, sterilisation	2
2	Study of the bacterial morphology. Wet mount. Smears. Simple and Gram staining. Ziehl-Neelsen staining. Neisser staining.	Practical activities, presentation	-	Structure of microorganisms	2
3	The cultivation of microorganisms. Culture media. Methods of seeding. Macroscopic aspects of bacterial culture. Bacterial identification based on biochemical and metabolism characteristics.	Practical activities, presentation	-	Identification of microorganisms	2
4	Identification of the bacteria by their antigenic structure: agglutination, ELISA, IF. Intradermic reactions. Detection of nucleic acids - hybridization, gene amplification. Bacterial typing. Bacterial pathogenicity testing in vitro and in vivo (experimental disease). Antibiotic susceptibility testing – Antibigram	Practical activities, presentation	-	Identification of microorganisms Antibigram	2
5	Practical exam	Practical exam	-	-	2
6	Laboratory diagnosis of infections caused by Staphylococcus, Streptococcus, Enterococcus, Neisseria.	Practical activities, presentation	-	Bullous/vesicular skin eruption, Loose stools, Vaginal discharge, Cardiac valve disease, Chronic renal disease, endocarditis, gastroenteritis, Infectious disease of childhood, meningitis, Oral disorders (incl. Caries), otitis media, Respiratory tract infection, septicemia, Skin infections/infestations, Urinary tract infection, Disorders of pregnancy and	2

				deliver, Sexually transmitted diseases, Skin infections/infestations, Pregnancy loss	
7	Laboratory diagnosis of infections caused by enterobacteriaceae: Escherichia, Klebsiella, Proteus, Shigella, Salmonella, Yersinia. Laboratory diagnosis of infections caused by Vibrio, Helicobacter, Campylobacter.	Practical activities, presentation Practical exam	-	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, presentation	-	Constipation, Dysphagia, Visual impairment, acne, Oral disorders (incl. Caries), Peripheral nerve disorders, peritonitis, septicemia Haemoptysis, meningitis, Sexually transmitted diseases, tuberculosis, Urinary tract infection, Respiratory tract infection, Skin infections/infestations	2
9	Laboratory diagnosis of infections caused by endogenous anaerobic bacteria.	Practical activities, presentation	-	Oral disorders (incl. Caries)	2
10	Normal flora of the oral cavity. Quantitative assessment of lactobacilli in the mouth.	Practical activities, presentation	-	Oral disorders (incl. Caries)	2
11	Antimicrobial activity of dental materials and toothpaste.	Practical activities, presentation	-	Oral disorders (incl. Caries)	2
12	Microbial flora in periodontitis. Microbiology of dental caries.	Practical activities, presentation	-	Oral disorders (incl. Caries)	2
13	Review	Practical activities, presentation	-	-	2
14	Practical exam	Practical exam	-	-	2
Bibliography 1. Blackboard elearning 2. Adrian Man, Anca Mare, Felicia Toma. Atlas de bacteriologie. University Press. 2019;213 pag. ISBN: 978-973-169-612-6 3. 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

-

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge about the presented pathogens	TBL evaluation	10
- practical activities	Knowledge on microbiology diagnostic principles and antimicrobial therapy	Seminar	20
Final evaluation			
- theoretical final exam	Knowledge about the presented pathogens	Test	60
- practical final exam	Knowledge about the presented pathogens	Test	10
Minimal performance standards: Minimum passing grade during the semester's practical assessments - minimum 5 Minimum conditions for admission to final examination - Grade 5 assessment during the seminars - 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 minutes after each course

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD 2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Lecturer Dr. Borş 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: 35		
- supplemental documentation at the library, from specialized information portals and in the field: 30		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 10		
- examinations: 6		
- other activities: 0		
3.8 Total hours of individual study: 91		
3.9 Total hours: 175		
3.10 Credits: 7		

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: Multimedia equipment. 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 cavity base materials. Dental adhesive systems.	Oral+multimedia presentation.	Course of 2 hours in English language.	-	2
7	Dental luting cements. Temporary restoration materials.	Oral+multimedia presentation.	Course of 2 hours in English language.	-	2
8	Dental materials for direct restorations. Dental amalgams.	Team-Based Learning (TBL), multimedia.	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.	Team-Based Learning (TBL), multimedia.	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

References (compulsory):

1. 'Dental Materials' on BlackBoard and E-learning Platform, Website of the UMFST G.E. Palade of Tg.Mures
2. Székely M., Borş A., Molnar-Varlam Cristina: Dental Materials – Course for Students. University Press, UMFST Tg.Mureş, 2019.
3. Von Fraunhofer J.A.: Dental Materials at a Glance. Wiley-Blackwell Publishing, Oxford, 2010.

References (facultative):

1. McCabe J.F., Walls A.W.G.: Applied Dental Materials. Editura Blackwell Science, Oxford, 1998.
2. Székely M., Molnar-Varlam C., Kerekes-Máthé B.: Fogászati anyagtan. Editura University Press, Târgu Mureş, 2015.
3. Molnar-Varlam C., Székely M., Mucenic S.: Materiale dentare. Editura University Press, Târgu Mureş, 2011.

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 (LR).	-	4
3	Preparation techniques of thermoplastic and buccoplastic impression materials.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
4	Preparation techniques of elastic impression materials: reversible and irreversible hydrocolloids. Hydroalginic impression.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
5	Preparation techniques of elastic impression materials. Combined impression techniques.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
6	Preparation techniques of classical dental cements. Practical knowledge assessment by test.	Practical demonstration and individual preparation + test.	4 hours, Laboratory Report (LR) + grade.	-	4
7	Preparation techniques of modern dental cements.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
8	Preparation techniques of polymerizable materials: acrylates, composites.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	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 (LR) + grade.	-	4
10	Preparation and handling of dental cast materials.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
11	Handling techniques of materials used for patterns, investments and casting.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4

12	Handling techniques of materials used for dental prosthetics: polymers.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
13	Handling techniques of materials used for dental prosthetics: dental ceramics and alloys.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
14	Recapitulation. Knowledge assessment by seminar.	Practical demonstration and individual preparation.	4 hours, Laboratory Report (LR).	-	4
Bibliography Bibliography Molnar-Varlam C.: Ghid practic de utilizare a materialelor dentare. Editura University Press, Târgu-Mureş, 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	TBL based theoretical knowledge. Attendance to lectures according to the Regulations of 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.	50
- practical final exam	Practical knowledge and skills joint with theory.	Practical exam including response to a question.	20
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 (1hour/week)

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Lect dr Lakó Cristian			
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: 0	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 seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations:		
- other activities:		
3.8 Total hours of individual study: 0		
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:

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

7.1 General objective:
7.2 Specific objectives:

8.1 Content of seminar, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Lect dr Lakó Cristian	1 ora saptamanal

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physiopathology			
2.2 Course coordinator: Șef I dr Gliga Florina-Ioana			
2.3 Practical activities coordinator(s): Șef I 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: 4		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 2		
- examinations: 3		
- other activities: 2		
3.8 Total hours of individual study: 19		
3.9 Total hours: 75		
3.10 Credits: 3		

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: 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 their specific activity.
7.2 Specific objectives: Presentation of the etiopathology and pathophysiological mechanisms in general and special pathophysiology of the 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 (incl. Caries)	2
2	Pathophysiology of body's defense systems. Inflammatory syndrome. Infectious syndrome. Particularities of the oral cavity	Oral presentation and multimedia	-	Immunodeficiency.Infectious disease.Lymphadenopathy	2
3	Pathophysiology of fever. Particularities of the oral cavity.	Oral presentation and multimedia	-	PUO-pyrexia of unknown origin	2
4	Pathophysiology of pain. Applications in dental medicine.	Oral presentation and multimedia	-	Migraine.Headache	2
5	Pathophysiology of blood. Erythrocyte series and leukocyte 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 acid-base balance and of the hydro-electrolytic balance. Applications in dental medicine.	Oral presentation and multimedia	-	Electrolyte and water balance	2
8	Pathophysiology of the cardiovascular system. Atherosclerosis. Hypertension.Applications in dental medicine.	Oral presentation and multimedia	-	Hypertension. Disorders of lipid metabolism	2

9	Cardiac diseases. Cardiac arrhythmia. Applications in dental medicine.	Oral presentation and multimedia	-	Cardiac conduction/rhythm disorder	2
10	Pathophysiology of the respiratory system. Applications in dental medicine.	Oral presentation and multimedia	-	Chronic bronchitis and emphysema. Respiratory tract infection. Asthma.	2
11	Pathophysiology of the digestive tract. Particularities of the oral cavity.	Oral presentation and multimedia	-	Dysphagia. Malabsorption. Peptic ulcer	2
12	Pathophysiology of nutrition and metabolic diseases. Particularities of the oral cavity.	Oral presentation and multimedia	-	Diabetes mellitus. Hypoglycaemia. Malnutrition	2
13	Pathophysiology of the endocrine system. Applications in dental medicine	Oral presentation and multimedia	-	Thyroid disorders. Pituitary disorders	2
14	Pathophysiology of the urinary system. Applications in dental medicine.	Oral presentation and multimedia	-	Chronic renal disease. Urinary tract infection.	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. Bacărea Anca, Pathophysiology, Lecture guide, University Press Tîrgu Mureş, 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. Practical applications of the pathophysiology of inflammation in dental medicine.	Lab practical activities, PPT presentation, discussions	-	-	2
2	Practical applications of the pathophysiology of inflammation in dental medicine	Lab practical applications, debates, CBL	-	Oral disorders (incl. Caries)	2
3	Practical applications of the pathophysiology of leukocyte series in dental medicine.	Lab practical applications, debates, CBL	-	Immunodeficiency	2
4	Practical applications of the pathophysiology of erythrocyte series in dental medicine. Exploring anemic syndrome. Polycythemia	Lab practical applications, debates, CBL	-	Anemia	2
5	Practical applications of the pathophysiology of hemostasis in dental medicine.	Lab practical applications, debates, CBL	-	Coagulation disease	2
6	Electrolyte disturbances. Correlations between signs and lab tests based on pathophysiological mechanisms.	Lab practical applications, debates, CBL	-	Electrolyte and water balance	2
7	Practical applications of the pathophysiology of cardiovascular system in dental medicine. The blood pressure.	Lab practical applications, debates, CBL	-	Hypertension	2
8	Practical applications of the pathophysiology of cardiovascular system in dental medicine. The pulse. Vascular reactivity tests.	Lab practical applications, debates, CBL	-	Shock. Cardiac conduction/rhythm disorder	2

9	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
10	Practical applications of the pathophysiology of digestive tract and metabolism in dental medicine	Lab practical applications, debates, CBL	-	Malabsorption. Peptic ulcer	2
11	Practical applications of the pathophysiology of lipid and protein metabolism disturbances in dental medicine.	Lab practical applications, debates, CBL	-	Disorders of lipid metabolism. Disorders of calcium and vitamin D metabolism	2
12	Practical applications of the pathophysiology of hyperglycemic and hypoglycaemic syndrome. Diabetes mellitus. Chronic and acute DM complications.	Lab practical applications, debates, CBL	-	Diabetes mellitus. Hypoglycaemia	2
13	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
14	Practical applications of the pathophysiology of renal system in dental medicine.	Lab practical applications, debates, CBL	-	Urinary tract infection. Chronic renal disease	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

The ability to evaluate the essential role of clinical pathophysiology and to integrate it with a multidisciplinary approach of a patient with a specific dental pathology.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL test1 TBL test2	written test 10 % written test 10 %	20
- practical activities	Written practical activity test Case report - oral and multimedia individual presentation	Written test 10 % Case presentation 10%	20
Final evaluation			
- theoretical final exam	Final theoretical exam	Written multiple choice test	30
- practical final exam	Final practical exam	A written / oral - practical test	30
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 I dr Gliga Florina-Ioana	Monday 13-15 pm (counseling hours may change depending on the teaching module schedule)

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pharmacology			
2.2 Course coordinator: Prof dr Brassai Attila-Miklos			
2.3 Practical activities coordinator(s): Șef I Dr. Bán Erika-Gyongyi			
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: 9		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 2		
- examinations: 2		
- other activities: 0		
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:
• Understanding/knowledge of indications, contraindications, adverse effects, pharmacokinetics, dosage, drug associations and interactions for each drug class
6.2 transversal competencies:
• Aquisition of skills and knowledge necessary for accurate drug prescription (compound, precompound, officinal)
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:

Pharmacology is a basic science, included in the curriculum for third year medical students, which aim is to provide students with the following knowledge:

- knowledge of the most important drug classes, the organotrophic medications, the main therapeutic drug classes, correlations between action and chemical structure

7.2 Specific objectives:

- Understanding the mechanisms of action of the drug molecule on the level of cells, tissues, organs and systems, on molecular and receptorial level, and on the level of the whole human body
- knowledge of indications, contraindications, adverse effects, pharmacokinetics, dosage, drug associations and interactions for each drug class
- During the practical activities students learn the general rules of medical prescriptions (compound, precompound, officinal), and the basics of pharmacovigilance
- Understanding of basic concepts of general pharmacology, pharmacokinetics, pharmacodynamics, pharmacotoxicology and dosage regarding the following drug categories: drugs acting on peripheral neurotransmission and tissue active substances, drugs acting on central nervous system, blood, respiratory system, gastrointestinal system, urinary tract and uterus, endocrine and metabolic processes, anti-inflammatory drugs, antimicrobial and antiparasitic chemotherapy, anticancer agents
- Aquisition of skills and knowledge necessary for accurate drug prescription (compound, precompound, officinal)

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Introduction: basic principles, importance, historical development of pharmacology; generalities about drugs-definitions, effects, Pharmacokinetics: sites of administration, drug absorption, distribution, metabolism, excretion, cumulation Pharmacodynamics: mechanisms of action, interactions, dosage and administration, drug safety and effectiveness. Basic and clinical evaluation of a drug. Pharmacotoxicology: toxicity, adverse effects, pharmacovigilance Pharmacokinetics: sites of administration, drug absorption, distribution, metabolism, excretion, cumulation Pharmacodynamics: mechanisms of action, interactions, dosage and administration, drug safety and effectiveness. Basic and clinical evaluation of a drug. Pharmacotoxicology: toxicity, adverse effects, pharmacovigilance	Oral + multimedia presentation	-	-	2
2	Drugs acting on the autonomic nervous system. Cholinergic agonists : direct and indirect acting parasympathomimetics. Cholinergic antagonists – parasympatholytics; antispasmodic drugs. Drugs that act on autonomic ganglia.	Oral + multimedia presentation	-	-	2
3	Neuromuscular blocking agents. Adrenergic drugs : sympathomimetics	Oral + multimedia presentation	-	-	2
4	Sympatholytic agents : alpha-blockers, beta-blockers, neurosympatholytics. Cardiac glycosides, other drugs used in congestive heart failure	Oral + multimedia presentation	-	-	2
5	Antiarrhythmics Antianginal Drugs. Diuretics. Treatment of high blood pressure.	Oral + multimedia presentation	-	-	2
6	Agents used in correction of plasma and blood volume. Antianemic drugs : iron, vitamin B12, folic acid Antithrombotic drugs: anticoagulants, antiplatelet agents, fibrinolytic agents. Haemostatic agents : coagulants, antifibrinolytics	Oral + multimedia presentation	-	-	2
7	Drugs affecting the respiratory system: Drugs used for cough, expectorants, antiasthmatic agents. Drugs affecting the gastrointestinal system. Stimulants and supplements of digestive secretions. Digestive enzymes Antacids and antiulcer drugs. Emetic and antiemetic drugs. Purgatives, laxatives and antidiarrheal agents.	Oral + multimedia presentation	-	-	2

8	Local anesthetics. General anesthetics : inhaled and intravenous.	Local anesthetics. General anesthetics : inhaled and intravenous.	-	-	2
9	Sedative, hypnotic, anxiolytic drugs : barbiturates, benzodiazepines, alcohols. Antipsychotic drugs. Psychostimulants and analeptic drugs.	Local anesthetics. General anesthetics : inhaled and intravenous.	-	-	2
10	Antiepileptic drugs, anti-Parkinson agents, central muscle relaxants. Antidepressants.	Oral + multimedia presentation	-	-	2
11	Opioid analgesics and antagonists. Nonsteroidal antiinflammatory drugs, antirheumatic agents, drugs used in gout treatment	Oral + multimedia presentation	-	-	2
12	Corticosteroids and ACTH. Antimicrobial agents : penicillins, cephalosporins, macrolides, chloramphenicol, tetracyclines, aminoglycosides, polymyxin Antimicrobial chemotherapeutics (antimycobacterials, sulfonamides and trimethoprim. Locally acting substances. Bacterial plaque medication and drugs against caries.	Oral + multimedia presentation	-	-	2
13	Urinary tract and intestinal antiseptics, quinolones. Disinfectants. Local and general antifungal agents. Antiprotozoal agents: chemotherapy of malaria, amebiasis, trichomoniasis. Anthelmintic drugs. Antiviral agents. Antidiabetic agents: insulin and oral antidiabetics. Thyroid hormones and antithyroid drugs.	Oral + multimedia presentation	-	-	2
14	Gonadal hormones and anabolic steroids. Drugs affecting the phosphocalcic metabolism. Anticancer drugs and immunosuppressants.	Oral + multimedia presentation	-	-	2

Bibliography

1. Rang HP, Dale MM, Ritter JM, Moore PK: Pharmacology, Editura Churchill Livingstone, 5th ed., (2003)
2. Hardman J, Limbord L, Gilman A: Goodman & Gilman's – The pharmacological basis of therapeutics, Editura The McGraw-Hill Companies, Inc. 10th ed. (2001)
3. Katzung BG (red): Basic and clinical pharmacology, Editura McGraw-Hill, Boston, 9th ed. (2004)
4. Brody TM, Lerner J, Minneman KP, Harold CN: Human pharmacology- molecular to clinical, Editura Mosby, 4th ed. (2005)
5. Luellmann H, Mohr K, Hein L – Pocket Atlas of Pharmacology, 4nd edition, Thieme, 2010
6. Tripathi KD – Essentials of Pharmacology for Dentistry, Second edition, Jaypee Brothers Medical Publishers Ltd, New Delhi, 2011

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General and official regulation of prescription, delivery and circulation of drugs. Pharmacopeia. Pharmacy. Medical prescription – forms, general rules. Solid dosage forms.	Practical demonstrations	-	-	2
2	Semisolid and soft dosage forms. Liquid and gaseous dosage forms.	Practical demonstrations	-	-	2
3	Practical test: general pharmacology and drug prescription	Multiple choice test	-	-	2
4	Colinergic and anticolinergic drugs. Adrenergic and antiadrenergic drugs.	Practical demonstrations	-	-	2
5	Cardiac glycosides and antiarrhythmics. Vasoactive agents.	Practical demonstrations	-	-	2
6	Diuretics. Hematologic drugs	Practical demonstrations	-	-	2
7	Drugs affecting the respiratory system. Drugs affecting the gastrointestinal system	Practical demonstrations	-	-	2

8	Practical test: autonomic nervous system, cardiovascular, pulmonar and GIT pharmacology	Multiple choice question	-	-	2
9	Local anesthetics. General anesthetics.	Practical demonstrations	-	-	2
10	Sedative, hypnotic, anxiolytic drugs : barbiturates, benzodiazepines, alcohols, aldehydes, etc. Antipsychotic drugs. Psychostimulants and analeptic drugs	Practical demonstrations	-	-	2
11	Antidepressants: tricyclic, atypical. Opioid analgesics and antagonists. NSAID.	Practical demonstrations	-	-	2
12	Antimicrobial agents : penicillins, cephalosporins, macrolides, chloramphenicol, tetracyclines, aminoglycosides, polymyxin Antimicrobial chemotherapeutics (antimycobacterials, sulfonamides and trimethoprim). Urinary tract and intestinal antiseptics, fluoroquinolones. Disinfectants. Local and general antifungal agents. Antiprotozoal agents: chemotherapy of malaria, amebiasis, trichomoniasis. Anthelmintic drugs. Antiviral agents.	Practical demonstrations	-	-	2
13	Antidiabetic agents: insulin and oral antidiabetics. Thyroid hormones and antithyroid drugs. Suprarenal gland hormones and anabolic steroids.	Practical demonstrations	-	-	2
14	Drugs affecting the phosphocalcic metabolism. Anticancer drugs and immunosuppressants .	Practical demonstrations	-	-	2

Bibliography

1. Rang HP, Dale MM, Ritter JM, Moore PK: Pharmacology, Editura Churchill Livingstone, 5th ed., (2003)
2. Hardman J, Limbord L, Gilman A: Goodman & Gilman's – The pharmacological basis of therapeutics, Editura The McGraw-Hill Companies, Inc. 10th ed. (2001)
3. Katzung BG (red): Basic and clinical pharmacology, Editura McGraw-Hill, Boston, 9th ed. (2004)

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	-Passing the test	-2 theoretical multiple choice tests	40
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Passing the test	Theoretical multiple choice test	50
- practical final exam	Passing the test	Rp. writing	10
Minimal performance standards: Passing the practical exam with min. 5 and the theoretical test with min. 5			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Brassai Attila-Miklos	Wednesday 4 - 6 PM

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department:
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Microbiology - Virusology, Mycology			
2.2 Course coordinator: Prof dr Man 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: 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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
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:
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Prof dr Man Adrian	Dupa curs, 30 minute

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Bereșescu Liana			
2.3 Practical activities coordinator(s): sef I dr. beresescu Liana			
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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 8		
- tutorial activities: 4		
- examinations: 4		
- other activities: 1		
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 know the devices, appliances, materials, tools and techniques necessary for the realization of a proper oral hygiene
6.2 transversal competencies: The student must know the norms of work safety, the possible risks of nosocomial infections and develop the ability to work in a team with fellow dentists and assistants.
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' introduction in the field of oral-dental prevention.

7.2 Specific objectives:

Knowledge of various methods and techniques of primary and secondary prevention.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	History and philosophy of dental prevention.	Oral and multimedia	-	-	2
2	The preventions of infections transmission in dentistry	Oral and multimedia	-	-	2
3	Organizing the circuit of clinical activity in dental office	Oral and multimedia	-	-	2
4	Saliva and its role in maintaining oral health	Oral and multimedia	-	-	2
5	The dental plaque: definition, composition and formation.	Oral and multimedia	-	-	2
6	The role of the dental plaque in caries and periodontitis etiology	Oral and multimedia	-	-	2
7	Dental plaque highlighting. Oral hygiene and health index.	TBL (Team based learning)	-	-	2
8	Mechanical plaque control	Oral and multimedia	-	-	2
9	Plaque control through complementary oral hygiene measures	TBL (Team based learning)	-	-	2
10	Chemical control of the dental plaque	Oral and multimedia	-	-	2
11	Professional oral hygiene procedures	Oral and multimedia	-	-	2
12	The role of diet in the prevention of dental diseases	Oral and multimedia	-	-	2
13	Fluoride: general presentation, metabolism	Oral and multimedia	-	-	2
14	Fluoride: local and systemic applications	Oral and multimedia	-	-	2

Bibliography

Petcu Blanka, Bereşescu Liana, Cornoş Bogdan – Noţiuni practice de prevenţie oro-dentară, Ed. University Press, Tg. Mureş, 2010

Dumitriu Horia – Parodontologie, Ed. Viaţa Medicală Românească, Bucureşti, 2009

Nuca Cristina, Amariei C. - Fluorul in medicina oro-dentara Ed. Muntenia 2005

Optional bibliography:

Dănilă I. – Dentistică preventivă, Ed. Didactică şi Pedagogică Bucureşti, 2005

Podariu Angela, Jumanca Daniela, Galuscan Atena, Vacaru Roxana, Muntean Ramona - Tratat de preventie oro-dentara - Editura Waldpress Timisoara, 2003

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introductory lesson: presentation of the discipline	Oral presentation	-	-	3
2	Presentation of inner rules of the discipline	Oral presentation	-	-	3
3	General presentation of a dental office.	Oral presentation	-	-	3

4	Dental plaque disclosing	Clinical practical demonstrations	-	-	3
5	Oral hygiene indices	Clinical practical demonstrations	-	-	3
6	Oral health indices	Clinical practical demonstrations	-	-	3
7	Toothbrushing techniques	Practical demonstrations	-	-	3
8	Application of different toothbrushing techniques	CBL (Case based learning)	-	-	3
9	Presentation of complementary oral hygiene devices	Practical demonstrations	-	-	3
10	Presentation of professional application of different complementary oral hygiene measures and oral hygiene procedures	CBL (Case based learning)	-	-	3
11	Presentation of professional oral hygiene procedures	Practical demonstrations on study	-	-	3
12	Application of professional oral hygiene procedures	Practical demonstrations on study	-	-	3
13	Topical fluoridation	Practical demonstrations on study	-	-	3
14	Diet approaches to oral health	Practical demonstrations on study	-	-	3
Bibliography Petcu Blanka, Bereşescu Liana, Cormoş Bogdan – Noţiuni practice de prevenţie oro-dentară, Ed. University Press, Tg. Mureş, 2010					

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

The contents of the course is relevant for the current practical activity if the dentist, knowledge of the curriculum being mandatory for ensuring a complex and thorough therapy, according to the current standards in the field.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL sesion	TBL	20
- practical activities	CBL sesion	CBL	20
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects of the curriculum.În funcţie de specificul disciplinei	Written evaluation – multiple choice	40
- practical final exam	Participation and engagement during practical activities n funcţie de specificul disciplinei	Practical seminar	20
Minimal performance standards: - Achieving minimum 5 at each of the theoretical and practical evaluation. - Minimal practical activity: - 1 patient file with oral hygiene and oral health indices - Performing 1 professional dental cleaning			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Bereşescu Liana	wednesday, 12-13, office E14

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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: Șef I dr Pop Marian			
2.3 Practical activities coordinator(s): Șef I dr Pop Marian			
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: 5		
- supplemental documentation at the library, from specialized information portals and in the field: 5		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 1		
- examinations: 1		
- other activities: 1		
3.8 Total hours of individual study: 14		
3.9 Total hours: 70		
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: 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 the main hardware (PC) and software used in computer science and medical informatics -The student must know the main branches and areas of interest in the field of medical informatics -The student must demonstrate the ability to use the latest online documentation 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, the rules 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 Assessment 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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introductory Guide. Medical informatics objectives	Oral + multimedia presentation	-	Nu este cazul	2
2	Medical informatics fields	Oral + multimedia presentation	-	Nu este cazul	2
3	Data, Information, Knowledge	Oral + multimedia presentation	-	Nu este cazul	2
4	Architecture of a digital computer. The hardware architecture of a automated computer system	Oral + multimedia presentation	-	Nu este cazul	2
5	Architecture of a digital computer. The software architecture of a automated computer system	Oral + multimedia presentation	-	Nu este cazul	2
6	Computer Networks – introductory guide	Oral + multimedia presentation	-	Nu este cazul	2
7	The Internet – introductory guide	Oral + multimedia presentation	-	Nu este cazul	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	-	Nu este cazul	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	-	Nu este cazul	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	-	Nu este cazul	2
11	Office applications in the biomedical field: Word processing software. Desktop Publishing (DTP). Advanced text editors.	Oral + multimedia presentation	-	Nu este cazul	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	-	Nu este cazul	2
13	Biomedical databases.	Oral + multimedia presentation	-	Nu este cazul	2
14	Biomedical simulation and modeling.	Oral + multimedia presentation	-	Nu este cazul	2

Bibliography

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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/Data_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. van Bemmelen J., Musen M.A., Musen Mark A.: Handbook of Medical Informatics, Springer PublishingHouse, 2002, online book la

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Basic knowledge of using computers	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2
2	File Managers. (Windows Explorer): General Concepts. Files. Folders/Directories	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2
3	Utilization of Office software in biopharmaceutical field	Practical demonstrations. Synchronous/asynchronous e-learning methods.		Electronic Medical Records (EMR)	2
4	Advanced text editors. MS Word (I): General concepts. Page formatting; paper, fonts, text formatting, paragraph formatting	Practical demonstrations. Synchronous/asynchronous e-learning methods.			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 demonstrations. Synchronous/asynchronous e-learning methods.			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 demonstrations. Synchronous/asynchronous e-learning methods.			2
7	Advanced text editors. MS Word (IV) – creating and editing tables	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2

8	Advanced text editors. MS Word (V) – the equation editor	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2
9	Spreadsheet software (MS Excel, OO Calc). MS Excel (I) – General concepts ; creating workbook; sheets and cells formatting and editing.	Practical demonstrations. Synchronous/asynchronous e-learning methods.		Electronic Medical Records (EMR)	2
10	Spreadsheet software MS Excel (II): using objects, editing formulas, using absolute and relative addresses.	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2
11	Spreadsheet software MS Excel (III): using simple and complex functions	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2
12	Spreadsheet software MS Excel (IV): Diagrams /Charts	Practical demonstrations. Synchronous/asynchronous e-learning methods.			2
13	Electronic presentation software (MS Powerpoint, OO Impress). MS Powerpoint. General concepts. Creating and using slides. Using objects in slides. Animations and transitions.	Practical demonstrations. Synchronous/asynchronous e-learning methods.			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 demonstrations. Synchronous/asynchronous e-learning methods.		Medical Online searching strategies	2
Bibliography Marius Mărușteri, Marius Petrișor: Informatică medicală. Îndrumător de activități practice. manual digital - (filme didactice adnotate cu activitățile de la LP), 2014, disponibil online pe platforma de e-learning RoELME - Guest login), http://roelme.umftgm.ro/moodle/course/view.php?id=256 Eugenia Tătar, Simona Tătar, Marius Mărușteri: Informatică Medicală. Bazele informaticii – lucrări practice, 2001, UMF Târgu Mureș, disponibil online pe serverele UMFST Tg. Mures https://www.umfst.ro/info/LP%20Info.pdf Drugan T., Bondor C., Bolboacă S., Călinici T., Colosi H., Gălățuș R., Istrate D., Văleanu M., Achimaș A., Tigan S.: Aplicații practice de informatică și statistică medicală, ed. Alma Mater, ClujNapoca, 2002 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

The knowledge acquired from the above mentioned curricular content will assure for the students the proper understanding of basic statistical glossary and of some other terms related to the field of biostatistics and will enhance their ability to understand and apply a specific statistical protocol for a particular type of clinical trial/epidemiological study or scientific experiment. It is also provided a theoretical and practical framework for critically reading of scientific articles published in the biomedical field, with the proper understanding of statistical protocols used in such articles.

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	25
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts. Knowledge of bibliographical references	Multiple choice test	25

- practical final exam	Correlation between theoretical and practical notions. Capacity of performing practical work	Practical exam at the end of semester.	45
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)

Şef I dr Pop Marian	Friday, 14-15

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Hygiene and health education			
2.2 Course coordinator: Conf dr Nădășan Valentin			
2.3 Practical activities coordinator(s): Conf dr Nădășan Valentin, Șef I dr Ferencz Jozsef-Lorand			
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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 28		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 10		
- examinations: 4		
- other activities: 0		
3.8 Total hours of individual study: 84		
3.9 Total hours: 126		
3.10 Credits: 2		

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 for conducting TBL examination.
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 a 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. Radiofrequency electromagnetic fields (mobile phone exposure).	Oral and multimedia presentation. TBL	-	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. Sources and nutritional value.	Oral and multimedia presentation	-	Weight gain, Weight loss, Constipation, Malnutrition, Disorders of calcium and vitamin D metabolism, Oral disorders (incl. Caries)	2

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- Frumkin H, Ed. Environmental Health: From Global to Local. San Francisco: Jossey Bass, 2005.
- 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 pollution. 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,	Oral, multimedia presentation, practical activities	-	Loose stools, Vomiting, Abdominal pain	2

	beverages.				
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 Mureș, 2012

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.	TBL	10
- practical activities	Assessment of knowledge and ability to apply it individually and in a team.	CBL1 and CBL2	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:

Minimal performance standards: Minimal performance standard: 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)

Conf dr Nădășan Valentin	Monday 10-12, Wednesday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical psychology			
2.2 Course coordinator: Șef I dr Popa Octavian-Cosmin			
2.3 Practical activities coordinator(s): Șef I 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: 1		
- supplemental documentation at the library, from specialized information portals and in the field: 1		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 1		
- tutorial activities: 1		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 5		
3.9 Total hours: 33		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: Not required
4.2 competency: Not required

5. Conditions

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

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: To acquire skills in the field of medical psychology that will be used through the clinical application of different psychological techniques when treating patients.
7.2 Specific objectives: - To understand the specific dysfunctional thinking pattern involved in psychological disorders; - To understand the relationship between thoughts - emotions and behavior in psychological and / or organic disease; - To develop a good capacity to choose an appropriate psychological questionnaire for a specific psychological disorder; - To acquire practical abilities for conducting a clinical psychological interview with a patient.

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	Oral presentation, PowerPoint presentation	-	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 approaches 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 laboratory, 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.	Video presentation, discussion 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. (2019) The new approaches and future orientation in medical psychology, Targu-Mures:University Press (in press).
2. Antony, M.M., Barlow, D.E. (2011) Handbook of Assessment and Treatment Planning for Psychological Disorders, 2/e Second Edition, New York: The Guilford Press.
3. Clark, D.A., Beck, A.T. (2010). Cognitive Therapy of Anxiety Disorders, New York: The Guilford Press.
4. Gross, J.J., (2014). Handbook of Emotion Regulation, Second Edition, New York: The Guilford 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 of medical field assumes that doctors acquire a high level of theoretical and practical skills. Also, these abilities must be completed with knowledge from medical psychology for a good understanding of sanogenesis and pathogenesis factors involved in health and disease.

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	According to the requirements of the discipline	Multiple choice test/ final theoretical project	60
- practical final exam	According to the requirements of the discipline	Role-play/ final practical project	40

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 be present to all lectures and practical activities in one hundred percentages. 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)

Şef I dr Popa Octavian-Cosmin	Tuesday, 8-12

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: Functional and Additional Sciences
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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: Șef I dr Pop Raluca-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: 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: 1		
- supplemental documentation at the library, from specialized information portals and in the field: 1		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 1		
- other activities: 0		
3.8 Total hours of individual study: 3		
3.9 Total hours: 17		
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 scientific research, history	PowerPoint presentation	Oral presentation	Immunisation	1
2	Introduction in Methodology of medical scientific research, generalities	PowerPoint presentation	Oral presentation	Infectious disease of childhood	1
3	Medical scientific research: Strategies and planning a research study	PowerPoint presentation	Oral presentation	Disorders of calcium and vitamin D metabolism	1
4	Steps of a research study: Study population and sample	PowerPoint presentation	Oral presentation	Oedema	1
5	Steps of a research study: Types and methods of data collection	PowerPoint presentation	Oral presentation	Bone malignancy	1
6	Steps of a research study: Research studies (descriptive studies)	PowerPoint presentation	Oral presentation	Infant feeding	1
7	Steps of a research study: Research studies (analytical studies, screening and diagnostic tests)	PowerPoint presentation	Oral presentation	Malformations of lip/palate	1
8	Steps of a research study: Research studies (Randomized clinical study)	TBL	Individual and team work	Pain management	1
9	Steps of a research study: Data analysis	PowerPoint presentation	Oral presentation	Oral disorders (incl. Caries)	1
10	Steps of a research study: Research study bias	PowerPoint presentation	Oral presentation	Drug reactions	1
11	Steps of a research study: Displaying results	PowerPoint presentation	Oral presentation	Post-operative care	1
12	Steps of a research study: The structure of a scientific paper (Evaluation of a scientific article)	PowerPoint presentation	Oral presentation	Oral disorders (incl. Caries)	1
13	Steps of a research study: The structure of a scientific paper (Evaluation of a scientific presentation, undergraduate thesis)	PowerPoint presentation	Oral presentation	Oral disorders (incl. Caries)	1
14	Ethics in medical research	PowerPoint presentation	Oral presentation	HIV	1

Bibliography

Bacărea Vladimir, Ghiga Dana, Mărușteri Marius, Oláh Péter, Petrișor Marius. A Primer in Research Methodology and Biostatistics, University Press Tg. Mureș, 2014.

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.

Gordis L. Epidemiology. Fourth edition, Saunders Elsevier, Philadelphia, 2009.

Stuart MC. The complete guide to medical writing. Pharmaceutical Press, London, 2007.

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. Answers to lecture questions. Essay correctness.	TBL (10%). Lecture questions (10%). Essay(10%)	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Understanding and integration of all theoretical concepts	Multiple choice test	70
- practical final exam	-	-	0
Minimal performance standards: Enunciation of the steps of a research study Medical research study classification Methods of result presentation Scientific paper structure Undergraduate thesis structure			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef I dr Pop Raluca-Monica	Weekly, 30 minutes after each lecture, during the teaching activities

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Ergonomy. Notions of diagnosis in dentistry			
2.2 Course coordinator: Șef I dr Bukhari Csilla			
2.3 Practical activities coordinator(s) : Conf dr. Lazăr Luminița, șef lucrări dr. Bukhari Csilla, Asist.univ. Buka Imola, Asist.univ. drd. Vlasa Alexandru			
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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 7		
- examinations: 7		
- other activities: 7		
3.8 Total hours of individual study: 49		
3.9 Total hours: 105		
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:
Video projector, computer (PC)

6. Specific competencies acquired

6.1 professional competencies: Acquiring the necessary knowledge to elaborate a complete diagnosis by going through all the stages of the case presentation, with the diagnoses specific to each specialty in the field of oral-dental pathology. Acquiring the ability to assess the general health of patients, identifying serious systemic conditions or other diseases that can directly influence the treatment and the evolution of the patient. Knowledge of the rules according to which the interdisciplinary consultation is ensured.
6.2 transversal competencies: Learning complex examination methods by setting up working groups, in which students will be both examiners and patients; and oral presentation of the results of clinical investigations will be made. Awareness of the importance of maintaining the confidentiality of information obtained from the patient, compliance with

professional ethics in contact with colleagues in other medical specialties and the correct use of the diagnostic algorithm.

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:

During the course, the aim is to obtain the basic notions necessary in the elaboration of the observation sheets. Emphasis is placed on mastering the methods of clinical examination and knowing the possibilities of complementary examination.

7.2 Specific objectives:

- Acquisition of notions related to the organization and endowment of the dental office
- Knowledge of sterilization methods in dentistry
- Acquisition of notions related to the ergonomics of the dental office
- Knowledge of the stages of clinical and paraclinical examination
- Ability to establish complex diagnosis and treatment plan in dentistry

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1.Organization and equipment of the private practice.	Oral and multimedia presentation	-	-	2
2	2.Sterilization in dentistry.	Oral and multimedia presentation	-	-	2
3	3.Ergonomics criteria in dentistry.	Oral and multimedia presentation	-	-	2
4	4.Ergonomics of the private practice.	Oral and multimedia presentation	-	-	2
5	5.Stages of the diagnosis in dentistry .	Oral and multimedia presentation	-	-	2
6	6.Medical history.	Oral and multimedia presentation	-	-	2
7	7.Symptoms in dentsity.	Oral and multimedia presentation	-	-	2
8	8.Extraoral clinical examination.	TBL	Individual testing of students, solving the test in working groups, clarification of difficult aspects.	-	2
9	9.Intraoral clinical examination – mucosa and the teeth.	Oral and multimedia presentation	-	-	2
10	10.Intraoral clinical examination – periodontal and occlusal signs.	Oral and multimedia presentation	-	-	2
11	11.The total and partial edentulous patient's examination	Oral and multimedia presentation	-	-	2
12	12.Complementary clinical and para clinical examinations.	TBL	Individual testing of students, solving the test in working groups, clarification of difficult aspects.	-	2

13	13. The complex diagnosis in dentistry.	Oral and multimedia presentation	-	-	2
14	14. The treatment plan in dentistry.	Oral and multimedia presentation	-	-	2

Bibliography
Bibliography:

- Stephen J. Stefanac, Samuel P. Nesbit: Diagnosis and treatment planning in dentistry, Third edition. St. Louis, Missouri : Elsevier, 2017
- Bukhari Cs, Lazăr L, Buka IZ, Vlasa AI, Szabo I. Oral Diagnosis and Ergonomics notions. Editura University Press Tg. Mureș, 2019

Facultative bibliography:

- Monea A., Sitaru A., Monea M.: Diagnostic oro-dentar, Ed. University Mpress, Targu Mures, 2012

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. The equipment and instruments of the dental medical practice.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
2	2. The mastering of the methods of asepsis and antisepsis in the dental medical practice.	CBL	The students receive the material in time, so they have the possibility to make individual study	-	2
3	3. The ergonomic position of the doctor and patient in the dental medical practice.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
4	4. Methods used in the clinical examination - inspection.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
5	5. Methods used in the clinical examination – palpation, percussion.	CBL	The students receive the material in time, so they have the possibility to make individual study	-	2
6	6. Criteria for completing the treatment sheets.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
7	7. The stages of the medical history.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
8	8. The extraoral examination in the dental medical practice.	CBL	The students receive the material in time, so they have the possibility to make individual study	-	2
9	9. The examination of mucosa and teeth.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
10	10. The examination of periodontium and occlusion.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
11	11. Radiological examination.	CBL	The students receive the material in time, so they have the possibility to make individual study	-	2
12	12. Vitality tests of the teeth.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2
13	13. Complementary examinations.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	2

14	14. Formulation of diagnosis and treatment plan.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	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 AI, Szabo I. Oral Diagnosis and Ergonomics notions. Editura University Press Tg. Mureș, 2019 Facultative bibliography: 1. Monea A., Sitaru A., Monea M.: Diagnostic oro-dentar, Ed. University Press, Targu Mures, 2012.					

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

Ergonomics and notions of diagnosis in dentistry provide information on the organization of the dental office (location of furniture, appliances, doctor's circuit, patient, nurse, medical instrument circuit).
Based on the acquired knowledge, the doctor's behavior towards the patient is modeled, starting from the initial interview until the elaboration of the diagnosis and the treatment plan.
The future doctor is aware of the need to collaborate with other medical specialties in the case of patients with poor health.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Course attendance, grades obtained on the tests during the TBL courses	Average of the grades obtained in assessing the criteria of evaluation	10
- practical activities	The practical works attendance, fulfilling the minimum scale of activity. Qualifications obtained during the CBL sessions	Average of the grades obtained in assessing the criteria of evaluation. Average of the grades obtained during CBL	20
Final evaluation			
- theoretical final exam	Acquiring the necessary knowledge to elaborate a complete diagnosis by going through all the stages of the case presentation, with the diagnoses specific to each specialty in the field of oral dental pathology.	Test	50
- practical final exam	Student's ability to properly examine a patient, to complete a treatment sheet	Written evaluation	20
Minimal performance standards: - The accumulation of more than 3 absences on the course, and more than 3 absences on the practical part results in students being forbidden to access the final exam. The motivated absences will be recovered after a schedule established at level of the discipline. - Evaluation during semester: 1. Practical works: Fulfilling minimum scale of activity: examination of a patient and completion of a treatment sheet. 2. Course: In case of not attending the TBL sessions, note 1 will be granted; there is no possibility to repeat this assessment, but it will still be allowed to take the final exam. In case of absence at the TBL sessions for extremely justified reasons, the student has the possibility to draw up a report from the respective topic. - The final evaluation: Minimum promotion mark is 5 in both practical and theoretical exams.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Bukhari Csilla	Thursday 15-17

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Biocompatibility of dental materials			
2.2 Course coordinator: Prof dr Székely Melinda-Gyöngyi			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II	2.5 Semester: 2	2.6 Type of evaluation: V	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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 1		
- examinations: 2		
- other activities: 1		
3.8 Total hours of individual study: 26		
3.9 Total hours: 40		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: Dental students' option for this preclinical optional course.
4.2 competency: English language examination certificate.

5. Conditions

5.1 for lectures: Lecture hall equipped with laptop and video projector, multimedia equipment.
5.2 for practical activities: -

6. Specific competencies acquired

6.1 professional competencies: -The student will know the 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. -Future dentist should be able to choose a dental material from the variety of options on the market according to its potential health risks. They must know which material is better, more efficient and especially which matches the requirements and demands of patients, ensuring the optimum conditions to comply with the international norms. -In addition, the student will understand to what extent dental materials may be hazardous to patients and the environment.

6.2 transversal competencies: -The student will be aware that the work they perform it is a teamwork performed by 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 dental practice. -Teamwork, passion for performance and commitment to helping patients equally bounds students to become increasingly efficient dental professionals 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: -To acquire the necessary knowledge about the potential health risks of dental materials regarding their proper and efficient use in dental practice.
7.2 Specific objectives: -To acquire the ability to understand different aspects about the properties of dental materials which have major implications in dental health. -Understanding theoretical aspects of biocompatibility to be able to use the appropriate dental materials in practice.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. Fundamental aspects of biocompatibility.	Oral + multimedia presentation.	Course of 2 hours in English language.	-	2
2	Determination of biocompatibility: evaluation and test methods.	Oral + multimedia presentation.	Course of 2 hours in English language.	-	2
3	Regulations and standards.	Team-Based Learning (TBL), multimedia.	Evaluation (30% of final grade).	-	2
4	Biocompatibility of dental amalgam and resin-based composites.	Oral + multimedia presentation.	Course of 2 hours in English language.	-	2
5	Biocompatibility of dental cements and ceramics.	Oral + multimedia presentation.	Course of 2 hours in English language.	-	2
6	Biocompatibility of dental alloys and polymers.	Oral + multimedia presentation.	Course of 2 hours in English language.	-	2
7	Side effects of dental materials, occupational exposures and environmental aspects.	Oral + multimedia presentation.	Course of 2 hours in English language.	-	2

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., Borş 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.

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

-Marketing and dental practice management performance through knowledge regarding the biocompatibility of dental materials. -Didactic activity in practical instruction or administration in the field of dental materials.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final

			grade
Evaluation during the semester			
- lecture	TBL based theoretical knowledge. Attendance to lectures according to the Regulations of Discipline.	Grade obtained on test individually.	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Theoretical knowledge in the domain of courses.	Exam test – multiple choice questions.	70
- practical final exam	-	-	0
Minimal performance standards: Getting minimum mark of 5 (five) for the final theoretical exam: to know the basics regarding the biocompatibility of dental materials.			

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 online

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M3
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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: Asist dr Szasz Zsuzsanna-Agnes			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 2	2.6 Type of evaluation: V	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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations:		
- 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:
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Asist dr Szasz Zsuzsanna-Agnes	

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: II+III	2.5 Semester: 2	2.6 Type of evaluation: V	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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 1		
- examinations: 2		
- other activities: 4		
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:
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.	Chemical and histological characters of enamel; adhesion to enamel.	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.	Chemical and histological characters of enamel; adhesion to enamel.	Two hours every week in english.	-	2
4	Materials, methods and technique options for adhesive fixing.	Team-Based Learning (TBL).	Evaluation (30% from the final grade)	-	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 Required 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. Optional bibliography: 1. Silas Duarte Jr. Quintessence of Dental Technology 2016, Quintessence Book, 2016.

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 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.	TBL	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)

Şef I dr Borş Andrea-Izabella	Tuesday 9-10

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Anesthesia. Anesthesia and sedation in dental medicine			
2.2 Course coordinator: Șef I dr Iacob Alina			
2.3 Practical activities coordinator(s): Șef I dr Iacob Alina, Asist.Univ. Bereczki Temistocle Despina, Șef I dr Cosarca Adina, Șef I dr. Petrovan Cecilia			
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: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 10		
- examinations: 10		
- other activities: 10		
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:
-

5. Conditions

5.1 for lectures:
course room / internet access
5.2 for practical activities:
practical activity room with dental units, anesthetic solution cartridges/vials, disposable syringes and needles, swabs, alcohol, disposable gloves.

6. Specific competencies acquired

6.1 professional competencies:
Concepts descriptions; theories and basic notions regarding signs and symptoms of pathological conditions, used to guide the clinical diagnosis.
Proper clinical and laboratory data evaluation, in order to establish positive diagnosis. Then, using therapeutic resources, treatment plan elaboration.
Ability to perform adequate local and loco-regional anesthesia required by a specific dental treatment. Prevention of local and general, and, primary and secondary complications of loco-regional and general anesthesia; complications management.

6.2 transversal competencies: Identification of: objectives to be achieved; available resources in order to fulfill their work-stages/practical activities. Identification of role and responsibility in a multidisciplinary team, in order to apply them in an 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: Students will learn: different techniques of oral local and regional anesthesia; prevention and management of loco-regional anesthesia complications and accidents.
7.2 Specific objectives: Students will learn: rules of asepsia and antisepsia; anesthetic substances, tools and materials that are used in loco-regional oral and general anesthesia

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 anesthesia methods used in Dentistry and Oral and Maxillo-Facial Surgery	Multimedia and oral presentation, discussions	-	-	2
2	The purpose of local anesthesia techniques used in Dentistry. The functional substrate of the nervous impulse transmission. Effectiveness of local anesthetics. Pharmacology of the ideal local anesthetic. The secondary actions of local anesthetics.	Multimedia and oral presentation, discussions	-	-	2
3	Anatomy of the trigeminal nerve. Local anesthesia in the upper jaw (part 1)	Multimedia and oral presentation, discussions	-	-	2
4	Local anesthesia in the upper jaw (part 2). Local anesthesia in the lower jaw	Multimedia and oral presentation, discussions	-	-	2
5	Local anesthetic solutions – Classification. Pharmacology	TBL	TBL 1	-	2
6	Adjuvants of local anesthetic solutions (side effects)	Multimedia and oral presentation, discussions	-	-	2
7	Local accidents of loco-regional anesthesia. Cause, clinical aspect and management	Multimedia and oral presentation, discussions	-	-	2
8	Local complications of loco-regional anesthesia. Cause, clinical aspect and management	Multimedia and oral presentation, discussions	-	-	2
9	Systemic complications of loco-regional anesthesia. Cause, clinical aspect and management	TBL	TBL 2	-	2
10	General anesthesia – particularities, indications of GA in Dentistry and Oral and Maxillo-facial Surgery. General anesthesia in children	Multimedia and oral presentation, discussions	-	-	2
11	Substances used for general anesthesia	Multimedia and oral presentation, discussions	-	-	2
12	Pre-anesthesia. Clinical aspects in General Anesthesia	Multimedia and oral presentation, discussions	-	-	2

13	General Anesthesia methods used in Dentistry and Oral and Maxillo-facial Surgery	Multimedia and oral presentation, discussions	-	-	2
14	Recap. Discussions	Multimedia and oral presentation, discussions	-	-	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. Bucur A., Navarro C.V., Lowry J., Acero J.: Compendiu de chirurgie oro-maxilo-facială, vol. 1, Editura 2009 Q Med Publishing București

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	Multimedia and oral presentation, discussions	-	-	3
2	Theoretical presentation of infiltration anesthesia techniques	Multimedia and oral presentation, discussions	-	-	3
3	Theoretical presentation of local anesthesia in the upper jaw techniques	Multimedia and oral presentation, discussions	-	-	3
4	Theoretical presentation of local anesthesia in the lower jaw techniques	Multimedia and oral presentation, discussions	-	-	3
5	Practical aspects of syringes handling, keeping sterility and using of different anesthetic substances	Multimedia and oral presentation, discussions	-	-	3
6	Practical application of studied anesthetic techniques	CBL	CBL 1	-	3
7	Practical application of studied anesthetic techniques	CBL	CBL 2	-	3
8	Practical application of studied anesthetic techniques	Practical examples. Exercises. Students activity supervising	-	-	3
9	Practical application of studied anesthetic techniques	Practical examples. Exercises. Students activity supervising	-	-	3
10	Practical application of studied anesthetic techniques	CBL	CBL 3	-	3
11	Practical application of studied anesthetic techniques	CBL	CBL 4	-	3
12	Practical application of studied anesthetic techniques	Practical examples. Exercises. Students activity supervising	-	-	3
13	Practical application of studied anesthetic techniques	Practical examples. Exercises. Students activity supervising	-	-	3
14	Practical application of studied anesthetic techniques	Practical examples. Exercises. Students activity supervising	-	-	3

Bibliography

1. 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
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 studenții anului III Medicină Dentară – Tg-Mureș, 2011
4. Hans Evers, Glenn Haegerstam. Introduction to Dental Local Anaesthesia, Mediglobe 1990

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 third year each student must know to perform local and loco-regional anesthesia basic

techniques in the oral cavity, including to respect the rules, to solve accidents and complications of local and loco-regional anesthesia. Lack of knowledge of local anesthesia in dentistry, involves the inability of performing dental treatments which are necessary for patients.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to discipline's specific objectives.	TBL	10
- practical activities	According to discipline's specific objectives. Performing various oral local anesthetic techniques	CBL	25
Final evaluation			
- theoretical final exam	According to discipline's specific objectives.	Written test – multiple choice questions	50
- practical final exam	According to discipline's specific objectives.	Written evaluation - test / multiple choice questions	15
Minimal performance standards: Each student has to do a minimum of two different anesthetic techniques: 0 injection = failed exam 2 injections = grade 6 3 injections = grade 7 4 injections = grade 8 5 injections = grade 9 6 injections = grade 10 The grade for written test – minimum 5; less than 5 = failed exam; The grade for practical activities – 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/semester for practical classes will not give the student the right to participate in the semester examination session. The recovery of any absence will be performed in pre-session depending of the teacher schedule. Additional absences are permitted during student scientific events or other situations provided in the STUDENT MANUAL (art.39).			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

Ability to perform basic oral/dental anesthetic techniques (infiltration anesthesia, mandibular block), to keep sterility and prevent complications and accidents

13. Appointment timetable (for students)

Şef I dr Iacob Alina	30 minutes after each course / PA. Online

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD 2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): Șef I dr Borș 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: 24		
- supplemental documentation at the library, from specialized information portals and in the field: 21		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 5		
- examinations: 4		
- other activities: 0		
3.8 Total hours of individual study: 66		
3.9 Total hours: 150		
3.10 Credits: 8		

4. Prerequisites (where applicable)

4.1 curricular:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Lecture hall equipped with multimedia equipment, internet connection.
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, 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, fixed, mobile and mobilized 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, 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 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Fixed partial dentures: definitions, basic concepts, classifications, manufacturing technologies.	Oral and multimedia presentation.	Two hours courses in english.	-	2
2	2. Dental crowns. The technology for manufacturing metal crowns.	Oral and multimedia presentation.	Two hours courses in english.	-	2
3	3. Dental crowns. The technology for manufacturing polymer-based crowns.	Oral and multimedia presentation.	Two hours courses in english.	-	2
4	4. Dental crowns. The technology for manufacturing mixed metal-polymer crowns.	Oral and multimedia presentation.	Two hours courses in english.	-	2
5	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	6. Dental crowns. The technology for manufacturing full ceramic crowns.	Team-Based Learning (TBL) + multimedia presentation.	Evaluation (5% of the final grade)	-	2
7	7. Inlays, onlays manufacturing technologies.	Oral and multimedia presentation.	Two hours courses in english.	-	2
8	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	9. Dental posts and cores. Technological procedures.	Oral and multimedia presentation.	Two hours courses in english.	-	2
10	10. Dental bridges: classification, parts and procedure.	Team-Based Learning (TBL) + multimedia presentation.	Evaluation (5% of the final grade)	-	2
11	11. Manufacturing dental bridges depending on position of missing tooth replaced.	Oral and multimedia presentation.	Two hours courses in english.	-	2
12	12. Methods and materials for manufacturing pontics.	Oral and multimedia presentation.	Two hours courses in english.	-	2
13	13. Technological procedures for manufacturing temporary dental bridges.	Oral and multimedia presentation.	Two hours courses in english.	-	2
14	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. : Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureş, 2021.
2. Silas Duarte Jr. Quintessence of Dental Technology 2016, Quintessence Book, 2016.
3. Molnar-Varlam C., Grozescu V., Borş A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureş, 2015.

Optional bibliography:

1. Stephen F. Rosenstiel, Martin F. Land, Junhei Fujimoto: Contemporary Fixed Prosthodontics, Fifth Edition, Elsevier, 2016

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Presentation of discipline rules for students, evaluation methods and safety rules in the dental office and dental laboratory.	Oral and written	Students will sign the acknowledgment. They will fill in the laboratory report (LR).	-	4
2	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	3. Intracoronaral 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	4. The metallic crown.	Practical demonstration. Manufacturing wax pattern for metallic crown.	Individual waxing the pattern for metallic crown. Grading (LR).	-	4
5	5. The acrylic crown.	Practical demonstration. Manufacturing wax pattern for acrylic crown.	Individual waxing the pattern for acrylic crown. Grading (LR).	-	4
6	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	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	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	9. The full ceramic and porcelain fused to metal crowns.	Multimedia presentation of technologies for manufacturing all-ceramic and porcelain fused to metal crowns.	LR	-	4
10	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	11. Dental bridges with different pontics for different oral topographic areas. The esthetic	Practical demonstration.	Waxing the pattern for an anterior maxillary bridge with modified ridge lap contact. Grading (LR).	-	4

	bridge.				
12	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	13. Dental bridges with different pontics for different oral topographic areas. The metallic bridge.	13. 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	14. Revision.	Test	Seminar fixed dental prosthesis.	-	4

Bibliography

Bibliography:

1. Bors A, Szekely M, Molnar-Varlam C. : Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureş, 2021.
2. Silas Duarte Jr. Quintessence of Dental Technology 2016, Quintessence Book, 2016.
3. Molnar-Varlam C., Grozescu V., Borş A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureş, 2015.

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

The dentist, knowing the laboratory phases of making dental prosthesis, will be able to work with exigency, being able to guide and control the work of the dental technician, having all the responsibility for prosthetic restorations.

- The future dentists will know to choose the right technologies and select the appropriate materials for the clinical situation, which meets the requirements of the patient but also be durable and last but not least profitable.
- Through the acquired knowledge and skills the practitioner will be able to perform or correct some technical steps that can be achieved in the dental office, therefore increasing the efficiency by decreasing the working time.

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 TBLs.	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.	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)

Şef I dr Borş Andrea-Izabella	Tuesday 10-12 Friday 16-18

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Surgical semiology. General surgery			
2.2 Course coordinator: Șef lucr. dr Roșca Ancuța-Noela			
2.3 Practical activities coordinator(s): Șef.lucr.Dr. Borz Cristian			
2.4 Year of study: III	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: 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: 2		
- supplemental documentation at the library, from specialized information portals and in the field: 2		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 2		
- examinations: 0		
- 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: no
4.2 competency: no

5. Conditions

5.1 for lectures: Teaching 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: Recognition of surgical diseases that represent outpatient emergencies and application of therapeutic measures for resuscitation and maintenance of vital functions. Identifying the disease state and establishing the correct diagnosis of diseases in surgical pathology. Acquiring appropriate therapeutic principles (including surgery) for the identified conditions. Correct assessment of the risk of illness or the context of an individual / collective illness, followed by the choice and application of appropriate prophylaxis measures. Approaching the health / disease problems from the perspective of the particularities of the community, in direct relation with the social, economic and / or cultural conditions proper to that community. Fulfilling in efficient and effective conditions the managerial tasks imposed by humid professional roles

6.2 transversal competencies: Identifying the role and responsibility in a multidisciplinary team; Applying relationship techniques and effective teamwork and in the relationship with the patient and relatives; Efficient use of information sources, communication resources and professional training both in Romanian and in a language of international circulation, in order to develop and present a specialized paper; Identifying the objectives to be achieved, the work stages, the deadlines, the available resources, the risks and the completion conditions within the projects under coordination; Applying relationship techniques and effective teamwork and in the relationship with the patient and relatives; Efficient use of information sources, communication resources and professional training both in Romanian and in a language of international circulation, in order to develop and present a specialized paper; Identifying the objectives to be achieved, the work stages, the deadlines, the available resources, the risks and the completion conditions within the projects under coordination;
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: Accumulation of knowledge necessary for the diagnosis of diseases that require surgical treatment. Understanding the main methods of surgical treatment and its physiological bases. Developing interest in scientific research.
7.2 Specific objectives: Recall of the knowledge of anatomy accumulated by students in previous years and the acquisition of data on surgical anatomy absolutely necessary to understand surgical procedures Understanding the pathophysiological basis of diseases with surgical potential Accumulation of knowledge necessary for the timely recognition and diagnosis of diseases conditions that require surgical treatment Understanding the main methods of surgical treatment and the physiological bases underlying this treatment Understanding the specifics of the surgical patient Information on the latest methods of diagnosis and surgical treatment worldwide Acquiring emergency medical-surgical maneuvers in order to save the lives of patients in critical situations Understanding the principles of oncological surgery Advising students interested in a surgical career. Developing interest in scientific research by involving students in various research topics. Training in communicating with patients and examining them

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Asepsis and antisepsis	Oral + multimedia, including video surgical technique / online or onsite films	no	Preoperative care Postoperative care	2
2	Hemorrhage and hemostasis	Oral + multimedia, including video surgical technique / online or onsite films	no	Anemia Hematemesis Hematuria Hemoptysis Rectal hemorrhage Coagulation disorders Blood transfusion / blood derivatives Hemolytic disease of the Rh	2
3	Surgical infections	Oral + multimedia, including video surgical technique / online or onsite films	no	Immunodeficiency Adenopathy Septicemia Skin infections	2
4	Trauma - contusions and wounds	Oral + multimedia, including video surgical technique / online or onsite films	no	Fall trauma Aggression / violence Pain management	2
5	Orthopedic trauma	Oral + multimedia, including video surgical technique / online or onsite films	no	Fall injuries Joint pain Joint edema Pain management Limb trauma	2

6	Burns and frostbite	Oral + multimedia, including video surgical technique / online or onsite films	no	Burns Pain Management	2
7	Semiology - general	Oral + multimedia, including video surgical technique / online or onsite films	TBL	Abdominal distension Abdominal pain Hepatomegaly Adenopathy Colon and rectal carcinoma Pancreatic carcinoma Gastric carcinoma Intestinal obstruction Peptic ulcer Pathology of the gallbladder Hernia Peritonitis Splenomegaly	2

Bibliography

1. Coros Marius et al. : General surgery, Volume I - Surgical semiology, University Press Publishing House, Tg.Mures, 2015
2. Brunicardi F – Schwartz's Principles of Surgery 11th edition, Mc Graw-Hill Co., 2020
3. Sabiston D.C. – Textbook of Surgery, 19th edition, B.W. Saunders Co., Ed, Philadelphia, 2012

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The functionality of the hospital, the circuit of the patients, primary records	Teaching theoretical notions in oral form and media presentations. Visiting the wards and departments of the hospital. Familiarization with the primary records (consultation register, observation sheet, referral note, death certificate, medical leave, prescription, etc.). Online / Onsite	no	Preoperative care Postoperative care	2
2	Surgical instruments • Cutting tools : scalpel (fixed blade, interchangeable blade, available), surgical scissors (dressing, dissection, straight, curved, cooper) • Instruments for grasping and fixing : anatomical forceps and surgical hemostatic forceps (Pean, Kocher, mosquito, Halsted) port buffer clamps, forceps fields (Doyen, Bachhaus) clamp	Presentation of surgical instruments and how to use them. Practical use of tools by students online / onsite presentation	no	Preoperative care Postoperative care	2
3	. Sterilization methods (asepsis and antisepsis) • Autoclave and oxyethylene sterilizer • Surgical hand washing • Wearing a sterile gown and surgical gloves	Presentation of sterilization devices and how to use them in a practical way. Hand disinfection. Dressing in a robe and surgical gloves practically.	no	Preoperative care Postoperative care	2
4	Injections and infusions • Injection id, sc, im, iv, ia • Infusions • Central venous catheterization • PVC measurement	Types of injections id, sc, im, iv. Performing injections. Preparation of the infusion kit Effective measurement of PVC in patients	no	Preoperative care Postoperative care, Acid-base imbalance	2
5	Surgical dressing and bandage • materials and technique of dressing, types of dressing (protective, absorbent, compressive, occlusive, elastic, improvised) • methods of fixing the dressing • methods of driving the buttocks (types of windings)	Practical making of dressings and bandages for hospitalized patients and colleagues	no	Preoperative care Postoperative care	2

	circular, spiral, helical, inverted, spike on different areas.				
6	Dressing and bandage • windings by regions: circular winding of the fingers, thumb of the thumb, ear of the hand, twisted winding, spiral	Practical making of dressings and bandages for hospitalized patients and colleagues.	no	Preoperative care Postoperative care	2
7	Cardio-respiratory resuscitation • Cardiac resuscitation technique • Maintaining airway permeability (mandible mobilization maneuvers, cannulas) • Types of artificial respiration	Performing resuscitation maneuvers on the manikin.	CBL	Cardio-respiratory arrest Disorders of consciousness,	2
8	Oxygen Therapy and Tracheostomy	Theoretical and practical presentation of oxygen administration methods. Types of devices. Presentation of tracheostomy cannulas and tacheostomy technique.	no	Cardio-respiratory arrest Disorders of consciousness,	2
9	Hemostasis and blood transfusion • Temporary hemostasis (by compression, tourniquet, forceps) • Blood transfusion - determination of blood groups - determination of Rh - compatibility tests a transfusion technique	Practical demonstrations of temporary hemostasis methods. Practical performance of blood group determination and transfusion preparation.	no	Anemia Hematemesis Hematuria Hemoptysis Rectal bleeding Coagulation disorders Blood transfusion / blood derivatives	2
10	Surgical operations • Preparation of the operating field • Incision, contraincision • Excision • Wound drainage	Theoretical notions about surgery. Preoperative preparation. Operator field isolation. Operating team. Practical demonstrations, assistance in operations in the operating room. Theoretical data about drainage and presentation of drainage types.	no	Preoperative care Postoperative care	2
11	Manual and mechanical surgical suture • Surgical knots	Theoretical notions about surgery. Preoperative preparation. Operator field isolation. Operating team. Practical demonstrations, assistance in operations in the operating room. Theoretical data about drainage and presentation of drainage types.	no	Preoperative care Postoperative care	2
12	. Surveys, washes, enemas • S waves: - bladder: Nelaton, Thiemann, Petzer, Foley - gastric: Faucher, double lumen - duodenal: Einhorn - intestinal: Miller-Abbott - Sengstaken-Blackemore, Linton-Nachlas • Survey technique and gastric lavage • Bladder survey technique • Mounting the Blackemore probe • enemas	Theoretical data on surveys, washes and enemas. Practical presentation of cannulas and probes (nasogastric, urinary, rectal). Participation in digestive endoscopies	no	Urine retention, Malabsorption, Malnutrition, Abdominal distension, Vomiting urinary incontinence, Vomiting, Urinary tract obstruction	2

13	Punctures and biopsies • Puncture • Pleurala • Pericardial • Abdominal • Types of biopsies, materials, and technique	Presentation of the technique of punctures, indications, contraindications and possible accidents. Presentation of the types of punctures, indications, technique and possible incidents.	no	Pleurisy pneumothorax	2
14	General clinical examination on devices and systems of the surgical patient	Practical performance of the clinical examination (inspection, palpation, percussion, auscultation)	no	Preoperative care Postoperative care	2

Bibliography

1. Coros Marius et al. : General surgery, Volume I - Surgical semiology, Tg.Mures, 2015
2. Brunicardi F – Schwartz's Principles of Surgery 11th edition, Mc Graw-Hill Co., 2020
3. Sabiston D.C. – Textbook of Surgery, 19th edition, B.W. Saunders Co., Ed, Philadelphia, 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 content of the discipline is corroborated with the need of employers in the fields of health, health management, medical education, drug companies, medical research.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	The rating is based on the score of the TBL tests.	During the module, there will be one short tests with five multiple choice questions each.	15
- practical activities	Evaluation is based on a score calculated according to achieving specific objectives learning the techniques of small surgery	During the module, each student will have to participate to a CBL. Evaluation is made upon the quality of presentation and participation to CBL sessions.	15
Final evaluation			
- theoretical final exam	The rating is based on the score achieved at the final theoretic test.	Multiple choice grid tests that cover all topics across the syllabus. The test is given on paper, or online.	40
- practical final exam	Evaluation is based on a score calculated according to achieving specific objectives learning the techniques of small surgery.	Carrying out practical tests with the presentation of indications, contraindications, accidents and possible incidents.	30

Minimal performance standards:

The minimum criteria for validating the evaluations during the semester:

- Completion of at least 80% of classes and internships
- Participating during at least one TBL session
- 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 (TBL) and the practical (CBL) 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 TBL 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 CBL 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 TBL 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

1. organizing the surgery service
2. drafting / completing the observation sheet and medical documents in surgery
3. knowledge and recognition of surgical semiology

4. examination of the surgical patient
5. knowledge of the notions of asepsis and antisepsis
6. knowledge of surgical instruments
7. knowledge of basic medical-surgical maneuvers (injections, infusions, sutures and surgical knots, incisions, excisions, drainage, urethro-bladder probe, enemas, preparation of the operating field
8. making a bandage
9. performing cardio-respiratory resuscitation and oxygen therapy maneuvers
10. performing a tracheostomy
11. performing a temporary and definitive hemostasis method
12. performing a puncture and a biopsy

12. Clinical / practical abilities

Achieving minimum practical skills in surgery:

1. organizing the surgery service
2. drafting / completing the observation sheet and medical documents in surgery
3. knowledge and recognition of surgical semiology
4. examination of the surgical patient
5. knowledge of the notions of asepsis and antisepsis
6. knowledge of surgical instruments
7. knowledge of basic medical-surgical maneuvers (injections, infusions, sutures and surgical knots, incisions, excisions, drainage, urethro-bladder probe, enemas, preparation of the operating field
8. making a bandage
9. performing cardio-respiratory resuscitation and oxygen therapy maneuvers
10. performing a tracheostomy
11. performing a temporary and definitive hemostasis method
12. performing a puncture and a biopsy

13. Appointment timetable (for students)

Şef lucr. dr Roşca Ancuţa-Noela

Every Friday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Occlusology			
2.2 Course coordinator: Conf dr Bechir Edwin-Sever			
2.3 Practical activities coordinator(s): Conf dr Bechir Edwin-Sever			
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: 16		
- supplemental documentation at the library, from specialized information portals and in the field: 24		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 16		
- tutorial activities: 0		
- examinations: 3		
- other activities: 10		
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:
Multimedia equipment, didactic study models
5.2 for practical activities:
Demonstrations, equipment: articulator, facial bow, occlusion paper of different thickness

6. Specific competencies acquired

6.1 professional competencies:
Technical or professional skills
Detection and use of cephalometric landmarks in dental prosthetics.
Clinical determination of the position of the mandible.
Clinical determination of the centric relationship position.
Determining the relationship of dental occlusion.
Examination of occlusal function by analysis of mandibular movements.
Detection and analysis of specific clinical manifestations in stomatognathic system dysfunction.
Detection and analysis of complex clinical manifestations in stomatognathic system dysfunction.
Performing a complete clinical examination of the dental occlusion.
Establishing a treatment plan.

Model study. Treatment of occlusal dysfunction by selective preparation and grinding.
6.2 transversal competencies: Cognitive skills Notions about the fundamental mandibulo-maxillary relations. Notions about the fundamental movements of the mandible. Notions about the dysfunction of the stomatognathic system. Notions about occlusion and its evaluation in implant prosthetics. Notions of occlusal rebalancing therapy. Affective-value skills Relationship with the patient and medical staff. Communication with the patient. Communication with the dental technician.
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 acquire general notions about occlusal function and dysfunction
7.2 Specific objectives: To know and understand the notions of occlusology. Use specialized terms. To define and nominate specific working methods. To know and explain the therapeutic principles used by occlusology in dentistry. To know the stages of the occlusal clinical examination. To know the notions regarding the morphology, physiology and occlusal pathology, based on the modern concepts of occlusology, the role and importance of occlusology in dentistry. To know the materials used in the examination, determination and registration of the mandibulo-maxillary occlusion reports as well as in the realization of the treatments. To adopt the behavior of the future dentist. To work in a team, developing the ability to collaborate with specialties from different fields.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Essential elements of gnathology. Functions of the oro-facial system (OFS).	Oral and multimedia presentation	-	-	2
2	Factors and forces that determine the position of the teeth on the arches. Occlusion plan: its importance and examination.	Oral and multimedia presentation	-	-	2
3	Elements of osteology and craniometry. Resistance pillars of the maxilla and mandible. Anthropometric points and plans.	Oral and multimedia presentation	-	-	2
4	The concept of occlusal stability and the factors that ensure it: the anterior determinant of occlusion, the neuromuscular functional determinant.	Oral and multimedia presentation	-	-	2
5	Posterior determinant of occlusion. Temporomandibular joint (TMJ) characteristics. Morphological and functional features.	Oral and multimedia presentation	-	-	2
6	The fundamental positions of the mandible. Posture position, elements that participate in its realization.	TBL	-	-	2
7	Centric relationship: definition, landmarks and various theories developed.	Oral and multimedia presentation	-	-	2
8	Maximum intercuspid occlusion. Assessment of the ratio between maximum intercuspation (MI) and centric relation (CR).	Oral and multimedia presentation	-	-	2

9	Mandibular kinematics. Classification of mandibular movements. Analysis of mandibular movements in the three planes.	Oral and multimedia presentation	-	-	2
10	Occlusal concepts and theories.	Oral and multimedia presentation	-	-	2
11	Articulators and principles of use.	TBL	-	-	2
12	Articulators and principles of use.	Oral and multimedia presentation	-	-	2
13	Etiology of occlusal dysfunction. Specific clinical manifestations.	Oral and multimedia presentation	-	-	2
14	Indications and contraindications of selective preparation and grinding.	Oral and multimedia presentation	-	-	2
Bibliography 1. Okeson JP: Management of Temporomandibular Disorders and Occlusion. 7th Edition, Mosby, 2012 2. Course notes					

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	Impression of dental arches. Casting models.	Presentation	-	-	2
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					

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	Knowledge of the theoretical aspects within the course topic.	Test de verificare și discuții argumentative. Media notelor de la sesiunile de TBL susținute în cadrul tematicii	20
- practical activities	Knowledge of the theoretical and practical aspects within the topic of practical works.	Media notelor obținute la testul de verificare din cadrul sesiunilor CBL.	30
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects within the course topic.	Multiple choice and short answer examination	30
- practical final exam	Knowledge of the theoretical and practical aspects within the topic of practical works.	The practical test performed during the practical work hours and the fulfillment of the minimum practical performance standards	20
Minimal performance standards: Minimum standard of performance: Obtaining a minimum grade of 5 (five) for each component of the assessment requires: course: - To know the basic notions regarding: - the fundamental positions of the mandible, - mandibular kinematics, - principles of use of articulators, - indications and contraindications for selective grinding. - To support and promote TBL sessions Practical works*: - To perform the static occlusion examination, - The dynamic occlusion examination is performed, - Carry out a recording of the intermaxillary relations with the facial bow, - Perform a clinical examination of the fundamental positions of the mandible, - To identify the correct occlusal (dento-dental) contacts and occlusal interferences. - Participate and promote CBL sessions. *fulfilling the minimum criteria of practical performance, allows the student to take the theoretical exam			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Bechir Edwin-Sever	Wednesday 10-11

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical semiology. Internal medicine			
2.2 Course coordinator: Conf dr Negovan Anca-Elena			
2.3 Practical activities coordinator(s): As univ. Dr. Crina Fofiu			
2.4 Year of study: III	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: 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: 8		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 2		
- examinations: 2		
- other activities: 2		
3.8 Total hours of individual study: 22		
3.9 Total hours: 64		
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: To achieve basic knowledge regarding medical semiology of the body systems and apparatus, integrative evaluation of the medical and health status of the patients
6.2 transversal competencies: The capacity to appreciate and evaluate the health status of patients based on medical history of the patients and clinical examination
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:
Gathering and using basic knowledges regarding correct interpretation of clinical symptoms and signs and investigations in order to develop a problem list and plan, establish a presumed diagnosis and create the patient's record
7.2 Specific objectives:
To synthesize the most important communication skills and clinical examination techniques: inspection, palpation, percussion, auscultation, that can be useful in assessment of medical diagnostic of patients

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Taking medical history, general inspection	oral and multimedia presentation	-	confusion, cyanosis, dizziness, limp, malformations of cardiovascular system, malformations of spine/CNS, menstrual disorders, normal pregnancy and deliver, Weight gain, weight loss, substance abuse,	1
2	Inspection and palpation of skin and subcutaneous tissues and conjunctivae	oral and multimedia presentation	-	eczematous skin lesions, hair disorders, bullous/vesicular skin eruption lump neck, gynaecomastia	1
3	Respiratory system. Symptoms of respiratory diseases. Clinical examination of respiratory system.	oral and multimedia presentation	-	breathlessness, chest pain, cyanosis, hemoptysis	1
4	Respiratory system. Respiratory syndromes	oral and multimedia presentation	-	asthma, carcinoma of the bronchus, chronic bronchitis and emphysema, pneumothorax, respiratory tract infection	1
5	Cardiovascular system. Symptoms of cardiovascular diseases. Clinical examination of heart	oral and multimedia presentation	-	breathlessness, chest pain, cyanosis, oedema, palpitation	1
6	Cardiovascular system. Cardiac syndromes	oral and multimedia presentation	-	cardiac valve disease, pericardial disease, hypertension, thromembolic disease	1
7	Cardiovascular system. Semiology of arterial and venous diseases	oral and multimedia presentation	-	varicose veins, thrombembolic disease, peripheral arterial diseases	1
8	Digestive system. Symptoms of digestive diseases. Clinical examination of digestive system	oral and multimedia presentation	-	abdominal distension, abdominal pain, intestinal obstruction, constipation, dysphagia, haematemesis, hepatomegaly, eating disorder	1
9	Digestive system. Syndromes of digestive tract	oral and multimedia presentation	-	inflammatory bowel diseases, rectal bleeding, gastroenteritis, peritonitis,	1
10	Digestive system. Hepatobiliary and pancreatic syndromes	TBL	-	Jaundice, chronic liver disease, acute liver disease/failure, gall bladder disease	1
11	Urinary system. Symptoms of urinary diseases. Clinical examination of genito-urinary system	oral and multimedia presentation	-	back pain. dysuria, frequency of micturition, urinary tract infection, urinary incontinence	1
12	Urinary system. Syndromes of urinary disorders	oral and multimedia presentation	-	carcinoma of the kidney and bladders, sexually transmitted diseases, urinary tract infection, disorders of prostate	1

13	Haemathologic disorders. Semiology of haemathologic diseases.	oral and multimedia presentation	-	splenomegaly, PUO, hepatomegaly, jaundice, lymphadenopathy, purpura, transfusion of blood products	1
14	Haemathologic disorders. Bleeding syndromes. Splenaomegaly	oral and multimedia presentation	-	jaundice, drug reaction, hepatomagaly, rhesus haemolitic diseases, splenomegaly, anemia,	1
Bibliography Bibliography: Oxford Handbook of Clinical Examination and Practical Skills, James Thomas, Tanya Monaghan, Oxford University Press 2012					

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Taking history	demonstration, practicing, working in small groups	-	malformations of cardiovascular system, malformations of spine/CNS, menstrual disorders, normal pregnancy and deliver, Weight gain, weight loss, substance abuse	2
2	General inspection	demonstration, practicing, working in small groups	-	confusion, cyanosis, dizziness, limp,	2
3	Skin, subcutaneous tissue, mucosa e examination	demonstration, practicing, working in small groups	-	eczematous skin lesions, hair disorders, bullous/vesicular skin eruption lump neck, gynaecomastia	2
4	Lymph node examination. Locomotor system examination.	demonstration, practicing, working in small groups	-	lymphadenopathy,lump neck, limp	2
5	Respiratory system: symptoms, clinical examination (percussion, auscultation)	demonstration, practicing, working in small groups	-	breathlessness, chest pain, cyanosis, hemoptysis	2
6	Respiratory syndromes	demonstration, practicing, working in small groups	-	asthma, carcinoma of the bronchus, chronic bronchitis and emphysema, pneumothorax, respiratory tract infection	2
7	Cardiovascular system: symptoms, clinical examination (inspection, palpation)	demonstration, practicing, working in small groups	-	breathlessness, chest pain, cyanosis, oedema, palpitation	2
8	Cardiovascular system: clinical examination (percussion, auscultation)	demonstration, practicing, working in small groups	-	cardiac valve disease, pericardial disease, hypertension, thromembolic disease	2
9	Digestive system: symptoms	demonstration, practicing, working in small groups	-	abdominal distension, abdominal pain, intestinal obstruction, constipation, dysphagia, haematemesis, hepatomegaly, eating disorder	2
10	Digestive system: clinical examination	demonstration, practicing, working in small groups	-	abdominal distension, jaundice, hepatomegaly, splenomegaly	2
11	Syndromes of digestive and hepatobiliary tract.	demonstration, practicing, working in small groups	-	jaundice, chronic liver disease, acute liver disease/failure, gall bladder disease	2
12	Urinary system-symptoms	demonstration, practicing, working in small groups	-	back pain. dysuria, frequency of micturition, urinary tract infection, urinary incontinence	2
13	Urinary system-syndromes	demonstration, practicing, working in small groups	-	carcinoma of the kidney and bladders, sexually transmitted diseases, urinary tract infection, disorders of prostate	2
14	Haemathologic disorders	demonstration, practicing, working in small groups	-	splenomegaly, PUO, hepatomegaly, jaundice, lymphadenopathy, purpura, transfusion of blood products	2

Bibliography
Oxford Handbook of Clinical Examination and Practical Skills, James Thomas, Tanya Monaghan, Oxford 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

The capacity of practitioner to evaluate the medical condition of the patient and to identify specific diseases, based on the medical history of the patient, their signs and symptoms.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Depending on discipline requirements.	TBL	10
- practical activities	Depending on discipline requirements.	CBL	10
Final evaluation			
- theoretical final exam	Depending on discipline requirements.	Theoretical exam-multiple choice questions	50
- practical final exam	Depending on discipline requirements.	Practical exam	30
Minimal performance standards: Carrying out 7 anamnesis (with their description in the practical workbook), completed with the general inspection of the patient • performing 4 objective examinations (inspection, palpation, auscultation percussion) of the systems with a detailed description of each patient			

11. Must seen clinical situation list

Pallor
Cyanosis, cutaneous erythema, rash
Jaundice
Bilateral/Unilateral lower limb edema, collateral vein circulation
Cutaneous bleeding
Palpation of peripheral adenopathy
Bronchial syndromes (acute bronchitis, chronic bronchitis, asthma)
Pulmonary consolidation syndrome
Respiratory failure
Patient with coronary syndrome (acute, chronic)
Patient with valvular cardiomyopathy (mitral, aortic, pulmonary, tricuspid)
Hypertension syndrome
Heart failure syndrome.
Signs, symptoms in peripheral arterial disease
Signs, symptoms in venous diseases
Gastro-duodenal ulcer syndrome
Intestinal syndromes
Urinary Tract Infection
Urinary tract obstruction

12. Clinical / practical abilities

The standard history framework
• General data:

• Anamnesis:
o Chief complains: most relevant symptoms
o Family history:
☐ Diseases with potential family predisposition/aggregation, genetically transmitted diseases.
☐ Chronic contagious diseases like: Tuberculosis, HIV, viral hepatitis or other sexually transmitted diseases
o Personal history:
☐ Physiologic:
☐ For female patients: first and last menstruation, number of pregnancies, pathologic events during pregnancies, miscarriages.

o Pathological history:
☐ Childhood diseases and most important contagious diseases.
☐ Chronic diseases (it will be asked about arterial hypertension, diabetes)
☐ Surgical history

- Traumas
- Allergies

o Living conditions: (Diet, working out, occupational status, marital status, living conditions, educational levels)

o Chronic intoxication:

- Smoking: how many cigarettes/day, for how long
- Alcohol intake
- Drugs

o Medication: name, dosage

• History of the present illness-history of the present complaint

o The onset of the problem, the setting in which it has developed, its manifestation.

o For each symptom: the exact nature, location, quality, quantity or severity, the setting in which they occur, timing (including onset, duration and frequency)

o The evolution of the symptoms, investigations, treatments.

o Associated comorbidities.

o Present status: general condition, body temperature and weight, stools, sleeping and appetite.

2. Physical examination:

• General state inspection: -posture/stance; motor activity; facial expression; height weight and built.

• Skin, hair and nail examination: pallor, increased pigmentation, erythema(redness), icterus, cyanosis, edemas, collateral circulation, skin eruptions and lesions.

• Consciousness and state of mind: sleeping disorders; transient loss of consciousness-syncope; prolonged loss of consciousness-coma's; seizures.

• Neurological semiology: tremors and other involuntary movements; voluntary (active) movements; movement coordination; abnormalities of sensation; reflexes, loss of consciousness, convulsions, and comas.

• Lymph nodes semiology: inspection and palpation of the lymph nodes.

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• Semiology of lips, mouth and pharynx: alteration of lips and mouth in respiratory, cardiovascular, digestive, rheumatologic and metabolic/ nutritional disease; alterations of the mouth in infectious diseases and endocrinological disorders.

• Adipose and muscle system semiology : palpation of the tegument and adipose tissue; muscles examination and semiology.

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3. Semiology of the respiratory system.

• Particularities of history and common symptoms of respiratory diseases.

• Physical examination of the respiratory system:

-topographic landmarks of the thorax; general inspection, thorax inspection; chest deformities.

-palpation of the chest wall; respiratory expansion (chest wall movements); tactile fremitus/ tactile fremitus alteration (increased, decreased or absent)

-percussion of the chest wall: topographic and comparative

-auscultation of the lungs: normal vesicular sound, bronchial breathing, added sounds (crackles, crepitations or rales)

aking history for cardiovascular diseases

• Clinical examination of cardiovascular system

o General inspection

o Inspection of thorax/precordium

o Palpation of thorax/precordium

o Palpatoric heart added sounds/significance

o Systolic/diastolic palpable murmur (thrill)

o Percussion of precordium

o Auscultation of the heart

■ The main areas of heart auscultation

■ Normal heart sounds

■ Pathological changes of heart sounds

■ Abnormal rhythms

■ Arrhythmia

■ Added heart sounds

• Systolic murmurs

• Diastolic murmurs (topography, radiation area, significance)

• Pericardial rub

-Clinical examination of peripheral arteries (palpation of the pulse, area, characters of the pulse, pathological changes, significance)

-Blood pressure measurement- hypertension, hypotension.

-Clinical examination of veins
 Clinical examination of digestive system :
 o Inspection of mouth/pharynx
 o Examining the abdomen
 Inspection
 Palpation (technique-superficial, deep palpation)
 painful area of abdomen
 topography of abdomen
 liver palpation (hepatomegaly, significance)
 palpation of abdominal masses
 spleen palpation(techniques, significance)
 percussion of abdomen
 auscultation of abdomen (bowel sounds, arterial murmurs)

Physical examination of urinary system:
 o Renal edema, secondary renal hypertension, anemia
 o Abdominal examination :
 Kidney palpation
 Genitalia examination
 Kidney auscultation

13. Appointment timetable (for students)

Conf dr Negovan Anca-Elena	Friday 14-15

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Tohati Adrian-Roland			
2.3 Practical activities coordinator(s): Șef.I dr.Tohati Adrian-Roland,Sef I dr. Petcu Blanka,Sef I dr. Bereșescu Liana,Asist univ.drd 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: 42		
- supplemental documentation at the library, from specialized information portals and in the field: 28		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 3		
- examinations: 4		
- other activities: 7		
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:
video-projector, laptop
5.2 for practical activities:
dental units, handpieces, various consumables

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:

Learning and performing descaling, professional sanitation and sealing pits and fissures.

7.2 Specific objectives:

Knowledge and deep knowledge of different methods and techniques of scaling, professional brushing and sealing.

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	-	-	2
2	Dental calculus: formation, attachment	Oral and multimedia presentation	-	-	2
3	Dental calculus: marginal calculus-periodontium relationship, pathogenicity	Oral and multimedia presentation	-	-	2
4	Manual supragingival scaling: instruments, techniques	Oral and multimedia presentation	-	-	2
5	Manual subgingival scaling: instruments, techniques	Oral and multimedia presentation	-	-	2
6	Sonic and ultrasonic scaling: general principles, indications and contraindications	Oral and multimedia presentation	-	-	2
7	Ultrasonic scaling: technique, accidents and complications	TBL course	-	-	2
8	Materials for sealing pits and fissures	Oral and multimedia presentation	-	-	2
9	Sealing techniques and evaluation of sealing efficiency	TBL course	-	-	2
10	Halitosis	Oral and multimedia presentation	-	-	2
11	Acid dental erosion	Oral and multimedia presentation	-	-	2
12	Prophylaxis of malignancies with oral localization	Oral and multimedia presentation	-	-	2
13	Reversible carious lesions	Oral and multimedia presentation	-	-	2
14	Dentinal hypersensitivity. Prevention and treatment.	Oral and multimedia presentation	-	-	2

Bibliography

1. Clinical Periodontology; Carranza, 9th Edition, 2002
2. Primary Preventive Dentistry; Norman O. Harris, 8th Edition, 2009
3. Primary 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 subgingival 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	Demonstration of the ultrasonic scaling technique	Practical demonstrations	-	-	4
7	Demonstration of the ultrasonic scaling technique	CBL session	-	-	4
8	Demonstration of the ultrasonic scaling technique	Practical demonstrations	-	-	4
9	Demonstration of the ultrasonic scaling technique	Practical demonstrations	-	-	4
10	Demonstration of the ultrasonic scaling technique	Practical demonstrations	-	-	4
11	Demonstration of sealing techniques	CBL session	-	-	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					
-					

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 for the practical activity - scaling, professional brushing, sealing being very current methods in modern dental treatment.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL (TBL average)	TBL sessions	20
- practical activities	CBL (CBL average)	CBL sessions	20
Final evaluation			
- theoretical final exam	According to discipline specifics	Written - multiple choice examination	40
- practical final exam	According to discipline specifics	Verification during the examination session	20
Minimal performance standards: Minimum performance standard: The student must practically perform ultrasonic and manual scaling, preventive sealing of the pits and occlusal fissures, as well as design and perform a complete oral prophylaxis session. -To validate the evaluations, the grade of each component that is included in the calculation of the final grade must be at least 5. - the minimum conditions for admission to the final examination require the completion of a number of 3 ultrasonic or manual scalings as well as the sealing of a number of 2 teeth. -No more than 2 absences are allowed for the activity of practical works.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Tohati Adrian-Roland	Friday 14-15

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dermatology			
2.2 Course coordinator: Conf dr Fekete Gyula-Laszlo			
2.3 Practical activities coordinator(s):			
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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations: 0		
- 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:
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Conf dr Fekete Gyula-Laszlo	

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD 2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Borș Andrea-Izabella			
2.3 Practical activities coordinator(s): Șef I dr Borș 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: 24		
- supplemental documentation at the library, from specialized information portals and in the field: 21		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 5		
- examinations: 4		
- other activities: 0		
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:
Lecture hall equipped with multimedia equipment, internet connection.
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, 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, fixed, mobile and mobilized 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, 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.	Team-Based Learning (TBL) + multimedia presentation.	Evaluation (5% of the final grade)	-	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	Team-Based Learning (TBL) + multimedia presentation.	Evaluation (5% of the final grade)	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
Required bibliography:
1. Bors A, Szekely M, Molnar-Varlam C. : Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureş, 2021.
2. Silas Duarte Jr. Quintessence of Dental Technology 2016, Quintessence Book, 2016.
3. Molnar-Varlam C., Grozescu V., Borş A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureş, 2015.

Optional bibliography:
1. Stephen F. Rosenstiel, Martin F. Land, Junhei Fujimoto: Contemporary Fixed Prosthodontics, Fifth Edition, Elsevier, 2016

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.	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.	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. : Technolgy of single unit dental prosthesis, Editura University Press, Tîrgu-Mureş, 2021.
2. Silas Duarte Jr. Quintessence of Dental Technology 2016, Quintessence Book, 2016.
3. Molnar-Varlam C., Grozescu V., Borş A. : Proteze dentare fixe - aspecte clinico-tehnice, Editura University Press, Tîrgu-Mureş, 2015.

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

- The dentist, knowing the laboratory phases of making dental prosthesis, will be able to work with exigency, being able to guide and control the work of the dental technician, having all the responsibility for prosthetic restorations.
- The future dentists will know to choose the right technologies and select the appropriate materials for the clinical situation, which meets the requirements of the patient but also be durable and last but not least profitable.
- Through the acquired knowledge and skills the practitioner will be able to perform or correct some technical steps that can be achieved in the dental office, therefore increasing the efficiency by decreasing the working time.

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 TBLs.	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.	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)

Şef I dr Borş Andrea-Izabella	Tuesday 10-12 Friday 16-18

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Conservative dentistry (simulation)			
2.2 Course coordinator: Prof dr Monea Monica-Dana			
2.3 Practical activities coordinator(s): -			
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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 6		
- examinations: 8		
- other activities: 4		
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:
Videoprojector, laptop
5.2 for practical activities:
Phantom, hand pieces, burs, endodontic files

6. Specific competencies acquired

6.1 professional competencies: Knowledge about tooth structure, hard dental tissue histology, and decay etiopathogenic mechanism. Morphopathological changes description and clinical aspects in dental carious lesion. Knowledge about investigation and diagnosis methods. Knowledge about cavity preparation.
6.2 transversal competencies: Knowledge about chronological steps in dental treatment, and how to chose the appropriate dental material for best treatment results, for each clinical case. Helping the student to realize the importance of periodical updating with literature resources, in order to elevate

theoretical and practical knowledge. The importance of doctor-patient relation, such as the treatment should meet the patient's expectations.

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:

Study of dental pathology, based on most recent fundamental and applicative research

7.2 Specific objectives:

Correlation between lectures and practical part, focused on etiology and treatment of dental carious lesion.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to operative dentistry, general considerations, epidemiology	Multimedia and oral presentation	-	-	2
2	Hard dental structures and carious lesion	Multimedia and oral presentation	-	-	2
3	Nutrients in the etiopathogenesis of dental carious lesion	Multimedia and oral presentation	-	-	2
4	Saliva (buccal liquid)	Multimedia and oral presentation	-	-	2
5	Etiology of dental caries: pathogenic bacterial plaque	TBL	-	-	2
6	Explosive carious lesion. Caries on root surfaces	Multimedia and oral presentation	-	-	2
7	Treatment principles in dental carious lesions	Multimedia and oral presentation	-	-	2
8	Morphopatology of carious lesion	TBL	-	-	2
9	Classification and diagnosis of simple carious lesions	Multimedia and oral presentation	-	-	2
10	Direct and indirect pulp capping procedures	Multimedia and oral presentation	-	-	2
11	Pain in carious lesion treatment	Multimedia and oral presentation	-	-	2
12	Secondary decay and recurrent carious lesion	Multimedia and oral presentation	-	-	2
13	Cavity preparation technique	Multimedia and oral presentation	-	-	2
14	Isolation of the operating field	Multimedia and oral presentation	-	-	2

Bibliography

1. Theodore M. Roberson, Harald O. Hezmann, Edward J. Swift: Sturdevant's Art and Science in Operative Dentistry 4th edition, Mosby, 2002
2. Ole Fejerskov, Edwina A.M. Kidd: Dental Caries- the disease and its clinical management, Blackwell Munksgaard, 2003

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Instruments and equipment for tooth preparation	Multimedia presentation and practical activity	-	-	4

2	Black's principles for cavity preparation	Multimedia presentation and practical activity	-	-	4
3	Class I cavity preparation	Multimedia presentation and practical activity	-	-	4
4	Class II cavity preparation	Multimedia presentation and practical activity	-	-	4
5	Class III cavity preparation	Multimedia presentation and practical activity	-	-	4
6	Class IV cavity preparation	Multimedia presentation and practical activity	-	-	4
7	Class V cavity preparation	Multimedia presentation and practical activity	-	-	4
8	Class VI cavity preparation	Multimedia presentation and practical activity	-	-	4
9	Cavity preparation - review	CBL. Multimedia presentation and practical activity	-	-	4
10	Teeth separation	Multimedia presentation and practical activity	-	-	4
11	Isolation of operating site	CBL. Multimedia presentation and practical activity	-	-	4
12	Instruments for endodontic treatment	Multimedia presentation and practical activity	-	-	4
13	Matrix and matrix bands	Multimedia presentation and practical activity	-	-	4
14	Temporary and long-term coronal restorations	Multimedia presentation and practical activity	-	-	4

Bibliography

1. Theodore M. Roberson, Harald O. Hezmann, Edward J. Swift: Sturdevant's Art and Science in Operative Dentistry 4th edition, Mosby, 2002
2. Ole Fejerskov, Edwina A.M. Kidd: Dental Caries- the disease and its clinical management, Blackwell Munksgaard, 2003

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

Knowledge about the most recent techniques and dental materials; of noninvasive early diagnosis methods, treatment of initial carious lesions in early stages.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to specific aspects of the subject	TBL	15
- practical activities	According to specific aspects of the subject	CBL	15
Final evaluation			
- theoretical final exam	According to specific aspects of the subject	Multiple choice test (written exam)	50
- practical final exam	According to specific aspects of the subject	Practical examination, oral presentation/ written exam	20

Minimal performance standards:

A grade of minimum 5.00 both in theoretical and practical examination, final average above 4.50.

Basic knowledge of the aspects that were studied is required.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Monea Monica-Dana	Every week, 30 minutes after each lecture, using Blackboard platform

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Prosthodontics (simulation)			
2.2 Course coordinator: Șef lucr. Dr. János Kinga-Mária			
2.3 Practical activities coordinator(s): Conf. Dr. Cerghizan Diana, Asist. univ. Dr. Baloș Monica, Asist. univ. Dr. Albu Aurița, Asist. univ. drd. Crăciun Adriana			
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: 14	3.2 lecture: 6	3.3 practical activities: 8
3.4 Total hours in curriculum: 98	3.5 lectures: 42	3.6 practical activities: 56
3.7 Distribution of time pool		
- study of books, lecture materials, bibliography, notes: 21		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 21		
- tutorial activities: 7		
- examinations: 19		
- other activities: 14		
3.8 Total hours of individual study: 102		
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:
materials needed - artificial teeth for simulation arches, handpieces (turbines), diamond burs, impression materials

6. Specific competencies acquired

6.1 professional competencies:
The student must achieve how to restore dental lesions by direct and indirect prosthodontic methods in terms of shape, function, and aesthetics in patients of all ages.
Must have the necessary knowledge and experience regarding the design and tooth preparation for different types of single-tooth restorations and elements related to the 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.

6.2 transversal competencies: The student must be competent in ensuring safety at work. Must understand the importance of one's health and its impact on the development of one's profession. They must have the competence to impose on other colleagues the principles of health and safety at work (simulation room, treatment room). They must achieve the scientific aspects of the use of biomaterials, the limits imposed on them, and their effect on the environment in which they are used. Be competent in recognizing one's limitations and recognizing the value of the 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 focuses on the indications, contraindications, methods, and techniques of the single-tooth restorations.
7.2 Specific objectives: Mastering by the student 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)

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	General considerations of tooth preparation (biological, mechanical, profilactical) part I	Oral and multimedia presentation	-	-	3
2	General considerations of tooth preparation (biological, mechanical, profilactical) part II	Oral and multimedia presentation	-	-	3
3	General considerations of tooth preparation (esthetics, ergonomics). Classification of the single-tooth restorations	Oral and multimedia presentation	-	-	3
4	Full veneer crowns. Full metal crown.	TBL	-	-	3
5	Aesthetic full veneer crown. (polymeric crown, Jacket ceramic crown, full ceramic crown)	Oral and multimedia presentation	-	-	3
6	Mixed / partial aesthetic crown. Metal-polymeric crown, metal-ceramic crown.	Oral and multimedia presentation	-	-	3
7	Abutment protection. Provisional restorations.	Oral and multimedia presentation	-	-	3
8	Impression techniques	Oral and multimedia presentation	-	-	3
9	Interocclusal records	Oral and multimedia presentation	-	-	3
10	Try-in of the restorations and shade selection	Oral and multimedia presentation	-	-	3
11	Application and cementation of the single-tooth restorations.	Oral and multimedia presentation	-	-	3
12	Veneers	Oral and multimedia presentation	-	-	3
13	Dowel core	TBL	-	-	3
14	Removal of the single-tooth restorations	Oral and multimedia presentation	-	-	3

Bibliography

I. Compulsory bibliography

1. Rosenstiel, Land, Fujimoto CONTEMPORARY FIXED PROSTHODONTICS 2016
2. Course notes

II. Optional bibliography

1. Schillingbourg 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. Pongrácz A: Rögzített fogpótlások, Studium Alapítvány Kiadó, 2009
4. Forna N: Dental Prosthetics, vol.I, pp. 401-805 - Topics included in residency, Encyclopedic Publishing House, 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 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 full ceramic crown - tooth 1.2	Practical activities: tooth preparation on the simulator	-	-	4
9	Tooth preparation for 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: impressions on the simulator	-	-	4
14	Recovery practical activities	Practical activities: tooth preparation on the simulator	-	-	4

Bibliography

Bibliography

1. The content of the materials presented at the practical activities and posted on the discipline's website
2. Shillingburg HT et al.: Fundamentals of Fixed Prosthodontics, Quintessence, 1997

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

The preparation of teeth for their restoration with crowns is an important activity in dentistry, being common cases of massive coronary destruction among the population, which requires this type of treatment.

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, of the 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	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	Multiple choice questions	50
- practical final exam	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, of the ergonomic working positions.	practical verification - tooth preparation for a specific type of single-tooth restoration	20
Minimal performance standards: 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 tests in TBL sessions with a minimum of 5.00 (the average of the grades obtained at the 3 TBL 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 (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)

Şef lucr. Dr. János Kinga-Mária	Monday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical semiology. Internal medicine			
2.2 Course coordinator: Conf dr Tilinca Mariana-Cornelia			
2.3 Practical activities coordinator(s): Conf dr Tilinca Mariana-Cornelia			
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: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 10		
- other activities: 10		
3.8 Total hours of individual study: 50		
3.9 Total hours: 106		
3.10 Credits: 2		

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, Continuous hospitalisation, exploration laboratories

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: Identifying role and responsibility in a multidisciplinary team; efficient use of information sources, on-line educational platform, with the purpose of elaborating and presenting an article
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The pathology of the respiratory system. Specific semiology. Upper respiratory tract disorders	oral, multimedia presentations	-	dyspnoea	2
2	Pneumonia. Pleurisy. Pulmonary tuberculosis	oral, multimedia presentations	-	dyspnoea	2
3	Chronic obstructive pulmonary disease. Asthma. Lung cancer	oral, multimedia presentations	-	dyspnoea	2
4	Cardiovascular pathology. The semiology of the cardiovascular system. Myocarditis. Pericarditis	oral, multimedia presentations	-	chest pain	2
5	Valvulopathies. Cardiomyopathies	oral, multimedia presentations	-	chest pain	2
6	Hypertension. Pulmonary heart disease	oral, multimedia presentations	-	chest pain	2
7	Peripheral arterial disease. Peripheral venous disease	oral, multimedia presentations	TBL 1	Peripheral vascular disorders	2
8	Chronic ischemic heart disease; Acute myocardial infarction. Cardiac arrhythmias	oral, multimedia presentations	-	chest pain	2
9	Digestive pathology. Digestive syndromes. Oesophageal disorders	oral, multimedia presentations	-	abdominal pain. abdominal distension	2
10	Gastroduodenal, biliary, intestinal pathology	oral, multimedia presentations	-	abdominal pain, abdominal distension	2
11	Renal disorders - urinary tract infections, kidney stones	oral, multimedia presentations	-	dysuria	2
12	Renal disorders - glomerulonephritis, pyelonephritis, acute and chronic kidney disease	oral, multimedia presentations	-	dysuria	2
13	Diabetes mellitus	oral, multimedia presentations	TBL 2	Acid-base imbalance	2
14	Hematological syndromes. Anemia. Leukemia	oral, multimedia presentations	-	Anemia	2

Bibliography

Bibliografie

1. T. Benedek. I Benedek-Curs de medicina interna pentru studentii de la medicina dentara –2013
2. Carmen Ginghina –Mic tratat de cardiologie . editura Academiei Romane 2010
3. 2013I. Gherasim – Medicina interna – Patologia aparatului respirator Vol 1 Bucuresti , 2007

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours

1	Clinical examination of the respiratory system	multimedia presentations, clinical cases	-	dyspnea	2
2	Clinical examination of the vascular system	multimedia presentations, clinical cases	-	chest pain	2
3	The methodology of performing the exercise test	multimedia presentations, clinical cases	-	chest pain	2
4	The methodology of performing the Holter ECG and TA	multimedia presentations, clinical cases	-	chest pain, palpitations	2
5	The methodology of performing the coronary angiography and angioplasty	multimedia presentations, clinical cases	-	chest pain	2
6	Acute and chronic pulmonary diseases	multimedia presentations, clinical cases	-	dyspnea	2
7	Acute myocardial infarction	multimedia presentations, clinical cases	-	chest pain	2
8	Arterial hypertension, Pulmonary thromboembolism	multimedia presentations, clinical cases	-	chest pain	2
9	Peripheral artery and venous diseases	multimedia presentations, clinical cases	-	Peripheral vascular disorders	2
10	Digestive system disorders	multimedia presentations, clinical cases	-	abdominal pain	2
11	Kidney pathology	multimedia presentations, clinical cases	-	abdominal pain	2
12	Diabetes mellitus	multimedia presentations, clinical cases	-	metabolic disorders	2
13	Anemic syndromes	multimedia presentations, clinical cases	-	anemia	2
14	Notions of disease prophylaxis	multimedia presentations, clinical cases	-	chest pain, anemia, abdominal pain	2

Bibliography

1. T. Benedek. I Benedek-Curs de medicina interna pentru studentii de la medicina dentara –2013
2. Carmen Gingham –Mic tratat de cardiologie . editura Academiei Romane 2010
3. 2013I. Gherasim – Medicina interna – Patologia aparatului respirator Vol 1 Bucuresti , 2007

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	TBL 1, TBL 2	teste grila	20
- practical activities	clinical case	case presentation	20
Final evaluation			
- theoretical final exam	examen	test grila	40
- practical final exam	examen	test grila	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 and performing basic therapeutic maneuvers, including those of qualified first aid

11. Must seen clinical situation list

Resuscitation, monitoring vital parameters in acute cardiovascular event, Short-term strategy in severe anemia, acute respiratory failure, HDS maneuvers, therapeutic strategies and maneuvers in life threatens arrhythmias

12. Clinical / practical abilities

Performing the anamnesis of the adult patient

Performing the general objective examination of the adult patient

Evaluation of adult nutrition

Enumeration and hierarchy of differential diagnoses

Enumeration and support of the elements of the positive diagnosis

Oxygen administration

Temperature monitoring, TA, EKG, AV, SaO₂

Observation and description of arterial catheter mounting

Observation and description of the insertion of the transvenous temporary pacemaker

Observation and description of defibrillation and cardioversion

Observation and description of the exercise test

Observation and description of osteomedullary biopsy

Performing and interpreting EKG

Interpretation of the written results of Holter EKG monitoring

Performing and interpreting the summary urine test

Interpretation of written results of dosing of chemical components in the blood

Interpretation of simple radiography

CT interpretation

Interpretation of ultrasound

Interpretation of written ultrasound results

Interpretation of the written results of cardiac and Doppler ultrasound

Interpretation of angiography

Interpretation of the written results of angiography

Interpretation of the written results of non-invasive vascular examinations

Completing the anamnesis and the objective examination in the medical documents

Recording the patient's evolution in the observation sheet

Writing the epicrisis

Writing the medical letter

Oral presentation of cases

Presentation of written cases / poster

13. Appointment timetable (for students)

Conf dr Tilinca Mariana-Cornelia

vineri 14-14.30

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Surgical semiology. General surgery			
2.2 Course coordinator: Șef lucr dr Roșca Ancuța-Noela			
2.3 Practical activities coordinator(s): Șef lucr Dr. Borz Cristian			
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: 0		
- supplemental documentation at the library, from specialized information portals and in the field: 0		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 0		
- other activities: 0		
3.8 Total hours of individual study: 0		
3.9 Total hours: 56		
3.10 Credits: 2		

4. Prerequisites (where applicable)

4.1 curricular: no
4.2 competency: no

5. Conditions

5.1 for lectures: Teaching 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: 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 1

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	TBL	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	no	Colon and rectal carcinoma Abdominal pain Intestinal transit changes Anemia Intestinal obstruction Rectal hemorrhage	2

		films			
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	Gallstones	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	TBL	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
Bibliography 1. Coros Marius et al. :Volume II - Surgical pathology, University Press Publishing House, Tg.Mures, 2015 2. Peter F. Lawrence - Essentials of General Surgery and Surgical Specialties, Sixth edition – Philadelphia: Wolters Kluwer Health, 2019 3. Schwartz's Manual of Surgery / Editor: F. Charles Brunicaudi, Eleventh Edition, Publisher McGraw-Hill Medical Publishing Division, New-York, 2020					

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Hernias and incisional hernias	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation Video presentations	The student will examine the patient and make an online 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 online 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 online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation Video presentations	CBL	Appendicitis	2
8	Ano-perineal pathology	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an online case presentation the next day in which all students will participate.	Fecal incontinence Ano-rectal pain Intestinal transit changes Constipation Rectal hemorrhage	2
9	Gallstones	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation Video presentations	The student will examine the patient and make an online case presentation the next day in which all students will participate.	Intestinal obstruction	2
12	Arterial pathology	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an online 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 online case presentation the next day in which all students will participate.	Varicose veins	2
14	Chest injuries	Onsite clinical examination followed by online case presentation Video presentations	The student will examine the patient and make an online 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	The rating is based on the score of the TBL tests.	During the module, there will be two 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 and participate to a CBL. Evaluation is made upon the quality of presentation and participation to CBL sessions.	15
Final evaluation			
- theoretical final exam	The rating is based on the score achieved at the final theoretic test.	Multiple choice grid tests that cover all topics across the syllabus. The test is given on paper, or online.	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 • Participating during at least one TBL session • 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 (TBL) and the practical (CBL) 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 TBL 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 CBL 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 TBL 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 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
- o To make a fair diagnosis
- o 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
- o 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
- o 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
- o Disease prevention and health promotion
 -  To recommend investigations and treatment with minimal risk to the patient 'Primum non nocere'
 -  To apply general and specific measures to prevent the occurrence and spread of infection
 -  To discuss with the patient, his family and the persons or institutions interested in the risk factors for disease and how they might be influenced
 -  To know and correctly recommends programs to prevent illness or screening for major diseases
- o Critical assessment (evidence-based medicine) / efficient use of resources:
 -  To critically evaluate data, information, and records in medical and academic situations
 -  To critically evaluate the literature to assess the benefits and risks of preventive measures, diagnostic and therapeutic
- o To use the computer for information, registration of patient's data and communication
- o To apply the principles of EBM in basic research and in clinical practice

13. Appointment timetable (for students)

Şef lucr dr Roşca Ancuţa-Noela

Friday 8-10

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: SL1 - Humanities
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical terminology - applied linguistics and communication skills in Romanian language			
2.2 Course coordinator: Lect dr Năznea Adrian			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: III	2.5 Semester: 2	2.6 Type of evaluation: V	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: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 0		
- 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:
Cunoașterea limbii române la nivel mediu.

5. Conditions

5.1 for lectures:
Sală dotată cu mijloace multimedia
5.2 for practical activities:
Sală dotată cu mijloace multimedia

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 sa: -utilizeze limba română ca mijloc de comunicare cu alti vorbitori ai aceleiasi limbi in situatii din domeniul medicinei dentare; - faca prezentari orale; - se documenteze si sa structureze informatii, sa sintetizeze date obtinute prin chestionare administrate unui grup tinta pentru pregatirea si elaborarea de lucrari in domeniu, participarea la stagii; - se familiarizeze cu utilizarea unor platforme de comunicare virtuala si munca in grup.
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 avansat.
7.2 Specific objectives: Dezvoltarea celor patru abilități de bază: citirea, înțelegerea mesajelor receptate pe cale auditivă, comunicarea verbală, comunicarea scrisă precum și 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, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
2	Introducere în terminologia medicinei generale 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
3	Introducere în terminologia medicinei dentare 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
4	Introducere în terminologia medicinei dentare 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
5	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 1. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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,	-	nu este cazul	1

		autoevaluarea			
6	Profesia de medic dentist. Provocări și oportunități. Scrisoarea de intenție și interviul 2. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
7	Bolile dinților. Boli parodontale. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
8	Bolile dinților. Abcesul. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
9	Bolile dinților. Cariile dentare. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
10	Bolile dinților. Placa dentară. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
11	Investigații în medicina dentară: Radiografii dentare. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1
12	Comunicarea cu pacientul. Comunicare și vocabular	Expunerea, prezentarea multimedia, conversația (descrierea unor imagini, discutarea unor cazuri, compararea unor itemi, brain-storming etc.) rezolvarea de exerciții, 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	1

13	Evaluare scrisă	Rezolvarea de exerciții: completare de spații, formare de cuvinte, întrebări cu complement multiplu etc.	-	nu este cazul	1
14	Evaluare scrisă	Rezolvarea de exerciții: completare de spații, formare de cuvinte, întrebări cu complement multiplu etc.	-	nu este cazul	1

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 și 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 dicționar medical, vol. I, II, Iași
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	-	Verificare pe parcurs	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Corectitudinea structurilor folosite - Complexitatea limbajului - Adecvarea la registru, nivel de formalitate specific situației	Întrebări cu complement multiplu, formare de cuvinte, potrivire de cuvinte, completare de spații	70
- 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 înțeleagă ideile principale ale unui text sau mesaj audio, să poată răspunde la întrebări pe baza lor fără greșeli mari la nivelul organizării discursului, să cunoască un număr satisfăcător de termeni specifici domeniului.			

11. Appointment timetable (for students)

Lect dr Năznean Adrian	Online: Blackboard, email, camera 233 în funcție de orarul modulului

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Endodontics (1)			
2.2 Course coordinator: Șef lucr poziția 28 (PO: Prof dr Monea Monica-Dana)			
2.3 Practical activities coordinator(s): -			
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: 35		
- supplemental documentation at the library, from specialized information portals and in the field: 25		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 20		
- tutorial activities: 6		
- examinations: 3		
- other activities: 2		
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:
Videoprojector, laptop
5.2 for practical activities:
Dental units, high speed and low speed handpieces, dental burs, dental materials

6. Specific competencies acquired

6.1 professional competencies:
The students should acquire knowledge regarding the etiology, diagnosis and treatment of acute and chronic pulp inflammation. Basic information regarding therapeutic methods concerning vital pulp therapy in order to preserve the vitality of the pulp tissue. The study of dental materials used in endodontic therapy during cleaning, shaping and filling root canals. Basic knowledge on iatrogenic factors that could lead to failure of primary endodontic therapy.

6.2 transversal competencies:

To develop collaboration with other specialties of dental medicine, especially prosthetic and orthodontics in order to be able to solve difficult cases. The study of the implications of the endodontic treatment on the general health and the development of abilities necessary to work in a team, together with practitioners from other medical specialties.

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 should acquire basic theoretical and practical knowledge regarding the etiological factors, diagnosis and treatment of inflammatory diseases of the dental pulp.

7.2 Specific objectives:

Development of technical skills regarding cleaning, shaping (through manual and rotary techniques) and filling of root canals (through manual and rotary techniques)

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Basic knowledge on the morphology and physiology of the dental pulp	Multimedia and oral presentation	-	-	2
2	Histopathologic characteristics of the dental pulp	Multimedia and oral presentation	-	-	2
3	Functions of dental pulp	Multimedia and oral presentation	-	-	2
4	Etio-pathogeny of the pulpal inflammation	TBL	-	-	2
5	Anatomic and clinical forms of acute pulpitis	Multimedia and oral presentation	-	-	2
6	Anatomic and clinical forms of chronic pulpitis	Multimedia and oral presentation	-	-	2
7	Dentinal hypersensitivity	Multimedia and oral presentation	-	-	2
8	The role of immunologic mechanisms in dental pathology	Multimedia and oral presentation	-	-	2
9	Treatment of acute pulpitis	Multimedia and oral presentation	-	-	2
10	Treatment of chronic pulpitis	Multimedia and oral presentation	-	-	2
11	Biologic methods for dental pulp therapy	TBL	-	-	2
12	Indirect and direct pulp capping, pulpotomy	Multimedia and oral presentation	-	-	2
13	Endodontic anatomy	Multimedia and oral presentation	-	-	2
14	Vital and non-vital pulpectomy	Multimedia and oral presentation	-	-	2

Bibliography

Castelucci A.: Endodontics, vol. I, Ed. Tridante, 2005

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Examination instruments, methods	Practical activities, oral presentation	-	-	4

2	Treatment chart, recording of caries lesions	Practical activities, oral presentation	-	-	4
3	Diagnostic methods used in dental caries	Practical activities, oral presentation	-	-	4
4	Dental cavities preparation (class I)	CBL. Practical activities, oral presentation	-	-	4
5	Dental cavities preparation (class II)	Practical activities, oral presentation	-	-	4
6	Dental cavities preparation (class III)	CBL. Practical activities, oral presentation	-	-	4
7	Dental cavities preparation (class IV)	Practical activities, oral presentation	-	-	4
8	Dental cavities preparation (class V)	Practical activities, oral presentation	-	-	4
9	Dental cavities preparation (class VI)	Practical activities, oral presentation	-	-	4
10	The use of Diagnodent	Practical activities, oral presentation	-	-	4
11	Complementary examination methods	Practical activities, oral presentation	-	-	4
12	The use of rubberdam in odontotherapy	Practical activities, oral presentation	-	-	4
13	Preparation and use of composite resins	Practical activities, oral presentation	-	-	4
14	Evaluation of treatment results	Practical activities, oral presentation	-	-	4
Bibliography Castelucci A.: Endodontics, vol. I, Ed. Tridente, 2005					

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

The level of information and practical training offered during lectures and clinical hours will enable the student to resolve simple and complicated endodontic cases. The student improve their manual, technical skills and become familiar with up to date instruments and new technologies.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to specific aspects of the subject	TBL	15
- practical activities	According to specific aspects of the subject	CBL	15
Final evaluation			
- theoretical final exam	According to specific aspects of the subject	Multiple choice test	50
- practical final exam	According to specific aspects of the subject	Oral examination/ written exam	20
Minimal performance standards: In order to pass the exam, the minimal mark for the multiple choice exam and for the practical exam must be 5.00. Ability to diagnose and apply the correct treatment for simple caries. Minimum requirements: preparation of first class cavities (2), preparation of second class cavities (2), preparation of third class cavities (2), preparation of fifth class cavities (1).			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef lucr poziția 28 (PO: Prof dr Monea Monica-Dana)	Every week, 30 minutes after each lecture, using Blackboard platform

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Odontotherapy			
2.2 Course coordinator: Șef I dr Hănțoiu Tudor-Alexandru			
2.3 Practical activities coordinator(s): -			
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: 35		
- supplemental documentation at the library, from specialized information portals and in the field: 25		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 20		
- tutorial activities: 6		
- examinations: 3		
- other activities: 2		
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:
Videoprojector, laptop
5.2 for practical activities:
Dental Units, High/Low speed dental pieces, different types of dental burs

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	TBL	-	-	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.	TBL	-	-	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
Tudor Hânțoiu, Monica Monea. Odontotherapy, Lecture notes, UMFST, 2020.
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 Hânțoiu, 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

The students must acquire extensive knowledge regarding technical steps in cavity preparation in order to restore the tooth with composite resins. The use of magnification and rubber-dam isolation must become familiar during their every day clinical practice.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to specific aspects of the subject	TBL	15
- practical activities	According to specific aspects of the subject	CBL	15
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 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 I dr Hânțoiu Tudor-Alexandru	Every week, 30 minutes after each lecture, using Blackboard platform or institutional e-mail address

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Digital orthodontics			
2.2 Course coordinator: Șef I dr Bud Eugen-Silviu			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: V	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: 16		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 4		
- examinations: 4		
- other activities: 2		
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: profesional

5. Conditions

5.1 for lectures: online
5.2 for practical activities: no

6. Specific competencies acquired

6.1 professional competencies: Computer aid complex etiologic, 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)
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	Introduction. Digital methods in orthodontics.	Online	No	No	2
2	Computerized patient registration (primary sheet).	Online	No	No	2
3	Digital scanning of casts. Data collection and registration.	Online	No	No	2
4	Computerized lateral cephalometry analysis.	Online	No	No	2
5	Radiological examination in dentistry: OPT, CBCT	Online	No	No	2
6	Diagnostic and therapeutical set-up. Invisalign technique on scanned casts.	Online	No	No	2
7	The use of FEM technique in orthodontic biomechanics.	Online	No	No	2

Bibliography

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 și aplicații. Ed. University Press Tirgu Mures, 2012

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	No	No	0
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Multiple choice test	Multiple choice test	100
- practical final exam	No	No	0
Minimal performance standards: 50 percent out of 100			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef I dr Bud Eugen-Silviu	Monday 16-18

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Bukhari Csilla			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+V+VI	2.5 Semester: 1	2.6 Type of evaluation: V	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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations:		
- 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:
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
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Şef I dr Bukhari Csilla	Tuesday 15-17

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Genetic hereditary factor in determining the scope of orofacial disorders			
2.2 Course coordinator: Prof dr Bănescu Claudia-Violeta			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV	2.5 Semester: 1	2.6 Type of evaluation: V	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 seminars / laboratories, homework, reports, portfolios and essays: 12		
- tutorial activities: 0		
- examinations: 0		
- 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:
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 activități 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 învățare 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: Înșușirea noțiunilor de genetică medicală cu aplicații în medicina dentara.
7.2 Specific objectives: Cunoașterea rolului factorilor genetici în realizarea trăsăturilor fiziologice și 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	Approaching of the patient with congenital malformations. Syndromes associated with filtrum abnormalities	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
2	Syndromes associated with lip abnormalities (full lips). Syndromes associated with lip abnormalities (cleft lip)	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases	2
3	Syndromes associated with tongue abnormalities (macroglossia, microglossia). Syndromes associated with tongue abnormalities (multiple frenulum, bifid tongue)	Oral+multimedia presentation	-	Chromosomal disorders, Monogenic diseases. Malformations of lip/palate,	2
4	Syndromes associated with teeth abnormalities (anodontia, hypodontia). Syndromes associated with teeth abnormalities (abnormalities of eruption, neonatal teeth)	Oral+multimedia presentation	test	Chromosomal disorders, Monogenic diseases	2
5	Syndromes associated with abnormality of the maxilla	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

- Lyons Jones K., Crandall Jones M., Del Campo M. Smith's recognizable patterns of human malformation, 7th edition, Ed. Elsevier, 2013
- Agnes Bloch-Zupan, Heddie Sedano, Crispian Scully. Dento/Oro/Craniofacial Anomalies and Genetics. Ed Elsevier, 2012.

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

Recunoașterea și abordarea factorului genetic în determinarea tulburărilor 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	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)

Prof dr Bănescu Claudia-Violeta	30 minute dupa fiecare curs

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Laser in dentistry			
2.2 Course coordinator: Conf dr Bechir Edwin-Sever			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: IV+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: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 0		
- examinations: 2		
- other activities: 2		
3.8 Total hours of individual study: 22		
3.9 Total hours: 36		
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 the future 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	Prezentare multimedia	-	-	1
6	Diode laser applications	Multimedia presentation	-	-	1
7	Diode lasers and diode laser 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. Aldo Brugnera Jr., Samir Namour. Laser Dentistry: Current Clinical Applications, World Federation for Laser Dentistry Universal Publishers, 2018.
2. Donald J. Coluzzi, Robert A. Convissar. Atlas Of Laser Applications In Dentistry, Quintessence Pub Co, 1st edition, 2007.
3. Patricia M. Freitas, Aylene Simões. Lasers in Dentistry: Guide for Clinical Practice, Wiley-Blackwell, 1st edition, 2015.
4. Olivi Giovanni, De Moor Roeland, DiVito Enrico. Lasers In Endodontics, Springer International Publishing, 2016.
5. 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 notions of 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.	TBL	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects of the course.	Multiple choice examination	90
- practical final exam	-	-	0
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	Wednesday 10-11

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M1 Morphologic sciences
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Forensic medicine			
2.2 Course coordinator: Șef I dr Radu Carmen-Corina			
2.3 Practical activities coordinator(s): Șef I Dr. Radu Carmen-Corina			
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: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 0		
- examinations: 3		
- 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: Anatomy, Physiology, Physiopathology, Clinical Medicine
4.2 competency: not required.

5. Conditions

5.1 for lectures: Acces 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 (traumatology, psychiatry, parentage, etc) , and cadavers (necropsy). Correct description and interpretation of violent bodily lesions. 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 criteria 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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	MEDICO-LEGAL TANATOLOGY Definition and stages of death, medico-legal classification of death, The signs of death	Lecture	-	agression/violence	2
2	TRAUMATIC LESIONS (medico-legal causality, primary traumatic lesions). LESIONS BY SHARP OBJECTS	TBL session	TBL session	Trauma of the limbs, aggression/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	-	thoracic/abdominal trauma, trauma of the limbs, aggression/violence	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 imbalance, poisoning	2
6	FORENSIC PSYCHIATRIC EXPERTISE. FORENSIC EXPERTISE IN IMPRISONMENT 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

1. C.C. Radu. Medicină legală- suport de specialitate. Editura University Press. 2020
2. V. Belis. Tratat de medicina legală. Vol. 1, 2. Editura medicală București. 1995
3. C.C. Radu. Aspecte medico-legale și etice ale traumatismului cranio-facial. Editura Universității din Oradea. 2016
4. C.C. Radu. Noțiuni introductive de bioetică în medicina legală. Editura Universității din Oradea. 2015
5. STEP-UP to USMLE STEP 2 CK, 5th Edition

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	MEDICO-LEGAL TANATOLOGY Definition and stages of death, medico-legal classification of death. the signs of death	practical activities	-	Aggression/violence	2

2	TRAUMATIC LESIONS (medico-legal causality, primary traumatic lesions). LESIONS PRODUCED BY SHARP WEAPONS	practical activities	-	trauma of the limbs, aggression/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, aggression/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	CBL	CBL	Hypothermia, cerebral palsy, burns, acido-basic imbalance, poisoning	2
6	FORENSIC PSYCHIATRIC EXPERTISE. FORENSIC EXPERTISE IN IMPRISONMENT CASES. FORENSIC EXPERTISE IN SEXUAL OFFENCES .PATERNITY. INFANTICIDE	practical activities	-	aggression/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. Medicină legală- suport de specialitate. Editura University Press.2020
2. V.Belis. Tratat de medicina legala. Vol. 1,2 . Editura medicala Bucuresti.1995
3. C.C.Radu.Aspecte medico-legale si etice ale traumatismului cranio-facial.Editura Universitatii din Oradea.2016
4. C.C.Radu. Notiuni introductive de bioetica in medicina legala. Editura Universitatii din Oradea. 2015
5. STEP-UP to USMLE STEP 2 CK, 5th Edition

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 community, it's representatives, professional associates and staff is taken into account.

The discipline follows to offer the students optimal premises to get successfully hired, immediately 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 using interactive questions	20
- practical activities	1 CBL session	Assessment during the lectures using interactive questions	10
Final evaluation			
- theoretical final exam	Sumative assesement	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)

Şef I dr Radu Carmen-Corina	Şef I Dr. Radu Carmen-Corina : Wednesday 11:00-12:00

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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): Șef lucru. Dr. Janosi Kinga, Asist. univ. Dr. Baloș Monica, Asist. univ. Dr. Albu Aurița, Asist. univ. drd. Crăciun Adriana			
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: 20	3.2 lecture: 4	3.3 practical activities: 16
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: 30		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 20		
- tutorial activities: 10		
- examinations: 15		
- other activities: 15		
3.8 Total hours of individual study: 110		
3.9 Total hours: 250		
3.10 Credits: 10		

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	TBL	-	-	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	TBL	-	-	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.	TBL	-	-	2
14	Therapeutic variants in the treatment of the partial edentation by dental bridges	Oral and multimedia presentation	-	-	2

Bibliography

I. Compulsory bibliography

1. Rosenstiel, Land, Fujimoto CONTEMPORARY FIXED PROSTHODONTICS 2016
2. Keynotes

II. Optional bibliography

1. Schillingbourg 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

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	-	-	8
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	-	-	8
3	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	CBL	-	-	8
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	-	-	8
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	-	-	8
6	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	CBL	-	-	8
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	-	-	8
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	-	-	8
9	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	CBL	-	-	8
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	-	-	8
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	-	-	8
12	Establishing the treatment plan. Pre and pro prosthetic maneuvers. Treatment of the partial edentation by dental bridges.	CBL	-	-	8
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	-	-	8
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	-	-	8

Bibliography

1. Rosenstiel, Land, Fujimoto CONTEMPORARY FIXED PROSTHODONTICS 2016

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 TBL 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	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 Appreciation of the work done during the semester by giving a rating for each activity performed on the scale of activities 5%+CBL 10%	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

Qualificatives obtained at CBL

The minimum promotion mark is 5.00 (not rounded).

2. At the course

Promotion of tests in TBL sessions with a minimum of 5.00 (the average of the grades obtained at the 3 TBL 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

Tuesday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department:
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: General radiology			
2.2 Course coordinator: Prof dr Buruian Mircea-Marian			
2.3 Practical activities coordinator(s): asist dr Mihaela Alexandra Ratiu			
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 seminars / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 1		
- examinations: 0		
- 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: -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 și 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 corela diversitatea cunoștințelor dobândite pe parcursul cursului; Să fie capabil de a identifica și utiliza noi surse de informație necesare pentru rezolvarea unor probleme contextualizate disciplinei

parcurse.

Forma rea unor preocupări pentru inovație și provocarea schimbărilor, echilibru între spiritul critic și tolerant
Dezvoltarea unui comportament empatic și a „orientării 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 profesională având la bază cunoștințe, competențe și abilități dobândite prin parcurgerea disciplinei de studiu

Îndeplinirea în condiții 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 limbă 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:

Înșușirea noțiunilor de bază referitoare la metodele de investigație imagistice; însușirea principalelor indicații și contraindicații ale examinărilor radiologice convenționale, CT, ultrasonografice, prin rezonanță magnetică și cu radioizotopi;

7.2 Specific objectives:

Interpretarea în context clinic a imaginilor obținute prin radiologie convențională, 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 properties, 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 osteoarthritis, malignant bone tumors	2
Bibliography 1.R.B.Gunde rman - Essential Radiology , second ed., Thieme, 2006 2.Weissleder R et al - Primer Diagnostic Imaging 5th ed. Mosby 2011					

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 of 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 osteoarthritis, malignant bone tumors	2

Bibliography
1.R.B.Gunde rman - Essential Radiology , second ed., Thieme, 2006
2.Weissleder R et al - Primer Diagnostic Imaging 5th ed. Mosby 2011

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 explice tendințele și orientările contemporane în domeniul imagisticii medicale Să utilizeze corect și flexibil terminologia generală și specifică din domeniul imagisticii medicale Să însușească operațional unele concepte și problematice specifice imagisticii medicale specifice terapiei fizice și recuperării funcționale; Să realizeze analize critice ale produselor suport oferite în cadrul cursului Să aplice achizițiile teoretice în proiectarea și derularea unor situații practice 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)

Prof dr Buruian Mircea-Marian	luni 18.30-19.00, marti 18.30-19.00

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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 I dr Golea Cristina			
2.3 Practical activities coordinator(s): Șef I 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 seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 2		
- examinations: 4		
- other activities: 1		
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 required 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 pre-session (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 terciara 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 neinfecioase.

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,	Oral and multimedia presentation	X	Infectious disease of childhood, Malaria, Drug reactions, cerebrovascular disease, Immunization, Immunodeficiency	2

	immunity, vulnerability, adaptation capacity. Favoring factors for the epidemiological process. Manifestation forms for the epidemiological process.				
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, Immunodeficiency 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 psychiatric 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. 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., Azoică D., Grigorescu R.: Epidemiologie generală și specială - Ediție bilingvă, Ed. Polirom, Iași, 1996, (English version: GENERAL AND SPECIAL EPIDEMIOLOGY, p 103-197)
6. Bocșan I.S.: Epidemiologie practică pentru medicii de familie, editura Medicală Universitară „Iuliu Hațieganu”, Cluj-Napoca, 1999
7. Ivan A.: Tratat de Epidemiologie a bolilor transmisibile, Ed. Polirom Iași, 2002
8. Sabău M., Voidăzan S, Golea C., : Epidemiologie generală ediția a-II-a, Litografia UMF Tg. Mureș, 2010
9. Sabău M., Golea C., Bacărea V.: Epidemiologie generală, Litografia UMF Tg. Mureș, 2005
10. Sabău M., Golea C., Bacărea V., Epidemiologie specială-Boli netransmisibile, Litografia UMF Tg.Mureș, 2005
11. Voidăzan Toader Septimiu, Ruța Florina Daniela; “Epidemiologia bolilor canceroase” Editura University Press - Tîrgu Mureș, 2016, 160 de pagini, ISBN 978-973-169-480-1, Cod CNCIS 210

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 criteria 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

References:

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., Azoică 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 ediția a-II-a, Litografia UMF Tg. Mureș, 2010
7. Sabău M., Golea C., Bacărea V.: Epidemiologie generală, Litografia UMF Tg. Mureș, 2005
8. Sabău M., Golea C., Bacărea V., Epidemiologie specială-Boli netransmisibile, Litografia UMF Tg. Mureș, 2005
9. Bocșan I.S.: Epidemiologie practică pentru medicii de familie, editura Medicală Universitară „Iuliu Hațieganu”, Cluj-Napoca, 1999
10. Ordin M.S. 1101/2016 privind aprobarea Normelor de supraveghere, prevenire și control al IAAM in unitatile sanitare.
11. OMS 961/2016 pentru aprobarea Normelor tehnice privind curățarea, dezinfectia și sterilizarea în unitățile sanitare publice și private, tehnicile de lucru și interpretare pentru testele de evaluare a eficienței procedurii de curățenie și dezinfectie, procedurilor recomandate pentru dezinfectia mâinilor, în funcție de nivelul de risc, metodelor de aplicare a dezinfectantelor chimice în funcție de suportul care urmează să fie tratat și a metodelor de evaluare a derulării și eficienței procesului de sterilizare.
12. OMS 1226/2012 pentru aprobarea Normelor tehnice privind gestionarea deșeurilor rezultate din activități medicale și a Metodologiei de culegere a datelor pentru baza națională de date privind deșeurile rezultate din activități medicale.

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

yes

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:			
- cunoașterea noțiunilor teoretice privind procesul epidemiologic al bolilor transmisibile și netransmisibile, a noțiunilor teoretice privind epidemiologia, supravegherea și controlul unor boli transmisibile și netransmisibile - cunoașterea noțiunilor practice privind aprecierea și evaluarea stării de sănătate a populației sau a unor grupe populationale - cunoașterea noțiunilor practice necesare în cazul intervențiilor profilactice (imunizări, decontaminări profilactice, etc.) - cunoașterea măsurilor de intervenție în focare de boală (anchete, decontaminări, imunizări, chimioprofilaxie, etc.) - cunoștințe pentru nota 5: realizarea a 50% din punctajul maxim posibil al grilei; - cunoștințe 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 I dr Golea Cristina	Wednesday 12-14

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dento-alveolar surgery			
2.2 Course coordinator: Senior Lecturer Dr. Coșarcă Adina-Simona			
2.3 Practical activities coordinator(s): Senior Lecturer Dr. Coșarcă Adina-Simona,Senior Lecturer Dr.Iacob Alina, Senior Lecturer Petrovan Cecilia, Bereczki Temistocle Despina			
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: 21		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 7		
- examinations: 7		
- other activities: 3		
3.8 Total hours of individual study: 70		
3.9 Total hours: 154		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: A
4.2 competency: A

5. Conditions

5.1 for lectures: A
5.2 for practical activities: A

6. Specific competencies acquired

6.1 professional competencies: Concepts description ; theories and fundamental notions regarding the appearance of the dental pathology, signs and symptoms, characteristic of each disease useful for guiding the clinical diagnosis. Identification of the correct maneuvers for first aid situation. Correct interpretation of clinical and paraclinical signs, symptoms in order to make the correct diagnostic. Proper clinical and laboratory data evaluation , in order to establish positive diagnosis. Consecutively, using therapeutical resources treatment plan elaboration. Ability to perform adequate treatment. Correct examination of the patient, correct evaluation of the indication of tooth extraction. Prevention of accidents and complications associated with tooth extraction and their management. Correct evaluation of the indications for the preprsthodontic surgery, and for endodontic surgery.

6.2 transversal competencies: Identification of: objectives to be achieved ; availabel resources in order to fulfill their work -stages /practical activities. Identification of role and responsibility in a multidisciplinary team, in order to apply them in an 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: Students will learn :techniques for dental extraction
7.2 Specific objectives: Students will became familiar with instruments for tooth extraction , will learn how to perform tooth extraction for each tooth , how to treat accidents and complication associated with tooth extraction; will learn how to do small dentoalveolar surgical procedures.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Patient examination in OMF surgery. Clinical examination Paraclinic examinations	Oral presentations , multimedia and discussions	A	A	2
2	Tooth extraction. indications, contraindications for temporary tooth extraction.	Oral presentations , multimedia and discussions	A	A	2
3	Tooth extraction. Tooth extraction with forceps	Oral presentations , multimedia and discussions	A	A	2
4	Tooth extraction-tooth type	Oral presentations , multimedia and discussions	A	A	2
5	Root extraction using forceps; root separation	Oral presentations , multimedia and discussions	A	A	2
6	Surgical extraction	Oral presentations , multimedia and discussions	TBL1	A	2
7	Postextractional healing process	Oral presentations , multimedia and discussions	A	A	2
8	Local accidents in tooth extraction	Oral presentations , multimedia and discussions	A	A	2
9	Local complications in tooth extraction	Oral presentations , multimedia and discussions	A	A	2
10	Endodontic surgery. Transmaxillary osteotomy. Periapical curettage	Oral presentations , multimedia and discussions	A	A	2
11	Endodontic surgery. Apicectomy. Root amputation	Oral presentations , multimedia and discussions	TBL2	A	2
12	Tooth replanting. Tooth transplanting	Oral presentations , multimedia and discussions	A	A	2
13	Preprosthetic surgery. Soft tissue deficiencies surgery	Oral presentations , multimedia and discussions	a	a	2
14	Bone deficiencies surgery	Oral presentations , multimedia and discussionsa	a	a	2
Bibliography Fragiskos D Fragiskos, Oral Surgery Springer -2007 .Sumit Sanghai, Parama Chatterjee, A concise textbook of oral & maxillofacial surgery, 2009					

8.2 Content of workout, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Review-dento-maxillary, anesthesiology anatomy	Oral presentation, multimedia, discussions	a	a	4

2	Patient examination, indications, contraindications for tooth extraction. Instruments for tooth extraction	Oral presentation, multimedia, discussions	a	a	4
3	Patient, doctor instruments training for tooth extraction. Extraction technique	Oral presentation, multimedia, discussions	a	a	4
4	Accidents and complications and their treatment	Oral presentation, multimedia, discussions	A	a	4
5	Tooth extraction	Oral presentation, multimedia, discussions	CBL1	a	4
6	tooth extraction	Supervision -tooth extraction to a patient	a	a	4
7	Tooth extraction	CBL	CBL2	a	4
8	Tooth extraction	CBL	CBL3	a	4
9	Tooth extraction	Supervision -tooth extraction to a patient	a	a	4
10	Tooth extraction	CBL	CBL4	a	4
11	Tooth extraction	Supervision -tooth extraction to a patient	a	aa	4
12	Tooth extraction	Supervision -tooth extraction to a patient	as	aa	4
13	Tooth extraction	Supervision -tooth extraction to a patient	a	a	4
14	Tooth extraction	Supervision -tooth extraction to a patient	a	A	4

Bibliography

Sumit Sanghai, Parama Chatterjee, A concise textbook of oral & maxillofacial surgery, 2009

2. Fragiskos D Fragiskos, Oral Surgery Springer -2007

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

Clasificarea ocupatiilor din Romania

Colegiul medicilor dentisti. Colegiul medicilor At the end of this year students must be capable to diagnose dentoalveolar pathologies which indicated tooth extraction or conservator surgical treatment; to make simple tooth extractions; to recognize and treat accidents and complications arising in time of this kind of treatment. They also need to know situations when there is needed specific treatment like transplantation, replantation or preprosthetic treatment.

Ministerul sanatatii din Romania

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the Department of Oral and Maxillofacial surgery	The mean of the TBL	10
- practical activities	According to the Department of Oral and Maxillofacial surgery	Mean of CBL and extractions(10% +15%)	25
Final evaluation			
- theoretical final exam	According to the Department of Oral and Maxillofacial surgery	Written test-multiple choice questions	50
- practical final exam	According to the Department of Oral and Maxillofacial surgery	Written test	15

Minimal performance standards:

Anamnesis , clinical examination, diagnosis manoeuvres, how to ask for the specific complementary examination. Making the correct diagnosis.

The students need to be able to make simple tooth extractions, prevent and treat accidents and complications that can be associated with tooth extraction.

Mark for practical activities(tooth extraction)-min 5

Mark <5= fail exam;

0 extraction – fail exam

1 extraction – 5

2 extractions – 6

3 extractions – 7
4 extractions – 8
5 extractions – 9
6 extractions– 10
Mark for theoretical exam – minim 5; mark < 5 = failed exam;
Mark for final practical exam– minim 5; mark < 5 =failed exam;
Final mark – minim 5; mark < 5 = failed exam.

Participation for practice -mandatory; 20% unmotivated abcences(8 -mandatory presence for practice)
Are permitted 20% unmotivated abcenses . (8 ore lp = 2 LP-uri);
>20% unmotivated abcenses or unrecovered =failed exam
Abcenses for practice can be recovered only in time of the school year or in time of summer practice.

11. Must seen clinical situation list

aaaaaaaaaaaaa

12. Clinical / practical abilities

Tooth extractions

13. Appointment timetable (for students)

Senior Lecturer Dr. Coșarcă Adina-Simona	30 Minute dupa fiecare curs

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Infectious diseases			
2.2 Course coordinator: Prof dr Georgescu-Văsiesiu Anca-Meda			
2.3 Practical activities coordinator(s): assistant drd. Akos Andrejkovits			
2.2 Course coordinator: Șef I dr Incze Andrea			
2.3 Practical activities coordinator(s): assistant drd. Akos Andrejkovits			
2.2 Course coordinator: Șef I dr Sincu-Bodnar Nina-Ioana			
2.3 Practical activities coordinator(s): assistant drd. Akos Andrejkovits			
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 seminars / 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: Not applicable
4.2 competency: Not applicable

5. Conditions

5.1 for lectures: on-site / online
5.2 for practical activities: on-site / online

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	Not applicable	PUO-pyrexia of unknown origin. Immunisation.	2
2	Oro-cervical bacterial infections.	oral + multimedia presentation	Not applicable	Oral disorders. Dysphagia	2
3	Oro-cervical viral and fungal infections	TBL	Not applicable	Infectious diseases of childhood. Candidiasis.	2
4	Systemic bacterial infections: SIRS, MSOF, bacteraemia with oro-pharyngeal entry gate.	oral + multimedia presentation	Not applicable	Septicaemia	2
5	HIV/AIDS infection. Oropharyngeal and facial manifestation of HIV infection.	oral + multimedia presentation	Not applicable	HIV	2
6	Acute viral hepatitis with parenteral and enteral transmission.	oral + multimedia presentation	Not applicable	Acute liver disease. Hepatomegaly. Jaundice.	2
7	Intracranial hypertension syndrome of infectious origin. Acute meningitis. Acute encephalitis.	oral + multimedia presentation	Not applicable	Meningitis. Headache. Raised intracranial pressure.	2

Bibliography

- 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
- Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
- 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	Not applicable	Infectious diseases of childhood. Oral disorders. Dysphagia.	1
2	Herpes-virus infections.	case report, images from our clinical practice	Not applicable	Bullous/vesicular skin eruption	1
3	Mumps - clinical manifestations and differential diagnosis challenges	case report, images from our clinical practice	Not applicable	Parotid swelling	1
4	Respiratory viral infections. Influenza. SARS-CoV-2 infection.	case report, images from our clinical practice	Not applicable	Respiratory tract infection	1
5	Diagnosis of acute pharyngitis.	case report, images from our clinical practice	Not applicable	Oral disorders	2
6	Acute viral hepatitis.	case report, images from our clinical practice	Not applicable	Acute liver disease. Hepatomegaly. Jaundice.	2
7	HIV/AIDS infection. Clinical aspects of oral cavity diseases in HIV/AIDS infections.	CBL	Not applicable	HIV	2
8	Antibiotic therapy in dental practice.	case report, images from our clinical practice	Not applicable	Drug reactions	1
9	Post-exposure prophylaxis	case report, images from our clinical practice	Not applicable	Immunisation	1
10	Nosocomial infections.	case report, images from our clinical practice	Not applicable	Acute renal disease	1
11	Infections with digestive entry gate.	case report, images from our clinical practice	Not applicable	Loose stools	1

Bibliography

- 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
- Kumar and Clark's Clinical Medicine, Elsevier publishing house, 10th edition, July 2020
- 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 climacteric 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	Knowledge assessment (information acquired during lectures and individual study)	TBL - MCQ (multiple choice questions) test	5
- 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 (multiple choice questions) test	65

- 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 (multiple choice questions) test	20
Minimal performance standards: - recognizing infectious diseases - managing an infectious disease in the dental practice - maximum number of absences accepted - 20% of the total number of practical classes (2 hours) - minimum validation grade for evaluations during the semester (CBL, TBL) is 5 - minimum validation grade for the final practical exam is 5 - minimum validation grade for the final theoretical exam is 5 (calculated by the "primum non nocere" method)			

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)

Prof dr Georgescu-Văsieșiu Anca-Meda	
Șef I dr Incze Andrea	
Șef I dr Sincu-Bodnar Nina-Ioana	Daily, 8:30-10:30 a.m.

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Ophthalmology			
2.2 Course coordinator: Șef I dr Vultur Florina			
2.3 Practical activities coordinator(s): Șef I dr Vultur Florina, Asist univ dr Tripon Robert			
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: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 2		
- examinations: 2		
- 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: 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 lachrymal sistem pathology	Oral presentation and PowerPoint	x	oedema, orbital swelling, brain tumor, red eye, visual impairment, trauma to head, thyroid 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, inflammatory 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

Karin Horvath, Florina Vultur, Gh. Muhlfay: Ophthalmology-Lecture notes, Editura University Press, UMF TgMures, 2014

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, thyroid 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, inflammatory 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

Bibliography

Karin Horvath, Florina Vultur, Gh. Muhlfay: Ophthalmology-Lecture notes, Editura University Press, UMF TgMures, 2014

Jack J. Kanski, Clinical Ophthalmology: A Systematic Approach, 7th Edition, 2011

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)

Şef I dr Vultur Florina Lecturer Dr Florina Vultur From Monday to Friday 12-13

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department:
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Otorhinolaryngology			
2.2 Course coordinator: Șef I dr Neagoș Adriana			
2.3 Practical activities coordinator(s):			
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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations: 0		
- 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:
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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Şef I dr Neagoş Adriana	

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pediatric dentistry (1)			
2.2 Course coordinator: Prof dr Bica Cristina-Ioana			
2.3 Practical activities coordinator(s): Bud Anamaria, Stoica Oana, Contac Laura			
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: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 1		
- examinations: 5		
- 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:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Videoprojector, PC, flipchart
5.2 for practical activities:
Dental treatment room, dental units, hand pieces, burs, endodontic files

6. Specific competencies acquired

6.1 professional competencies:
Knowledge about primary and immature tooth structure, knowledge about simple decay and pulp disease of the primary and permanent immature teeth
6.2 transversal competencies:
Knowledge about chronological steps in dental treatment, and how to chose the appropriate dental material for best treatment results, for each clinical case. Helping the student to realize the importance of periodical updating with literature resources, in order to elevate theoretical and practical knowledge. The importance of doctor-patient relation, such as the treatment should meet the patient's expectations.

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:

Study of dental pathology in primary and permanent immature teeth, based on the most recent fundamental and applicative research

7.2 Specific objectives:

Correlation between lectures and practical activities, focused on etiology and treatment of dental carious lesion and pulp disease in primary and permanent immature teeth

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Tooth development	Oral presentation	-	-	2
2	Tooth eruption. Rerosption of the temporary teeth. The order and ages of primary and permanent tooth eruption	Oral presentation	-	-	2
3	Replacement of the temporary teeth. Accidents and tooth eruption disorders	TBL	-	-	2
4	Simple caries in primary teeth: Topography and evolution, Classification, diagnosis, treatment and complex restoration of primary molars	Oral presentation	-	-	2
5	Pulp disease in primary teeth	Oral presentation	-	-	2
6	Necrosis and gangrene in primary teeth	Oral presentation	-	-	2
7	Severe early caries in children S-ECC	Oral presentation	-	-	2
8	Simple caries in permanent immature teeth	TBL	-	-	2
9	Pulp disease, necrosis and gangrene in permanent immature teeth	Oral presentation	-	-	2
10	Treatment of pulp disease in permanent immature teeth	Oral presentation	-	-	2
11	Treatment of pulp necrosis and gangrene in permanent immature teeth	Oral presentation	-	-	2
12	Integrated course. Medication in pediatric dentistry. Dental materials in pediatric dentistry.	Oral presentation	Partner: Department of Dental materials	-	2
13	Dentistry for children with special needs	Oral presentation	-	-	2
14	Pediatric emergencies in dental office	Oral presentation	-	-	2

Bibliography

- Cristina Bica, Daniela Esian, Oana Stoica, Anamaria Bud - Pediatric dentistry. Ed. University Press, Targu Mures, 2019

Optional bibliography:

- Cameron A, Widmer RP - Handbook of Pediatric Dentistry. 3rd edition, Mosby Elsevier, 2008

- Pinkham JR - Pediatric Dentistry. Infancy through Adolescence. 4rd edition, Elsevier Saunders, St. Louis, 2005

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours

1	Dental clinical examination of the paediatric patient.	Practical demonstrations, case presentations	-	-	4
2	Temporary teeth versus permanent immature teeth	Practical demonstrations, case presentations	-	-	4
3	Accidents and tooth eruption disorders. Dental age	CBL	-	-	4
4	Radiological exam in children with mixed dentition	Practical demonstrations, case presentations	-	-	4
5	Diagnosis and treatment of simple caries in temporary teeth	Practical demonstrations, case presentations	-	-	4
6	Pulp diseases in temporary teeth: classification, diagnosis	Practical demonstrations, case presentations	-	-	4
7	Acquiring specific methods of treatment in temporary teeth	Practical demonstrations, case presentations	-	-	4
8	Treatment of necrosis and gangrene in temporary teeth: endodontic treatment, compromise measures, extraction	CBL	-	-	4
9	Simple caries in permanent immature teeth: diagnosis and treatment	Practical demonstrations, case presentations	-	-	4
10	Local methods of the dental caries prevention	Practical demonstrations, case presentations	-	-	4
11	Pulp inflammation in permanent immature teeth: diagnosis	Practical demonstrations, case presentations	-	-	4
12	Particular methods of treatment in permanent immature teeth	CBL	-	-	4
13	Clinical importance of the dental replacement in the support area	CBL	-	-	4
14	Paediatric dental emergencies	Practical demonstrations, case presentations	-	-	4

Bibliography

-Eșian D, Păcurar M, Jurcă A, Bud E, Bică C - Pedodonție. Îndrumător de lucrări practice. Editura University Press Tîrgu Mureș, 2014

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

Knowledge about the most recent techniques and dental materials, noninvasive early diagnosis methods, treatment of initial carious lesions in early stages in primary and permanent immature teeth

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge and skills acquirement	2 TBL sessions	15
- practical activities	Practical skills acquired during practical activities	4 CBI sessions	25
Final evaluation			
- theoretical final exam	Knowledge and skills acquirement	Written MCQ	40
- practical final exam	Practical skills acquired during practical activities	Practical examination	20

Minimal performance standards:

-Minimal grade required for the promotion of the exam is 5 (the final grade being a result of the evaluations during the semester and the final exam)

-The student has to attend the evaluation during the semester (TBL and CBL sessions)

-The final practical exam is mandatory, the minimal grade required for promotion being 5

-In case of absence at the TBL sessions, the students will receive the grade 1; there is no possibility to repeat this evaluation, but the student will be allowed to attend the final exam.

CLINICAL and PARACLINICAL SKILLS:

-paediatric patient's history and clinical examination (2)

-seals (2)

-simple caries of the temporary teeth - diagnosis, cavity preparation (2)

-simple caries of the permanent immature teeth - diagnosis, cavity preparation (2)

-complicated caries of the temporary teeth - diagnosis, treatment and restoration (2)

-radiological investigations (4)

-performing of the pediatric dental emergencies (2) -temporary teeth extraction (2)

11. Must seen clinical situation list

MUST SEEN CLINICAL SITUATIONS LIST:

1. Rhizolysis of temporary teeth
2. Early eruption
3. Late eruption
4. Eruption order disorders
5. Disorders of eruption rhythm
6. Dental malposition
7. Acute caries of the temporary teeth
8. Chronic caries of the temporary teeth
9. Early childhood caries
10. Chronic pulpitis in temporary teeth
11. Necrosis and gangrene in primary teeth (facial edema)
12. Superficial cavity in permanent immature teeth
13. Deep cavity in permanent immature teeth
14. Dental trauma

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Bica Cristina-Ioana	4th Module, Friday, 8,00-10,00

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: Oral and Maxillo-Facial Surgery, MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dental radiology			
2.2 Course coordinator: Șef I dr Iacob Alina			
2.3 Practical activities coordinator(s): Șef I Dr Iacob Alina, Șef I dr Cosarca Adina, Șef I dr Petrovan Cecilia, Asist Univ Berecki Temistocle Despina			
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: 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: 7		
- supplemental documentation at the library, from specialized information portals and in the field: 7		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 1		
- examinations: 6		
- other activities: 1		
3.8 Total hours of individual study: 28		
3.9 Total hours: 84		
3.10 Credits: 3		

4. Prerequisites (where applicable)

4.1 curricular:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Course room
5.2 for practical activities:
practical activity room, negatoscope

6. Specific competencies acquired

6.1 professional competencies:
The students will learn dental radiography techniques and incidents used in dental medicine and maxillo-facial surgery. Learning radiological anatomy of teeth and jaws. The ability to identify on x-ray films, dental structures and facial bones and to diagnose any lesion if exist. Learning radioprotection methods for medical stuff and patient.
6.2 transversal competencies:
Know what radiation means and which are the protection rules; the rules of asepsis and antisepsis in radiology lab. 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:

Acquiring dental radiography techniques. Learning radiological incidents used in dental medicine and oro-maxillo-facial surgery. Theoretical knowledge and practical application of radioprotection methods for the doctor and the patient

7.2 Specific objectives:

The ability to recognize on X-ray images of the dental structures and facial bones and to determine pathological modifications.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Generalities - Dental X-ray device. X-ray film. X-ray image formation	Multimedia presentation, discussions	-	-	2
2	How is obtained the X-ray image. Imaging principles and techniques	Multimedia presentation, discussions	-	-	2
3	Radiation safety and protection in dentistry	Multimedia presentation, discussions	-	-	2
4	Normal radiographic anatomy	Multimedia presentation, discussions	-	-	2
5	Imaging principles and techniques used in dental and maxillo-facial area	TBL	TBL 1	-	2
6	Radiographic techniques used in dentistry (intraoral radiographic examination, panoramic imaging)	Multimedia presentation, discussions	-	-	2
7	Oral and Maxillo-facial Disorders. Interpretation of x-ray images	Multimedia presentation, discussions	-	-	2
8	Dental Anomalies	Multimedia presentation, discussions	-	-	2
9	Dental caries; complications of caries; periodontal disease	Multimedia presentation, discussions	-	-	2
10	Inflammatory lesions of the jaws; trauma; cysts of the jaws	TBL	TBL 2	-	2
11	Maxillary sinus imaging; benign and malignant tumors of the jaws	Multimedia presentation, discussions	-	-	2
12	salivary glands; temporomandibular joint	Multimedia presentation, discussions	-	-	2
13	Radiological examination in dental practice	Multimedia presentation, discussions	-	-	2
14	Wrong X-rays. Sources of errors	Multimedia presentation, discussions	-	-	2

Bibliography

1. White S.C., Pharoah M.J.: Oral Radiology: Principles and Interpretation, 5th Edition, Mosby, Philadelphia 2004

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Dental X-ray device (machine). X-ray film. X-ray image formation	Presentation of the X-ray machine and how it works, discussions	-	-	2
2	How radiographic image is obtained	Practical presentation of X-ray developer, discussions	-	-	2
3	Radioprotection in dentistry. Practical aspects	Multimedia presentation, discussions	-	-	2
4	Normal Radiographic Anatomy	Multimedia presentation, discussions CBL	CBL 1	-	2
5	Radiographic techniques used in dental medicine	X-ray images study (observation) and interpretation	-	-	2
6	Radiography of the jaws (panoramic imaging)	X-ray films study (observation) and interpretation CBL	CBL 2	-	2
7	Oral and Maxillofacial Disorders. Interpretation of radiographic images	X-ray films study (observation) and interpretation	-	-	2
8	Dental Anomalies	X-ray images study (observation) and interpretation	-	-	2
9	Dental caries; complications of caries; periodontal disease	X-ray images study (observation) and interpretation CBL	CBL 3	-	2
10	Inflammatory lesions; trauma; cysts of the jaws	X-ray images study (observation) and interpretation	-	-	2
11	Diagnostic imaging of maxillary sinus pathological conditions; benign and malignant tumors of the jaws	X-ray images study (observation) and interpretation CBL	CBL 4	-	2
12	Salivary gland radiology; diagnostic imaging of the temporomandibular joint	X-ray images study (observation) and interpretation	-	-	2
13	Guidelines for prescribing dental radiographs	X-ray images study (observation) and interpretation	-	-	2
14	Wrong X-rays. Sources of errors in dental radiology	X-ray images study (observation) and interpretation	-	-	2

Bibliography

1. White S.C., Pharoah M.J.: Oral Radiology: Principles and Interpretation, 5th Edition, Mosby, Philadelphia 2004
2. Langlais R.: Exercises in Oral Radiology and Interpretation, 4th Edition. Elsevier Science (USA).2004

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 4th year the students should be able to recognize the normal appearance on X-rays (panoramic and retroalveolar) of the teeth and jaws. They should be able to identify different pathological dental and maxillo-facial lesions and to establish a general diagnosis based on X-ray image.

10. Evaluation

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

- lecture	Depending on discipline's specific objectives	The mean of the TBLs	15
- practical activities	According on discipline's specific objectives	The mean of the CBLs	15
Final evaluation			
- theoretical final exam	According on discipline's specific objectives	Written evaluation - multiple choice questions.	50
- practical final exam	According on discipline's specific objectives	Test / Multiple choice questions / X-ray interpretation	20
Minimal performance standards: Final Theoretical Examination Mark - minimum 5; mark <5 = exam failed; Practical final exam mark - minimum 5; mark <5 = exam failed; Final mark - minimum 5; mark <5 = exam failed. The presence - mandatory for practical activities; 20% unmotivated absences are allowed (4 hours PA = 2 PA); > 20% unmotivated and unrecovered absences = exam failed			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

The students should be able to interpret panoramic X-ray and retroalveolar X-ray. They must recognize normal anatomy and abnormal modifications on these images and to describe them accordingly.

13. Appointment timetable (for students)

Şef I dr Iacob Alina	30 minutes after each course/PA.

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Psychiatry			
2.2 Course coordinator: Conf dr Mihai Adriana			
2.3 Practical activities coordinator(s): post vacant			
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: 6		
- supplemental documentation at the library, from specialized information portals and in the field: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 2		
- examinations: 4		
- 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: Psychiatric semiology, normal psychologic status, behaviour science
4.2 competency: ability to do an anamnesis, respect for ethical and cultural differences

5. Conditions

5.1 for lectures: power point presentation, short video movies, TBL, debates
5.2 for practical activities: video presentation, case presentation, CBL, debates, role play

6. Specific competencies acquired

6.1 professional competencies: thorough going study regarding the strategy, technique and methodology of case approach
6.2 transversal competencies: Improving the positive and responsible attitudes towards mental disorders and psychiatry
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:

Achievement of general notions regarding the mental disorders and psychiatric approach

7.2 Specific objectives:

Concrete approach of specific pathology (anxiety disorders, affective disorders, psychosis, addictions, etc)

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in psychiatry. Normality and abnormality. Mental Health	lecture, power point presentation, debates	students should be involved	Agresiune/Violenta, Tulburari ale constientei, Tulburari de somn, Oboseala, Castig ponderal, Pierdere ponderala	2
2	Psychopathology. Psychiatric anamnesis. Psychiatric examination	lecture, power point presentation, debates	students should be involved	Agresiune/Violenta, Tulburari ale constientei, Tulburari de somn, Oboseala, Castig ponderal, Pierdere ponderala	2
3	Personality traits and personality disorders	lecture, power point presentation, debates	students should be involved	Agresiune/Violenta,	2
4	Anorexia and bulimia and other feeding disorders	lecture, power point presentation, debates	students should be involved	Tulburari de comportament alimentar	2
5	Psychotic disorders. Schizophrenia. Addictions	lecture, power point presentation, debates	students should be involved	Schizofrenie	2
6	Affective disorders. Anxiety disorders.	lecture, power point presentation, debates	students should be involved	Tulburari afective, Anxietate/Fobie, Doliu, Depresie, Somatizare, Abuz de substante	2
7	Dementia. Intellectual Disabilities. Substance use disorders.	lecture, power point presentation, debates	students should be involved	Patologii degenerative ale SNC, uz de substante	2

Bibliography

Compulsory:

1. Kaplan & Sadock's, Comprehensive Textbook of Psychiatry, vol 1 -2Ed IIPPINCOTT Williams and Wilkins, 2016
2. Adriana Mihai, Otilia Butiu, Child and Adolescent Psychiatry, Ed Risoprint, Cluj Napoca 2014

Optional:

3. D. Nutt and J. Ballenger, Anxiety Disorders - Panic Disorder and Social Anxiety Disorder, Ed Willey Blackwell, 2005
4. Raymond W. Lam, Depression, Ed Oxford, 2012
5. David Goldberg, Robin Murray, The Maudsley Handbook of Practical Psychiatry, Ed Oxford, 2006

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Anamneza si exaluarea psihiatrica a pacientului psihic	joc de rol, prezentare caz	studentii vor fi implicati	normal child development	2
2	Tulburari din spectru afectiv	joc de rol, prezentare caz	studentii vor fi implicati	affective disorders, depression, suicide	2
3	Tulburari psihotice si schizofrenia	joc de rol, prezentare caz	studentii vor fi implicati	schizophrenia	2
4	Tulburari anxioase, obsesiv compulsive si de somatizare	joc de rol, prezentare caz, prezentare video	studentii vor fi implicati	somatisation	2

5	tulburari de personalitate	joc de rol, prezentare caz, prezentare video	studentii vor fi implicati	normal child development	2
6	Tulburari de adictie (alcool, drog si comportamente adictive)	joc de rol, prezentare caz, prezentare video	studentii vor fi implicati	drug use	2
7	Tulburari neurocognitive si disabilitati intelectuale	joc de rol, prezentare caz, prezentare video	studentii vor fi implicati	degenerative CNS disease	2

Bibliography

Bibliography

Compulsory:

1. Kaplan & Sadock s, Comprehensive Textbook of Psychiatry, vol 1 – 2Ed, LIPPINCOTT Williams and Wilkins, 2016
2. Adriana Mihai, Otilia Butiu, Child and Adolescent Psychiatry, Ed Risoprint, Cluj Napoca 2014
3. Glen O. Gabbard, M.D., Gabbard's Treatments of Psychiatric Disorders, 5th Edition
4. Kaplan & Sadock s, Comprehensive Textbook of Psychiatry, 50th Aniversary Edition, LIPPINCOTT Williams and Wilkins, 2017
5. D. Nutt and J. Ballenger, Anxiety disorders – Panic Disorder and Social Anxiety Disorder, Ed Willey Blackwell, 2005

Optional:

6. Raymond W. Lam, Depression, ed Oxford, 2012
7. David Goldberg, Robin Murray, The Maudsley Handbook of Practical Psychiatry, Ed Oxford, 2006
8. Adriana Mihai, Otilia Butiu, Child and Adolescent Psychiatry, Ed Risoprint, Cluj Napoca 2014
9. Glen O. Gabbard, M.D., Gabbard's Treatments of Psychiatric Disorders, 5th Edition

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

The discipline offer the minimum acknowledgement about psychiatry and patients with psychiatric comorbidities with the purpose of a acomplex approach of each patient. Notion of mental health are necessary for psychoeducation in general community

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Problem understanding, no stigmatisation	TBL	10
- practical activities	Communication ability, practical skills	Case presentation	20
Final evaluation			
- theoretical final exam	Theoretical knowledge evaluation	Written examination: questions with multiple choice answers	50
- practical final exam	Case understanding, medical thinking, treatment plan	Clinical evaluation	20

Minimal performance standards:

For minimal standard the students have to recognise the signs and symptoms in psychiatry, make diferences between normal and pathological behaviour, elaborate a major diagnostic category and propose the treatment plan.

11. Must seen clinical situation list

Affective disorders, Anxiety disorders, Psychotic disorders, Substance related disorders, Dementia

12. Clinical / practical abilities

anamnesis, psychiatric evaluation, diagnosis, treatment plan

13. Appointment timetable (for students)

Conf dr Mihai Adriana	monday 18.00-19.00

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Neurology			
2.2 Course coordinator: Șef I dr Bajko Zoltan			
2.3 Practical activities coordinator(s): Bajko Zoltan, Laura Barcutean			
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 seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 5		
- examinations: 1		
- other activities: 1		
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:
-Fixing and deepening of basic concepts related to neuroanatomy, the neurological semiology, neurology with which the student will face during exercise profession.
-Acquiring the necessary knowledge on the causes, investigations, the neurological manifestations of these disease, especially diagnosis and treatment. Some patients in addition to the underlying disease, usually shows heart problems, lung problems, liver problems, kidney problems, diabetes etc. which may cause the neurological disease.
-Filling the whole range of medical knowledge that are required to be known and applied

6.2 transversal competencies: - Identifying roles and responsibilities within a multidisciplinary team and applying of effective working techniques in team framework and in relationship with the patient.. - Effective use of information sources and communication resources and training assistance (portals, Internet, specialized software, data bases, online courses, etc.). both in romanian and in a foreign language. - Project working under coordination to solve specific issues with accurate assessment of workload, of available resources and time required to complete with application of the rules of conduct and professional ethics in the field, and health and safety 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: knowledge of neurological semiology and pathology
7.2 Specific objectives: Acquiring the necessary knowledge on the causes, investigations, neurological manifestations and especially the recovery. In the case of a patient with additional heart problems, lung problems, liver problems, kidney problems, diabetes etc. (which are involved in the etiology of the neurological disease), completing the full range of care and medical knowledge that is required to be known and applied.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction in neurology. Upper motor neuron syndrome	Oral lecture, drawing, video projection. Cases presentation	.	Cerebral palsy, cerebrovascular disorders, movement disorders, multiple sclerosis	1
2	Lower motor neuron syndrome, pathology of the peripheral nervous system (ALS, Polineuropathies, Lumbar disc herniation)	CBL, Oral lecture, drawing, video projection. Cases presentation.	.	peripheral nerve disorders, movement disorders, cranial nerve disorders	1
3	Senzitive syndromes, syringomyelia, neurological complications of syphilis	Oral lecture, drawing, video projection. Cases presentation	.	peripheral nerve disorders	1
4	Spinal cord syndromes, vestibular syndromes, cerebellar syndromes	Oral lecture, drawing, video projection. Cases presentation	.	spinal cord malformations, dizziness, cerebrovascular disorders, vomiting	1
5	Brainstem syndromes, headache, cranial neuralgias	Oral lecture, drawing, video projection. Cases presentation	.	headache, migraine, peripheral nerve disorders	1
6	Extrapiramidal syndromes, Parkinson's disease, Wilson disease	Oral lecture, drawing, video projection. Cases presentation	.	movement disorders, cromosomal disorders, hereditary metabolic disorders	1
7	Cortical syndromes, epilepsy, disorder of consciousness	Oral lecture, drawing, video projection. Cases presentation	.	epilepsy, Disturbance of consciousness, cerebrovascular disorders	1
8	Intracranial hypertension syndrome, meningeal syndrome, recapitulation of the major neurological syndromes	Oral lecture, drawing, video projection. Cases presentation	.	dizziness, cerebrovascular disorders, vomiting, headache	1
9	The vascularization of the brain	Oral lecture, drawing, video projection. Cases presentation	.	cerebrovascular disorders	1
10	Multiple sclerosis, myasthenia gravis	CBL, Oral lecture, drawing, video projection. Cases presentation.	.	multiple sclerosis, movement disorders	1

11	TBL, Stroke	TBL, Oral lecture, drawing, video projection. Cases presentation	.	cerebrovascular disorders	1
12	Ischaemic stroke	Oral lecture, drawing, video projection. Cases presentation	.	cerebrovascular disorders	1
13	Hemorrhagic stroke	Oral lecture, drawing, video projection. Cases presentation	.	cerebrovascular disorders	1
14	Muscular diseases	Oral lecture, drawing, video projection. Cases presentation	.	multiscular disorders, movement disorders	1

Bibliography

Bibliography:

1. Bălașa R. Major neurological syndromes. Editura University Press Târgu Mureș, 2012, 252 pg, ISBN 978-973-169-191-6, cod CNCSIS 210.

2. Adams ,R.; Victor, M.; - Principles of Neurology-Mc Graw-Hill, New York, 2007

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Neurological history taking (anamnesis)	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.	.	confusion, dizziness, disturbance of consciousness, headache, cerebrovascular disease, migraine, peripheral nerve disorders	1
2	Examination of the sensory system.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.	.	cranial nerve disorders, cerebrovascular disease, peripheral nerve disorders, multiple sclerosis	1
3	Motor system: examination of the muscle tone, the semiology of the muscle tone disorders.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.	.	peripheral nerve disorders, cerebral palsy, disorders of muscle	1
4	Motor system: examination of the reflexes, the semiology of the pathological reflexes.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.	.	peripheral nerve disorders, cerebral palsy, disorders of muscle	1
5	Examination of the balance and coordination.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.	.	dizziness, cerebrovascular disease, peripheral nerve disorders	1
6	Examination of the unconscious patient.	CBL, Bedside learning-internship, using teaching aids such as: atlases	.	confusion, disturbance of consciousness, raised intracranial pressure, encephalopathy	1

		of anatomy and pathology, etc.			
7	Examination of the cranial nerves (I-XII).	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		cranial nerve disorders	1
8	Clinical case reports: ischaemic stroke.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		Clinical case reports: ischaemic stroke.	1
9	Clinical case reports: hemorrhagic stroke.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		cerebrovascular disease	1
10	Clinical case reports: multiple sclerosis, Parkinson's disease.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		multiple sclerosis	1
11	Clinical case reports: miasthenia gravis and epilepsy.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		Clinical case reports: miasthenia gravis and epilepsy.	1
12	Paraclinical examinations: lumbar puncture (spinal tap), CSF examination. Electroencephalography and electromiography in normal and pathological conditions, cervico-cerebral artery ultrasound	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		meningitis, cerebrovascular disorders, epilepsy	1
13	Clinical case reports: spinal cord pathology and peripheral nervous system pathology	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		peripheral nerve disorders	1
14	Neuroradiological demonstrations: CT scan, MRI, DSA. 15. Clinical case reports: peripheral nervous system pathology.	CBL, Bedside learning-internship, using teaching aids such as: atlases of anatomy and pathology, etc.		cerebrovascular disease, multiple sclerosis	1

Bibliography

Bibliography:

1. Bălașa R. Major neurological syndromes. Editura University Press Târgu Mureș, 2012, 252 pg, ISBN 978-973-169-191-6, cod CNCIS 210.

2. Adams ,R.; Victor, M.; - Principles of Neurology-Mc Graw-Hill, New York, 1997

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

NA

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL-CEREBROVASCULAR DISORDERS	TBL	20
- practical activities	NA	NA	0
Final evaluation			
- theoretical final exam	-the knowledge of the material of theoretical lectures	multiple choice test	60
- practical final exam	-the knowledge of major neurological syndromes, positive diagnosis, paraclinical investigations, case presentation	-CASE PRESENTATION	20
Minimal performance standards: Minimum performance standard: the student will need to know 50 % of exam topics			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Bajko Zoltan	Thursday 10-11

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M3
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pediatrics			
2.2 Course coordinator: Șef I dr Chinceșan Mihaela-Ioana			
2.3 Practical activities coordinator(s): Șef I dr Chinceșan Mihaela-Ioana			
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: 4		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 7		
- tutorial activities: 0		
- examinations: 4		
- 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: 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 2

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 este cazul	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 este cazul	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, Epiglottitis, Acute bronchiolitis, Asthma, Pneumonia- definitions, general symptomatology, treatment	Oral presentation + multimedia	nu este cazul	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	Team based learning course	nu este cazul	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 este cazul	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 prognosis	Oral presentation + multimedia	nu este cazul	anemia, lymphadenopathy; splenomegaly; lymphoproliferative disorders; purpura; coagulation disease	2
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 este cazul	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 CNCIS 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 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	CHILD CARE NOTIONS. Clinical exam in child and infant. Clinical chart in pediatrics. Methods for assessing the child's and infant's growth and development (percentiles, weight, height, perimeters), neurological, psychical and motor development, temporary and permanent teething.	CBL	nu este cazul	Normal child development, Malnutrition, Weight gain	2
2	THE NEWBORN. Infant's deficiency disorders. Newborn at term, preterm, post-mature and dysmature. Archaic reflexes. The newborn's crises. Exclusive and preponderant alimentation, food diversification.	practical demonstrations, discussions, case presentations	nu este cazul	Normal pregnancy and deliver, Normal child development, Jaundice, Infant feeding	2
3	THE PATHOLOGY OF THE RESPIRATORY SYSTEM: Upper airways infections – clinical recognition, laboratory and paraclinical exams. Low airways infections – clinical recognition, laboratory and paraclinical examinations. Acute respiratory distress, clinical criteria for recognition, therapy with oxygen, indications.	practical demonstrations, discussions, case presentations	nu este cazul	Oral disorders, Dysphagia, Respiratory tract infection, Breathlessness, Stridor, Cyanosis, Asthma, Acid based disturbance	2

4	THE PATHOLOGY OF THE DIGESTIVE SYSTEM. Clinical criteria to define the 1st, 2nd, and 3rd degree acute dehydration syndrome, clinical approach. Describing the normal and pathological stools in infant, noting in the clinical chart. INFANT'S DEFICIENCY DISORDERS: Rickets – clinical picture, radiological exam, diagnosis, treatment, prophylaxis	practical demonstrations, discussions, case presentations	nu este cazul	Abdominal pain; Loose stools; Vomiting; Peptic ulcer; Disorders of calcium and vitamin D metabolism	2
5	THE PATHOLOGY OF THE CARDIOVASCULAR SYSTEM. The anamnesis of the child with congenital cardiopathy. The clinical exam of the child with congenital cardiac malformations. Clinical approach. Paraclinical investigations. Clinical recognition of cardiac failure and shock in child. Infectious endocarditis – prophylaxis.	practical demonstrations, discussions, case presentations	nu este cazul	Cyanosis, Breathlessness, Oedema; Malformations of cardiovascular system Hepatomegaly, Endocarditis	2
6	THE HEMATOLOGICAL PATHOLOGY. Anemias – Iron deficiency anemia – clinical picture, laboratory, prophylactic and curative treatment; Leukemias - laboratory, treatment. Hemorrhagic diatheses, hemophilia, platelets disorders: criteria of clinical recognition, practical approach of hemostasis	practical demonstrations, discussions, case presentations	nu este cazul	Anemia, Lymphadenopathy; Splenomegaly; Lymphoproliferative disorders; Purpura; Coagulation disease	2
7	PATHOLOGY OF THE RENO-URINARY SYSTEM. Urinary tract infections, Urinary exam, Nephrotic syndrome and Glomerulonephritis - clinical approach, nephritis and nephrosis diets	practical demonstrations, discussions, case presentations	nu este cazul	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 CNCIS 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 speciality.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	punctaj obtinut	1 TBL – test grila	10
- practical activities	acuratetea prezentarii cazului	1 CBL –prezentare de caz	20
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: Minimal grade required for the promotion of the exam is 5 (the final grade being a result of the evaluations during the semester and the final exam) - In order to be able to sustain the final theoretical exam, the student has the obligation to be present at the evaluation during the semester - The final practical exam is mandatory, the minimal grade required for promotion being 5 - Presence of TBL session is compulsory; there is no possibility to repeat this evaluation. In case of absence at the TBL sessions, the students will receive the grade 1; there is no possibility to repeat this evaluation; but the student will be allowed to sustain the final exam.			

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)

Şef I dr Chinceşan Mihaela-loana	Miercuri 14-15

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD 1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Aesthetics in orthodontics			
2.2 Course coordinator: Șef I dr Chibelelean Manuela			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: V	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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 12		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 4		
- tutorial activities: 2		
- examinations: 2		
- other activities: 2		
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:
Projector, computer - laptop, flipchart
5.2 for practical activities:
-

6. Specific competencies acquired

6.1 professional competencies:
6.1 profesionale:
Development of Advanced and personalized treatment plan clinical study (Model analysis, X-ray evaluations additional studies (OPG, TELERX), photo test, static and functional
. Occlusion, Anthropometric measurements
. Complex morphology, etiology and functional orthodontic diagnosis establishment of the use of aesthetic diagnosis in
filling in the orthodontic form Assessing
the harmony of the face
based on

photographic examination and radiographic evaluation Mastering the exact technique of photography Precise knowledge of the development and growth processes of the dento-maxillary apparatus Assessing the need for orthodontic treatment using IOTN indices

6.2 transversal competencies:
Getting to know the goals to be achieved, the steps of treatment, their deadlines and possible risk factors
Finding an individual role as a member of a pluridisciplinary team
Orthodontic screening in communities of different ages, conducting pathological surveys. Timely diagnosis of skeletal disorders, disorders causing aesthetic disorders management of half of specialist clinics . Writing and presenting dissertations in Romanian and international languages using the information source material effectively, knowing the principles of communication Objectives, work phases, available source

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:
Complex orthodontic diagnosis, establishment of a treatment plan, identification of therapeutic objectives taking into account the aesthetics of the face

7.2 Specific objectives:
Knowledge of the parameters responsible for facial harmony (photo analysis, remote X-ray evaluation)
Optimal timing of treatment of dental disorders Establishment of a complex orthodontic treatment plan depending on the age and general condition of the child, depending on the type of disorder

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	History of facial esthetics evaluation. The role of the anthropometric measurements in establishing the general development of the human body	Lecture, projection	-	-	1
2	Facial macroesthetics. Photostatic evaluation. Facial proportions and profile analysis.	Lecture, projection	-	-	1
3	Profile changes during somatic growth. Facial harmony: lips, eyes, nose and forehead evaluation.	Lecture, projection	-	-	1
4	The role of cephalometry in the evaluation of soft tissue balance	Lecture, projection	-	-	1
5	Facial miniesthetics. Smile analysis. Orthodontic approach of the gummy smile	Lecture, projection	-	-	1
6	Facial miniesthetics. Lips- teeth proportion. The tooth morphology (black triangles)	Lecture, projection	-	-	1
7	Cephalometric measurements for facial esthetics evaluation, Ricketts E line, the Z angle.	Lecture, projection	-	-	1
8	Ortho- esthetic treatment options, The advantages of the lingual technique. The role of the ceramic brackets.	Lecture, projection	-	-	1

9	Esthetic evaluation of different dental anomalies	TBL - modules	Students are informed about the topic in time, they have the opportunity to prepare individually before the lecture	-	1
10	Orthodontic treatment need evaluation. The importance of angular and metric measurements of facial harmony	Lecture, projection	-	-	1
11	Esthetic evaluation questionnaires. IOTN (index of orthodontic treatment need)	Lecture, projection	-	-	1
12	Esthetic report. Differences between professional evaluation and autoevaluation	Lecture, projection	-	-	1
13	The importance of orthodontics and orthognatic surgery in improvement of the facial esthetics	Lecture, projection	-	-	1
14	Iatrogenic orthodontic therapies and facial esthetics.	Lecture, projection	-	-	1

Bibliography

V Graber: Orthodontics current principles and techniques, Mosby, Elsevier 2011M Fradeani: Esthetic Analysis, Quintessence publishing, 2004

W. Proffit: Orthodontics. Editura Mosby Philadelphia, 2005

E. Ionescu: Manual pentru rezidentiat vol 1,2, ed. Univ. Caro 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 content of the course is in accordance with the dental medicine employees needs.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Evaluate on entire semestre TBL 10%. assignment 20%	Discussing complex cases in individual and group activities	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	The theoretical acquisition of the subject in question according to the material of the lectures	Written survey / test - with one or more hit test questions, descriptive parts	70
- practical final exam	-	-	0
Minimal performance standards: Final ticket - achievement of a minimum rating of 5			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef I dr Chibelea Manuela	wednesday 10-11

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Orthodontics (1)			
2.2 Course coordinator: Prof dr Mártha Ildikó-Krisztina			
2.3 Practical activities coordinator(s): Prof.dr. Mariana Păcurar, Assoc.prof.dr.. Martha Krisztina, Lecturer Bud Eugen, Lecturer Pop Silvia Izabella, Lecturer Manuela Chibeleian, Asist.dr. MahmoudnEl Saafin			
2.4 Year of study: V	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: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 18		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 18		
- tutorial activities: 2		
- examinations: 5		
- other activities: 3		
3.8 Total hours of individual study: 66		
3.9 Total hours: 150		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: Complex orthodontic diagnosis and individualized treatment plan
4.2 competency: Basic knowledge of dental morphology, dental occlusion

5. Conditions

5.1 for lectures: Computerized presentation, projector, flipchart
5.2 for practical activities: Treatment halls, dental units, negatoscopes

6. Specific competencies acquired

6.1 professional competencies: Elaboration of a complex and individualized treatment plan by clinical examination, complementary examinations (model analysis, radiography examination (OPG and teleradiography), photostatic exam, static and dynamic occlusion examination, anthropometric measurements) Establishing a morphological, etiological, and functional orthodontic complex diagnosis. Establishing therapeutic goals. Preparing the patient for the orthodontic therapy Knowing the stages of ADM growth and development, the importance of space management in mixed and permanent dentition Knowledge of methods to combat malfunctions and dysfunctions of dento-maxillary apparatus. Selective drilling,

stripping, exercises of myogymnastics.
6.2 transversal competencies: Identifying the objectives to be achieved, the working steps, the implementation deadlines, the available resources, the risks and the conditions for completion a stabile and functional occlusion; Identifying the role and responsibility of a multidisciplinary team; Performing orthodontic screenings in different age groups to identify the epidemiological aspects of different types of malocclusion; Early identification of serious skeletal disorders, of facial harmony and orientation towards specialist surgery. Effective use of information resources, communication and training resources both in Romanian, Hungarian and in an international language, in order to elaborate and present a specialized paper; Identifying objectives, work phases, available resources, risk factors in targeted 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: Elaboration of an orthodontic complex diagnosis and identification of the therapeutic objectives.
7.2 Specific objectives: Acquisition of organogenetic disorders in the form of certain dento-maxillary abnormalities, approaching dysfunctions, and malfunctions. Clinical and therapeutic particularities of orthodontic malocclusions. Designing a complex orthodontic treatment plan based on the child's age and general health status, focusing on the nature of the anomaly.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Growth and development of the craniofacial complex	Oral, multimedia presentation	-	-	2
2	Classification of malocclusions. Clinical examination in orthodontics	Oral, multimedia presentation	-	-	2
3	The etiology of malocclusions	Team-based Learning (TBL), module 1	Early communication of the topic in order to prepare	-	2
4	Complementary examinations in orthodontics	Oral, multimedia presentation	-	-	2
5	Malocclusions in transversal plane: maxillary compression syndrome Class II anomalies	Oral, multimedia presentation	-	-	2
6	Malocclusions in the transversal plane: crossbite syndrome	Oral, multimedia presentation	-	-	2
7	Malocclusions in sagittal plane: distal occlusion	Oral, multimedia presentation	-	-	2
8	Malocclusions in sagittal plane: Progenic Symptom. Class III anomalies	Oral, multimedia presentation	-	-	2
9	Malocclusions in vertical plane. Deep-bite (Angle II/2)	Oral, multimedia presentation	-	-	2
10	Malocclusions in vertical plane. Open bite.	Team-based Learning (TBL), module 2	Early communication of the topic in order to prepare	-	2
11	Class I anomalies: spacing and crowding	Oral, multimedia presentation	-	-	2
12	Class I anomalies: agenesis and supranumerary teeth	Oral, multimedia presentation	-	-	2
13	Class I anomalies: dental position disorders	Oral, multimedia presentation	-	-	2

14	Labio-maxilo-palatal cleft: impression taking and orthodontic treatment plan	Oral, multimedia presentation	-	-	2

Bibliography

1. Păcurar M, Draşovean A – Anomaliile dento-maxilare – curs, Universitatea de Medicină şi Farmacie Tg.Mureş, 2015,194
2. Ecaterina Ionescu - Anomaliile dentare, Editura Cartea Universitară, Bucureşti, 2005
3. Graber T.Orthodontics: Current Principles and Tehniques. Fourth Edition. Mosby Elsevier, 2005

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Static monomaxilar examination	Practical demonstrations, individual activity and small groups	-	-	4
2	Static bimaxilar exams	Practical demonstrations, individual activity and small groups	-	-	4
3	Cast analysis: developmental indexes of dentoalveolar arches, perimeter, Bolton index	Case Based Learning (CBL) module 1	Complex clinical case study	-	4
4	Photostatic examination in orthodontics	Practical demonstrations, individual activity and small groups	-	-	4
5	Complementary examinations in orthodontics	Practical demonstrations, individual activity and small groups	-	-	4
6	Orthodontic clinical examination	Practical demonstrations, individual activity and small groups	-	-	4
7	Radiographic examination: OPG, lateral cephalometry	Practical demonstrations, individual activity and small groups	-	-	4
8	Clinical and radiological examination in Orthodontic	Case Based Learning (CBL) module 2	Complex clinical case study	-	4
9	Diagnostics of class I anomalies. Treatment goals	Practical demonstrations, individual activity and small groups	-	-	4
10	Diagnosis of class I malocclusions. Crowding	Case Based Learning (CBL) module 3	Complex clinical case study	-	4
11	Diagnostics of class II malocclusions. Treatment goals	Practical demonstrations, individual activity and small groups	-	-	4
12	Etiological, morphological, and functional diagnosis in class II / 1 malocclusions	Case Based Learning (CBL) module 3	Complex clinical case study	-	4
13	Diagnosis of Class III malocclusions Treatment goals	Practical demonstrations, individual activity and small groups	-	-	4
14	Case presentation	Practical demonstrations, individual activity and small groups	-	-	4

Bibliography

1. Mariana Păcurar, Cristina Bică, Claudia Ursu - Caiet de lucrări practice de ortodonție. Litografia UMF Tg.Mureş, 2003
2. Mariana Păcurar, Cristina Bică, Martha Krisztina, Anca Draşoveanu, Eugen Bud - Îndreptar de lucrări practice. Aparat ortodontice. Litografia UMF Tg.Mureş, 2006
3. Mártha Krisztina, Cristina Bică: OrthoAtlas, Ed. University Press Tg. Mureş, 2015, ISBN: 978-973-169-329-3

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

Acquisition of theoretical and practical knowledge necessary for the understanding and profound knowledge of the clinical symptomatology of malocclusions, their characteristics, and the way of achieving an individualized therapeutic plan.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	Mean grade of the 2 TBL modules	15
- practical activities	CBL	Mean grade of the 4 CBL modules	25
Final evaluation			
- theoretical final exam	test	Multiple choice test	40
- practical final exam	Practical exam	Practical exam	20
Minimal performance standards: The final mark for promotion is 5 (five) and is made up of the assessments during the semester (TBL, CBL) respectively the final examinations. The student is required to attend all the evaluations throughout the academic year. If absent from a TBL module, the mark will be 1; there is no possibility of repeating this assessment, but it will still be possible to support the final exam. In the case of absences at TBL sessions for extremely justified reasons, the student has the possibility to draw up a review on the topic The final practical exam is mandatory, with the minimum promotion mark being 5.			

11. Must seen clinical situation list

MUST SEEN CLINICAL CASES - mandatory clinical cases presented to students during the semester:

1. Maxillary compression with protrusion
2. Maxillary compression without protrusion
3. Mandibular lateral shift
4. Crowding
5. Spacing
6. Upper lateral incisor agenesis
7. Agenesis of second bicuspid
8. Retention of canine
9. Class II / 1 malocclusion
10. Class II / 2 malocclusion
11. Open bite
12. Functional class III malocclusion
13. Anatomical class III malocclusion

12. Clinical / practical abilities

Minimum standards for practical works during the semester, which conditions the participation in the practical and theoretical examination in the session:

Static monomaxillary exam, study model 2
 Static bimaxillary exam, study model 2
 Orthodontic impression 2
 Analysis of the study cast (measurements) 2
 Photostatic Exam 2
 Radiological exam: OPG 3
 Analysis of lateral cephalometry 3
 Analysis of the documentation for cl. I. malocclusion 2
 Analysis of the documentation for cl. II / 1. malocclusion 2
 Analysis of the documentation for cl. II / 2. malocclusion 2
 Analysis of the documentation for cl. III. malocclusion 2
 Orthodontic Sheet 2
 Preparation of the laboratory sheet 2
 Case presentation 2

13. Appointment timetable (for students)

Prof dr Mártha Ildikó-Krisztina	Tuesday, 9.00-9.30 am

Head of department

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MDII
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Oral and maxillo-facial surgery (1)			
2.2 Course coordinator: Senior lecturer Dr. Coșarcă Adina-Simona			
2.3 Practical activities coordinator(s): Senior lecturer Dr. Iacob Alina, Assistant Lecturer Temistocle Despina, Senior Lecturer Petrovan Cecilia			
2.4 Year of study: V	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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 22		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 7		
- examinations: 12		
- other activities: 15		
3.8 Total hours of individual study: 98		
3.9 Total hours: 154		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: A
4.2 competency: A

5. Conditions

5.1 for lectures: Laptop
5.2 for practical activities: Surgery office, demonstration room

6. Specific competencies acquired

6.1 professional competencies: Concepts description: Theories and basic notions regarding signs and symptoms of pathological conditions, used to guide the clinical diagnosis. Proper clinical and laboratory data evaluation, in order to establish positive diagnosis. Consecutively, using therapeutical resources, treatment plan elaboration. For the final diagnostic and the prognosis of the clinical case applying the techniques and the clinical acknowledgements achieved. Regarding each case, development of the treatment plan according to the phase of the disease. Examination, diagnose and treatment (when is related to the dentist), or sending the case to the oro-maxillo-facial surgeon for: accidents and disorders of eruption; infections of the maxillo facial region; dental sinusitis; teeth, bone and mucosal trauma; chistic lesions of the maxillary bone; pain syndroms in the OMF zone,

characteristic symptoms for each disease that are useful for diagnose.

6.2 transversal competencies:

Identification of: objectives to be achieved ; available resources in order to fulfill their work -stages /practical activities. Identification of role and responsibility in a multidisciplinary team, in order to apply them in an 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:

Students will learn : to be familiar(to diagnose) the eruption teeth pathology, dental impaction, maxillary infections, odontogenic sinusitis, maxillary cysts and orofacial pain syndroms, traumatic lesions in OMF region

7.2 Specific objectives:

-anamnesis, clinical examination, basic diagnosis, complementary examinations

-positive diagnosis, differential diagnosis

-individualized therapeutic treatment plan and basic life support maneuvers

-Students need to be acquainted with treatment of perimaxillary infections, craniofacial trauma, odontogenic sinusitis, oral and maxillofacial pain.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Dental eruption pathology	Oral presentation + multimedia, discussions	-	-	2
2	Dental impaction	Oral presentation + multimedia, discussions	-	-	2
3	1 Oral and maxillo facial nonspecific infections	Oral presentation + multimedia, discussions	-	-	2
4	2 Oral and maxillo facial nonspecific infections	TBL	TBL1	-	2
5	Maxillary bone nonspecific infections	Oral presentation + multimedia, discussions	-	-	2
6	Oral maxillo facial specific infections. Oral maxillo facial lymph node infection	Oral presentation + multimedia, discussions	-	-	2
7	Soft tissue injuries -Maxillofacial traumatology	Oral presentation + multimedia, discussions	-	-	2
8	Dentoalveolar trauma- Maxillofacial traumatology	Oral presentation + multimedia, discussions	TBL	TBL2	2
9	Mandibular trauma	Oral presentation + multimedia, discussions	-	-	2
10	Midfacial fractures(Fracture of the nose, zygoma, orbit and maxilla)	Oral presentation + multimedia, discussions	-	-	2
11	Maxillofacial traumatology-evolution and complications	Oral presentation + multimedia, discussions	-	-	2
12	Maxillary cysts	Oral presentation + multimedia, discussions	-	-	2
13	Odontogenic maxillary sinusitis	Oral presentation + multimedia, discussions	-	-	2
14	Oral and maxillo facial pain. Neuralgia	Oral presentation + multimedia, discussions	-	-	2

Bibliography

1. Bucur A., Navarro C.V., Lowry J., Acero J.: Compendiu de chirurgie oro-maxilo-facială, vol. 1 și 2, Editura 2009 Q Med Publishing București
2. Burlibașa C.: Chirurgie Orală și Maxilofacială, Editura Medicală, București, 1995
3. Burlibașa C.: Chirurgie Orală și Maxilofacială, Editura Medicală, București, 2003
4. Gănuță N., Bucur A.: Chirurgie Oro-Maxilo-Facială vol. I-II, Editura Național, București, 1998
5. Ibric Cioranu V.: Chirurgie Maxilo-Facială, Editura Eminescu, 2000
6. Kovács D.: Ambuláns szájsebészet, Editura UMF Tg. Mureș, Tg. Mureș, 2002

7. Kovács D.: Szájsebészet I. kötet, Editura UMF Tg. Mureş, Tg. Mureş, 1997
8. Kruger E.: Lehrbuch der chirurgischen Zahn-, Mund- und Kieferheilkunde, Band 1-2, QuintessenzVerlags, Berlin, Chicago, London, Sao Paolo und Tokio, 1988
9. Popescu V.: Curs de chirurgie buco-maxilo-facială vol. I-II., Bucureşti, 1976
10. Rotaru A., G. Băciut, Rotaru H.: Chirurgie Maxilo-Facială vol. I-II, Editura Medicală Universitară „Iuliu Hațieganu”, Cluj Napoca, 2003
11. Rowe N. L., Williams J. L.: Maxillofacial Injuries, Churchill Livingstone, Edinburgh, 1985
12. Szabó Gy.: Szájsebészet, maxillofacialis sebészet, Semmelweis Kiadó, Budapest, 2004
13. Timošca G., Burlibaşa C.: Chirurgie Buco-Maxilo-Facială, Editura Didactică şi Pedagogică, Bucureşti, 1984
14. Tucker M. R., Terry B. C.: Rigid Fixation for Maxillofacial Surgery, J. B. Lippincott Company, Philadelphia, 1991
15. Vámos I., Berényi B., Inovay J.: Szájsebészet, Medicina Könyvkiadó, Budapest, 1980
16. Fragiskos D Fragiskos, Oral Surgery Springer -2007
17. Sumit Sanghai, Parama Chatterjee, A concise textbook of oral & maxillofacial surgery, 2009
18. Jonathan Pedlar, John W. Frame . Oral and maxillo facial surgery, Elsevier 2007

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Dental eruption pathology	Case presentation,multimedia, discussions	-	-	2
2	Dental impaction	CBL	CBL1	-	2
3	1 Oral and maxillo facial nonspecific infections	Case presentation,multimedia, discussions	-	-	2
4	2 Oral and maxillo facial nonspecific infections	Case presentation,multimedia, discussions	-	-	2
5	Maxillary bone nonspecific infections	CBL	CBL2	-	2
6	Oral maxillo facial specific infections. Oral maxillo facial lymph node infection	Case presentation,multimedia, discussions	-	-	2
7	Soft tissue injuries -Maxillofacial traumatology	Case presentation,multimedia, discussions	-	-	2
8	Dentoalveolar trauma- Maxillofacial traumatology	Case presentation,multimedia, discussions	-	-	2
9	Mandibular trauma	CBL	CBL3	-	2
10	Midfacial fractures(Fracture of the nose, zygoma, orbit and maxilla)	Case presentation,multimedia, discussions	-	-	2
11	Maxillofacial traumatology-evolution and complications	Case presentation,multimedia, discussions	-	-	2
12	Maxillary cysts	CBL	CBL4	-	2
13	Odontogenic maxillary sinusitis	Case presentation,multimedia, discussions	-	-	2
14	Oral and maxillo facial pain. Neuralgia	Case presentation,multimedia, discussions	-	-	2

Bibliography

Bibliography:

1. Bucur A., Navarro C.V., Lowry J., Acero J.: Compendiu de chirurgie oro-maxilo-facială, Editura 2009 Q Med Publishing Bucureşti
2. Burlibaşa C.: Chirurgie Orală şi Maxilofacială, Editura Medicală, Bucureşti, 2003
3. Gănuţă N., Bucur A.: Chirurgie Oro-Maxilo-Facială vol. I-II, Editura Naţional, Bucureşti, 1998
4. Fragiskos D Fragiskos, Oral Surgery Springer -2007
5. Sumit Sanghai, Parama Chatterjee, A concise textbook of oral & maxillofacial surgery, 2009
6. Principles of oral and maxillo facial surgery, U J MOORE, 2011, Willey Blackwell

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

Ministerul Sanatatii
 Colegiul medicilor.
 Colegiul medicilor dentisti
 Clasificarea ocupatiilor din Romania

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade

Evaluation during the semester			
- lecture	According to the Department of oral and maxillofacial surgery	Mean TBL	15
- practical activities	According to the Department of oral and maxillofacial surgery	Mean CBL	15
Final evaluation			
- theoretical final exam	According to the Department of oral and maxillofacial surgery	Whritten evaluation-multiple choice test-	50
- practical final exam	According to the Department of oral and maxillofacial surgery	Oral /written revision on pathology studied in the course of the semester-Verification	20
Minimal performance standards: Clinical examination, investigation of the medical history of the patient- oncologic risk zones examination, basic diagnosis, complementary test request. Positive and differential diagnose. Individualized therapeutic plan, basic therapeutic manoeuvres regarding the first aid. Final theoretic exam note– min. 5; note < 5 = failed exam; Final practical exam(verification)) – min 5; note < 5 =failed exam; Final note – min 5; not < 5 = Failed exam Presence - mandatory at class and practice. 20% absence are allowed (4 hours class= 2 classes and 4 hours practice=2 practice 20% absence groundless and unrecovered= faild exam Only the absences for practice can be recovered and only during the year and the summer practice.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

Patient examination with specific pathology -making the correct diagnosis

13. Appointment timetable (for students)

Senior lecturer Dr. Coșarcă Adina-Simona	30 minute dupa orele de curs

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
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: V	2.5 Semester: 1	2.6 Type of evaluation: V	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 seminars / 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	TBL	-	-	2
5	Partial crowns - indications, contraindications, workflow	Oral + multimedia presentation	-	-	2
6	Anchoring systems - indications, contraindications, workflow Test	Oral + multimedia presentation	-	-	2
7	Adhesive bridge - indications, contraindications, workflow	Oral + multimedia presentation	-	-	2

Bibliography
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 student's acquisition of theoretical and practical knowledge is necessary to become familiar with the logic of prosthetic treatment by dental bridges, evaluate the type of pre and prosthetic maneuvers indicated, and corroborate the clinical and technical phases so that the prosthetic reconstruction meet the requirements of treated patients.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	single choice questions	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	quiz test	single/multiple choice questions	90
- 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	Tuesday 10-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: ME2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Physiotherapy in dental medicine			
2.2 Course coordinator: Șef I dr Chis Monica			
2.3 Practical activities coordinator(s): Șef I dr Chiș Monica, Asit. univ. drd. Neagu Claudiu			
2.4 Year of study: V	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: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 0		
- tutorial activities: 0		
- examinations: 0		
- 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: biophysics, anatomy, neurophysiology, physiopathology
4.2 competency: NA

5. Conditions

5.1 for lectures: NA
5.2 for practical activities: NA

6. Specific competencies acquired

6.1 professional competencies: The main objective of this lecture is to offer to the medical student an image of the problems imposed by different pathologies concerning the quality of life of the patients and also to offer solutions, aiming the improvement of their outcome by rehabilitation. - The medical student should be able to complete a whole physiatric evaluation in order to establish the status and the future management of the patient.
6.2 transversal competencies: The medical student should be able to give solutions (in terms of rehabilitations programme) and to apply them aiming a major reintegration of the patient in society, taking into account the pro and cons according with the pathology.

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:

Rehabilitation is a teamwork, so in order to fulfill it the medical student should find and to adapt its position in a team whose main aim is the needs of the patient. So, she/he would be able to communicate with the nurse, the occupational therapist, the nurse and therapist specialized in physical rehabilitation, the psychologist and the physician of the current disease.

7.2 Specific objectives:

As stated before, the main objective is to be able to provide a rehabilitation programme in different pathologies.

The secondary objectives, after following this lecture, are:

- To be able to evaluate a patients from the perspective of the physiatric physician,
- To be able to apply the principles of rehabilitation,
- To be able to recognize the benefits of a complex rehabilitation plan
- To know how to work in a rehab team

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction notions - physics in rehabilitation	oral media presentation	NA	pain management	2
2	Physical modalities	oral media presentation	NA	MSK dysfunction, pain management	2
3	Kinetotherapy (medical gymnastics)	oral media presentation	NA	MSK dysfunction, pain management	2
4	Rehabilitation in connective tissue diseases	oral media presentation	NA	inflammatory arthritis, joint pain, joint edema, pain management, ROM	2
5	Rehabilitation in ankylosing spondylitis	oral media presentation	NA	inflammatory arthritis, joint pain, joint edema, pain management, ROM, low back pain	2
6	Rehabilitation in osteoarthritis and LBP (TBL)	TBL, oral media presentation	NA	MSK dysfunction, pain management	2
7	Rehabilitation in TMP joint affections. Rehabilitation of the facial nerve injury.	oral media presentation	NA	joint pain, joint edema, pain management, osteoporosis, ROM	2

Bibliography

1. Physical Medicine and Rehabilitation (fourth edition), Randall L. Braddom, Elsevier Saunders ed., 2011, 1-1506, ISBN: 978-1-4137-70884-4

2. Physical Medicine and Rehabilitation Secrets (third edition), B. J. O'Young, Mosby Elsevier ed., 2008, 1-748, ISBN- 13: 978-1-4160-3205-2

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The physiatric history. Physical examination (muscle testing, goniometry)	oral media presentation, practical skills	PS	joint pain	2
2	Electrotherapy	oral media presentation, practical skills	PS	joint pain	2
3	Heat therapies	oral media presentation, practical skills	PS	joint pain	2
4	Hydrokinetotherapy	oral media presentation, practical skills	PS	joint pain	2
5	Massage	oral media presentation, practical skills	PS	joint pain	2

6	Clinical case presentations - CBL	oral media presentation, practical skills	PS	joint pain	2
7	Clinical case presentations	oral media presentation, practical skills	PS	joint pain	2

Bibliography

1. Physical Medicine and Rehabilitation (fourth edition), Randall L. Braddom, Elsevier Saunders ed., 2011, 1-1506, ISBN: 978-1-4137-70884-4
2. Physical Medicine and Rehabilitation Secrets (third edition), B. J. O'Young, Mosby Elsevier ed., 2008, 1-748, ISBN- 13: 978-1-4160-3205-2

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

The discipline provides integrated knowledges about the multi- modal rehabilitation in dentistry providing a better QoL.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	To be able to upgrade his/her grade from the individual evaluation to the team one such showing his/her gaining and using new knowledges.	MQT-TBL	10
- practical activities	To be able to outline the main objectives in rehab. At least 5 out of 10.	Clinical case - CBL	20
Final evaluation			
- theoretical final exam	At least 6 out of 10.	MQT	70
- practical final exam	-	-	0

Minimal performance standards:

Standard minim:

The medical student should be able to perform/ to apply:

- the physiatric history
- the physical examination
- the therapeutical exercise – contraindications (major)
- the physical agent modalities - contraindications (major)
- the manipulation, traction and massage - contraindications (major)

Must seen:AS, OA, low back pain, facial nerve injury

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Chis Monica	Tuesday, 30 minutes after the lecture

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: M4
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Endocrinology concepts			
2.2 Course coordinator: Prof dr Pașcanu Maria-Ionela			
2.3 Practical activities coordinator(s): -			
2.2 Course coordinator: Șef I dr Pop-Radu Cristina-Corina			
2.3 Practical activities coordinator(s): -			
2.2 Course coordinator: Asist dr Reti Zsuzsanna			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: V	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: 6		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 0		
- examinations: 10		
- other activities: 4		
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:
The description of basic notions of endocrinology, with a focus on disease aetiology, specific signs and symptoms for orientation on clinical diagnosis, the presentation of prophylactic and therapeutic strategies.
- identification of risk factors in endocrine diseases, population health problems in the field of endocrinology

6.2 transversal competencies: Recognizing the need for lifelong learning; the efficient use of resources and learning techniques for personal and professional development; the knowledge, skills and attitudes learned to provide a solid foundation for further training, - involvement in social and civic competences, public health issues in endocrinology, by providing information/education for the population on the risk factors, prevention and management of endocrine 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: to promote high-level endocrinology training, motivate and inspire endocrine clinical and experimental research, and prepare students for medical and research activities at an academic level in endocrinology
7.2 Specific objectives: To establish the importance of endocrinology within the university education plan, - highlighting the close relationship between endocrinology and other medical and surgical specialties, - establishing a minimum level of knowledge necessary for the proper conduct of medical activity, - preparing students to understand/learn basic mechanisms in endocrinology, hormonal actions and interactions, endocrine physiology and pathology of endocrine diseases

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction. The hormone's classification, measuring methods, biorhythms, action and receptors. Etiology and pathogeny of endocrine diseases. Hypothalamus – superior neurovegetative center and neuroendocrine coordinator. Congenital hypothalamic dysfunctions. Hypothalamic-neurohypophysis system: AVP, oxytocin. Diabetes insipidus. The anterior pituitary gland. Empty Sella syndrome.	Oral presentation +multimedia support	-	Pituitary gland pathology, hydro-electrolyte imbalance, cerebral tumors, appetite disorders, headache, visual impairment, polyuria, nausea, weight loss, weight loss, sleep disturbance	2
2	The pituitary tumoral syndrome. Pituitary adenomas. Acromegaly. Prolactinoma and other hyperprolactinemia. Cushing disease. Pituitary failure.	Oral presentation +multimedia support	-	Pituitary gland pathology, brain tumors, headache, visual impairment, nausea, weight gain, weight loss	2
3	Thyroid gland - Anatomy, embryology, physiology, biosynthesis and action of the thyroid hormones. Thyroid function regulation. Thyrotoxicosis syndrome. Basedow Graves' disease. Hypothyroidism – newborn, child, adult, old age, pregnancy. Hypothyroid coma. Acute, subacute and chronic thyroiditis	Oral presentation +multimedia support	-	Thyroid Pathology, Palpitations, Visual Impairment, Blindness, Weight Loss, Orbital Inflammation, Learning Disorders, Deafness, Anemia, Constipation, Dysphagia, Short stature, Weight gain, Edema	2
4	Endemic and sporadic goiter. Thyroid tumors. Benign tumors. Thyroid cancer – diagnostic and therapeutic course of action. Morphology and physiology of the parathyroid glands. Hyperparathyroidism.	Oral presentation +multimedia support	-	Thyroid pathology, Head and neck cancer. Fever of unknown etiology. Dysphagia, cervical nodule, adenopathy. Disorders of calcium and vitamin D metabolism	2
5	Osteoporosis. Hypoparathyroidism. Spasmophilia.	Oral presentation +multimedia support	-	Osteoporosis, Paget's Disease Back pain	2

6	Chronic primary adrenal failure. (Addison disease). Addisonian crisis. Cushing syndrome. Pheochromocytoma. Paraganglioma.	Oral presentation +multimedia support	TBL	Hyperfunction of the adrenals. Hypertension. Diabetes mellitus. Adrenal failure	2
7	Normal and pathological puberty. Male hypogonadism. Primary ovarian failure. Polycystic ovary syndrome. Menopause. Obesity: Etiology, pathogenesis. The metabolic syndrome.	Oral presentation +multimedia support	-	Disorders of puberty, Hypogonadism, Infertility, Gynecomastia, Menstrual disorders, Contraception, Lipid metabolism disorders, Diabetes mellitus, Acne, Weight gain	2

Bibliography

1. Kumar and Clark's Clinical Medicine, 10th edition 2021, Elsevier – chapter 19 Bone disease (pg 471-485) & 21 Endocrinology (pg 583-650).
2. Ionela M. Pascanu, Florina Gliga, Gabriela Madaras, Raluca Pop, Corina Radu-Pop, Zsuzsana Szanto: ENDOCRINOLOGY LECTURE, Litografia UMF Targu Mures, 2012, 232 p.

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

Establishing a minimum of endocrinology-specific knowledge for the proper conduct of the medical activity.
Acquiring the ability to use existing diagnostic and therapeutic algorithms

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL - 9 questions, one or multiple correct answers Essay prepared in groups	TBL - For each correct answer 1 point- 10 % of the final mark For essays, grades will be given depending on originality, scientific content.	30
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	basic notions in general endocrinology,etiopathogenesis, clinical symptoms and signs of endocrine disease, laboratory and imaging investigations, differential diagnosis, therapeutic strategy of endocrine diseases	test 40-50 multiple choice questions	70
- practical final exam	-	-	0
Minimal performance standards: Correct answer to at least half of the questions at the end of the semester. Clinical recognition of endocrine diseases, interpretation of paraclinical investigations (hormonal tests, tumour markers, MRI), identifying endocrine emergencies, identifying objectives and therapeutic priorities, medical prescriptions, identifying endocrine risk factors and their prophylaxis.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Prof dr Pașcanu Maria-Ionela	Every Friday beetwen 12-14.
Șef I dr Pop-Radu Cristina-Corina	miercuri 11-13
Asist dr Reti Zsuzsanna	Luni si joi 10-13

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MDII
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Oral implantology			
2.2 Course coordinator: Senior Lecturer Dr Coșarcă Adina-Simona			
2.3 Practical activities coordinator(s): Senieo Lecturer Iacob Alina, Senior Lecturer Dr Petrovan Cecilia, Assistant Lecturer Dr. Temistocle Despina			
2.4 Year of study: V	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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 14		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 14		
- examinations: 3		
- other activities: 11		
3.8 Total hours of individual study: 84		
3.9 Total hours: 112		
3.10 Credits: 4		

4. Prerequisites (where applicable)

4.1 curricular:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Laptop
5.2 for practical activities:
Surgery office, demonstration room

6. Specific competencies acquired

6.1 professional competencies:
Correct local and general examination of the patient, regarding indications for implant insertion. Theoretical knowledge of local and general contraindications for implant insertion. Theoretical knowledge of insertion techniques for different types of implants; principles of bone grafting; accidents and complications which can lead to implant loss. Hospitalization methods for implant patients.
6.2 transversal competencies:
Sterilization, disinfection, and asepsis in oral implantology. Team 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:

Introduction of implantology treatment in dentistry treatment. Good knowledge of local and general indications and contraindications of implant insertion.

7.2 Specific objectives:

Theoretical knowledge of common insertion methods for different types of implants in oral cavity. Theoretical knowledge of bone grafting. Postoperator treatment, hospitalization for implant patients, implant hygiene

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The historical development of dental implants. Anatomy of the maxillary and mandibular bone. Implant clasification	Oral presentation + multimedia, discussions	-	-	2
2	Patient examination in cases of implant insertion. Bone supply	Oral presentation + multimedia, discussions	-	-	2
3	Indications, contraindications in implantology	TBL	TBL1	-	2
4	Surgical principles for the implantology Osteointegration	Oral presentation + multimedia, discussions	-	-	2
5	Biomaterials used for improving the bone substrate	Oral presentation + multimedia, discussions	-	-	2
6	Hard tissue surgery and bone grafting	Oral presentation + multimedia, discussions	-	-	2
7	Accidents and complications in implantology	Oral presentation + multimedia, discussions	-	-	2

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1. Bratu D.: Puntea pe implante, Helicon, 1996
2. Bratu E.: Tehnologia restaurărilor protetice cu sprijin implantar, Eubeea, Timișoara, 2007
3. Gănuță N., Bucur A., Gănuță A.: Tratat de implantologie orală, Ed. Național, 1997
4. Petrovan Cecilia: Noțiuni elementare de Chirurgie Implantologică – curs litografiat pentru studenții anului V Medicină Dentară, UMF Tg-Mureș, 2012
5. Arun K. Gark, Implant dentistry- a practical approach, Mosby Elsevier Second Edition 2009
6. Pancaj P. Singh., A Norman Cranin, Atlas of oral imlatology, Mosby Elsevier, Third Edition 2010
7. Rasmussen R.A: The Branemark System of Oral Reconstruction-A Color Atlas, 1992

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Implant clasification Implant sistem components	Multimedia and oral presentation, discussions	-	-	2
2	Biomaterials used for improving the bone substrate	Multimedia and oral presentation, discussions	-	-	2
3	Patient examination in implantology	Multimedia and oral presentation, discussions	-	-	2
4	Implants placement	CBL	CBL1	-	2
5	Implants placement	CBL	CBL1	-	2
6	Hard tissue surgery and bone grafting	Multimedia and oral presentation, discussions	-	-	2
7	Accidents and complications in implantology	Multimedia and oral presentation, discussions	-	-	2

Bibliography

1. Bratu D.: Puntea pe implante, Helicon, 1996
2. Bratu E.: Tehnologia restaurărilor protetice cu sprijin implantar, Eubeea, Timișoara, 2007

3. Gănuță N., Bucur A., Gănuță A.: Tratat de implantologie orală, Ed. Național, 1997
4. Petrovan Cecilia: Noțiuni elementare de Chirurgie Implantologică – curs litografiat pentru studenții anului V Medicină Dentară, UMF Tg-Mureș, 2012
5. Arun K. Gark, Implant dentistry- a practical approach, Mosby Elsevier Second Edition 2009
6. Pancaj P. Singh., A Norman Cranin , Atlas of oral imlatology, Mosby Elsevier, Third Edition 2010
7. Rasmussen R.A:The Branemark System of Oral Reconstruction-A Color Atlas,1992

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

Correcet evaluation of the implant patient.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the Department of Oral and maxillofacial surgery	MEAN TBL	15
- practical activities	According to the Department of Oral and maxillofacial surgery	MEAN CBL	15
Final evaluation			
- theoretical final exam	According to the Department of Oral and maxillofacial surgery	Written test - multiple choise questions	50
- practical final exam	According to the Department of Oral and maxillofacial surgery	oral/written test	20
Minimal performance standards: Final theoretic exam note– min. 5; note < 5 = failed exam; Final practical exam(verification)) – min 5; note < 5 =failed exam; Final note – min 5; not < 5 = Failed exam Presence - mandatory at practice. 20% absence are allowed (2 practice) Only the absences for practice can be recovered and only during the year and the summer practice.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Senior Lecturer Dr Coșarcă Adina-Simona	30 minute dupa orele de curs

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Pediatric dentistry (2)			
2.2 Course coordinator: Șef I dr Eșian Daniela-Elena			
2.3 Practical activities coordinator(s): Lecturer Eșian Daniela, Assist.Bud Anamaria, PhD stud. Stoica Oana, PhD stud. Lazar Ana, PhD stud. Contac Laura			
2.4 Year of study: V	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: 112	3.5 lectures: 28	3.6 practical activities: 84
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 seminars / laboratories, homework, reports, portfolios and essays: 3		
- tutorial activities: 2		
- examinations: 3		
- other activities: 2		
3.8 Total hours of individual study: 38		
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:
Videoprojector, PC, flipchart
5.2 for practical activities:
Dental treatment room, dental units, hand pieces, burs, endodontic files

6. Specific competencies acquired

6.1 professional competencies:
Description of the physiological and pathological aspects regarding the occurrence of dental anomalies based on the knowledge of anatomy, embryology and oral pathology
Recognition and diagnosis of muco-periodontal in children and adolescents based on clinical and complementary examinations
The application of basic knowledge to develop a complex diagnosis and establish a therapeutic plan
6.2 transversal competencies:
Helping the student to realize the importance of an efficient work in a multidisciplinary team and also the importance of a good doctor- patient relation, such as the treatment should meet the patient's expectations.

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 dental anomalies, muco-periodontal pathology and dental traumatology in children and adolescents

7.2 Specific objectives:

Acquiring the particularities of the odontogenetic disorders in the form of different primary and secondary dental anomalies

Knowledge of clinical and therapeutic aspects of temporary teeth traumatic injuries

Knowledge of clinical and therapeutic aspects of traumatic injuries in immature permanent teeth

Knowledge of clinical and therapeutic aspects of partial and total edentations in children and adolescents

Conceiving a complex pedodontic treatment plan based on the child's age and general health status

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Theory of psychology in pediatric dentistry practice	Oral presentation and multimedia	-	-	2
2	Primary dental anomalies	Oral presentation and multimedia	-	-	2
3	Secondary dental anomalies	Team Based Learning	It is based on self-study of course support provided in advance	-	2
4	Amelogenesis imperfecta. Dentinogenesis imperfecta	Oral presentation and multimedia	-	-	2
5	Traumatic dental injuries in temporary teeth	Oral presentation and multimedia	-	-	2
6	Traumatic dental injuries in permanent teeth	Team Based Learning	It is based on self-study of course support provided in advance	-	2
7	Traumatic avulsion. Possibilities of replanting and immobilization	Oral presentation and multimedia	-	-	2
8	Oral lesions in childhood and adolescence I. Oral manifestations of contagious diseases	Oral presentation and multimedia	-	-	2
9	Oral lesions in childhood and adolescence II. Oral manifestations of systemic diseases	Oral presentation and multimedia	-	-	2
10	Prosthetic treatment in pediatric dentistry	Oral presentation and multimedia	-	-	2
11	Techniques for surgical treatment in pediatric dentistry	Integrated course	With participation of Oral Surgery Department	-	2
12	The pedodontic approach of patients with cleft lip and palate	Oral presentation	-	-	2
13	Methods of sedation in pediatric dentistry	Oral presentation	-	-	2
14	Permanent first molar pathology	Oral presentation	-	-	2

Bibliography

- Cristina Bica - Pedodontie-diagnostic și tratament. Ed. University Press Tg.Mureș, 2013

- Cameron A, Widmer RP - Handbook of Pediatric Dentistry. 3rd edition, Mosby Elsevier, 2008

- Elisabeta Bratu, Florica Glăvan – Practica Pedodontică. Ed. Orizonturi Universitare, Timișoara, 2005

Optional bibliography:

- Duggal M, Cameron A, Toumba J- Paediatric Dentistry at a Glance, Wiley-Blackwell, 2013

- Masthan KMK- Textbook of pediatric oral pathology, First edition, Jaypee, 2011

- Pinkham JR - Pediatric Dentistry. Infancy through Adolescence. 4rd edition, Elsevier Saunders, St. Louis, 2005

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours

1	Treatment techniques in simple and complicated caries of deciduous teeth-a review	Demonstrations, interactive discussions	-	-	6
2	Treatment techniques in simple and complicated caries of immature permanent teeth-a review	Case Based Learning	Students will approach a complex clinical case	-	6
3	Diagnosis and treatment of crown and root fractures in deciduous teeth	Demonstrations, interactive discussions	-	-	6
4	Diagnosis and treatment of crown and root fractures in immature permanent teeth	Case Based Learning	Students will approach a complex clinical case	-	6
5	Methods of immobilization in dental trauma injuries	Demonstrations, interactive discussions	-	-	6
6	Treatment options in dental anomalies	Demonstrations, interactive discussions	-	-	6
7	Prosthetic treatment in children and adolescents. Interceptive therapeutic measures	Demonstrations, interactive discussions	-	-	6
8	Diagnosis and treatment of oral lesions in childhood diseases	Demonstrations, interactive discussions	-	-	6
9	Diagnosis and treatment of oral lesions in systemic diseases	Demonstrations, interactive discussions	-	-	6
10	Methods of therapeutic approach for children with cleft lip and palate	Demonstrations, interactive discussions	-	-	6
11	Assessment of the psychological status in pediatric dentistry	Demonstrations, interactive discussions	-	-	6
12	Complex diagnosis in pediatric dentistry. Clinical case presentation	Case Based Learning	Students will approach a complex clinical case	-	6
13	Prophylaxis of the permanent first molar	Demonstrations, interactive discussions	-	-	6
14	Medication in pediatric dentistry (antibiotics, anti-inflammatory, antialgic therapy)	Demonstrations, interactive discussions	-	-	6
Bibliography Cristina Bică - Pedodonție-diagnostic și tratament. Ed. University Press Tg.Mureș, 2013 Eșian D, Păcurar M, Jurcă A, Bud E, Bică C - Pedodonție. Îndrumător de lucrări practice. Editura University Press Tîrgu Mureș, 2014					

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

Knowledge about the most recent techniques and dental materials, noninvasive early diagnosis methods, treatment of initial carious lesions in early stages in primary and permanent immature teeth, emergency therapies in dental trauma injuries of deciduous and permanent teeth.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge and skills acquirement	TBL sessions	15
- practical activities	Practical skills acquired during practical activities	CBL sessions	25
Final evaluation			
- theoretical final exam	Knowledge and skills acquirement	Written MCQ	40
- practical final exam	Practical skills acquired during practical activities	Practical examination	20
Minimal performance standards:			
- Minimal grade required for the promotion of the exam is 5 (the final grade being a result of the evaluations during the semester and the final exam)			
- The student has to attend the evaluation during the semester (TBL and CBL sessions)			
- The final practical exam is mandatory, the minimal grade required for promotion being 5			
- In case of absence at the TBL sessions, the student will receive the grade 1; there is no possibility to repeat this evaluation but the student will be allowed to attend the final exam			

11. Must seen clinical situation list

1. Severe early childhood caries
2. Clinical forms of pulpitis in temporary teeth
3. Necrosis in primary teeth (periapical pathology)
4. Clinical forms of reversible pulpitis of young permanent teeth
5. Complicated necrosis of permanent immature teeth
6. Assessment of a case with dental trauma in emergency
7. Crown and root fractures of primary teeth
8. Luxations in primary teeth
9. Crown and root fractures of permanent teeth
10. Luxations in permanent teeth
11. Avulsion in permanent teeth
12. Dental anomalies of size, shape, number and structure
13. Oral pathology in children

12. Clinical / practical abilities

- Treatment of simple and complicated decay in deciduous and permanent teeth 3
Dental trauma injuries of deciduous teeth. Treatment plan 2
Dental trauma injuries of permanent teeth. Treatment plan 2
Primary and secondary dental anomalies. Treatment plan/Restorative treatment 2
Complex diagnosis and treatment plan in temporary and mixed dentition (clinical cases) 1
Complex diagnosis and treatment plan in temporary and mixed dentition(OPG)2
Pediatric emergencies in dental office 1

13. Appointment timetable (for students)

Şef I dr Eşian Daniela-Elena	Monday : 9.30-10.00 Thursday: 16.00-16.30 Room : E 12 Phone interior: 315

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Implanto-prosthetic therapy			
2.2 Course coordinator: Conf dr Bechir Edwin-Sever			
2.3 Practical activities coordinator(s): Prof.dr. Suciu Mircea, Conf. dr. Bechir Edwin Sever, Șef lucr. dr. Horga ClaudiuVasile, Șef lucr. dr.Biriș Carmen Ioana, Asist. Lazăr Ana Petra			
2.4 Year of study: V	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: 30		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 20		
- tutorial activities: 0		
- examinations: 2		
- other activities: 10		
3.8 Total hours of individual study: 72		
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:
Multimedia equipment
5.2 for practical activities:
Practical demonstrations, case studies / multimedia equipment, documentary support for clinical cases.

6. Specific competencies acquired

6.1 professional competencies:
Acquiring the knowledge necessary to develop an implant-prosthetic treatment plan. Acquiring theoretical knowledge involving the choice of implant depending on the future prosthetic work.
Ability to gain knowledge about choosing the ideal candidate for implant overprosthesis.
6.2 transversal competencies:
Cognitive skills:
Notions about the concepts of prosthetic implant therapies
Notions regarding paraclinical investigations useful in formulating effective diagnoses and treatment plans.
Affective-value skills:
Communication with the patient.

Communication with the dental technician.
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 notions of overprosthesis, indications, contraindications, variants of overprosthesis on implants.
7.2 Specific objectives: Learning the methods of examining patients. Understanding the importance of the concept of oral implant-prosthetic rehabilitation. Acquiring the knowledge necessary to develop an individualized implant-prosthetic treatment plan.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Candidate for implant-prosthetic therapy.	Multimedia presentation	-	-	1
2	Anatomical consequences of edentulism.	Multimedia presentation	-	-	1
3	The advantages of prosthetic restorations on implants.	Multimedia presentation	-	-	1
4	General terminology of implants and prosthetic attachments.	Multimedia presentation	-	-	1
5	Establishing the prosthetic treatment plan.	Multimedia presentation	TBL	-	1
6	Implantation and prostheses manufacture in implantology.	Multimedia presentation	-	-	1
7	Prosthetic considerations.	Multimedia presentation	-	-	1
8	Prosthetic principles of edentulous restoration by dental implants.	Multimedia presentation	-	-	1
9	Clinical situations for different types of edentations and their treatment with dental implants - Trinia.	Multimedia presentation	-	-	1
10	Clinical situations for different types of edentations and their treatment by dental implants - BioHP.	Multimedia presentation	-	-	1
11	Clinical variants of implant treatment.	Multimedia presentation	TBL	-	1
12	Temporary prosthesis on implants.	Multimedia presentation	-	-	1
13	Definitive prosthesis on implants.	Multimedia presentation	-	-	1
14	Dispensing of patients carrying prosthetic works on implants.	Multimedia presentation	-	-	1

Bibliography

1. Jensen., The sinus bone graft, Quintessence Publishing, 2006.
2. Davarpanah, Szmukler-Moncler. Immediate loading of dental implants, Quintessence International 2008.
3. Misch, Contemporary implant dentistry, Elsevier Mosby 2005.
4. Misch C.E., Dental Implant Prosthetics, Elsevier Mosby, 2005.
5. Khoury, Antoun, Missika, Bone augmentation in oral implantology, Quintessence Publishing 2007
6. Donald E. Arens, Practical lesson in endodontic surgery, Quintessence Publishing 1998.
7. Ralph Bellizzi-Robert Loushine, Endodontic surgery, Quintessence Publishing 1991
8. M. Davarpanah, S. Szmukler-Moncler, Manuel d'implantologie clinique, Wolters Kluwer France, 2008
9. Course notes

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Prosthetic components used in implantology.	Presentation	-	-	1
2	OPG examination in implantology - indications, contraindications, advantages, disadvantages, limitations.	OPG Examination	-	-	1
3	The use of CT examination in the exploration of the bone-implant substrate.	CT Examination	-	-	1
4	CBCT - applications, advantages and disadvantages.	CBCT Examination	-	-	1
5	CT-guided implant treatment - planning and execution techniques.	CBCT implant insertion simulation.	-	-	1
6	Preparation of the treatment plan in implantology.	Presentation	-	-	1
7	CBL	Test and CBCT implant insertion simulation.	-	-	1
8	Preliminary impression, preliminary model, individual tray.	Practical demonstration.	-	-	1
9	The final impression. Realization of the work model.	Practical demonstration.	-	-	1
10	Realization of the mesostructure. Choice of calculable abutments.	Practical demonstration.	-	-	1
11	CBL	Test	-	-	1
12	Making the model of the prosthesis with implant anchorage.	Practical demonstration.	-	-	1
13	Making of the finished prosthetic piece.	Practical demonstration.	-	-	1
14	Evaluation of finished parts. Appreciations and criticisms.	Presentation	-	-	1
Bibliography 1. Davarpanah, Szmukler-Moncler. Immediate loading of dental implants, Quintessence International 2008 2. Khoury, Antoun, Missika, Bone augmentation in oral implantology, Quintessence Publishing, 2007 3. Misch CE, Contemporary implant dentistry, Elsevier Mosby 2005 4. Misch CE, Dental Implant Prosthetics, Elsevier Mosby, 2005 5. PA 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 practical activity, the correct application of dental prosthetics, periodontology, implantology, and those of general pathology, pharmacology, pathophysiology and psychology being essential in restoring the functionality of the dentomaxillary apparatus with implants.

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.	TBL Average	20
- practical activities	Knowledge of theoretical and practical aspects within the topic of practical works.	CBL average	20
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects of the course topics.	Multiple choice test	40
- practical final exam	Knowledge of theoretical and practical aspects within the topic of practical works.	Interpretation of paraclinical examinations in the context of a given clinical situation.	20
Minimal performance standards: Minimum standard of performance: Obtaining a minimum grade of 5 (five) for each component of the assessment course: - to know the basic notions regarding the implant prosthetic therapy, - to participate in the discussion groups in the TBL system, on the mentioned topics Practical work*: - make at least one CBL 1 documented case presentation,			

- to interpret a CT / CBCT CBL 2 in order to formulate the diagnosis and the treatment plan.
*fulfilling the minimum criteria of practical performance, allows the student to take part in the theoretical exam

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Bechir Edwin-Sever

Miercuri 11-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD I
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Periodontology (1)			
2.2 Course coordinator: Asist.univ.Dr.Vlasa Alexandru			
2.3 Practical activities coordinator(s): Conf.Univ. Dr.Lazar Luminita, Sef.L.Dr.Bukhari Csilla,asist.Univ.Dr Buka Imola,Asist.Univ.Dr. Vlasa Alexandru			
2.4 Year of study: V	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: 5	3.2 lecture: 2	3.3 practical activities: 3
3.4 Total hours in curriculum: 35	3.5 lectures: 14	3.6 practical activities: 21
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: 28		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 18		
- tutorial activities: 14		
- examinations: 28		
- other activities: 14		
3.8 Total hours of individual study: 130		
3.9 Total hours: 165		
3.10 Credits: 8		

4. Prerequisites (where applicable)

4.1 curricular:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Video projector, PC, flipchart
5.2 for practical activities:
Video projector, PC, periodontal examination instruments

6. Specific competencies acquired

6.1 professional competencies:
Correct diagnosis of different forms of periodontal disease, knowledge of methods for recording odonto-periodontal status in specific files.
Correct use of means of clinical examination (periodontal probes, CPITN) and radiographic examination of periodontal patients.
Recognition of the correlations between systemic diseases and supporting tissues of the teeth.
Learning the treatment methods applicable in the initial phase of periodontal therapy (root scaling, sub-gingival curettage).

6.2 transversal competencies:

Training in interdisciplinary collaboration skills with related medical specialties (microbiology, immunology, histopathology, dental-alveolar surgery) in order to achieve a complex treatment of periodontal disease.
Knowledge of working methodologies in medium and long-term studies on the results of periodontal therapy in different groups of 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:

Knowledge of the anatomical elements of the periodontal tissue and of the areas with its maximum vulnerability, in order to be able to understand the periodontal pathology and the applied therapeutic means

7.2 Specific objectives:

Acquiring the morphological features of periodontal tissues in different pathological conditions.
Knowledge of clinical signs and optimal treatment methods in gingivitis and periodontitis.
Designing a complex periodontal treatment plan, adapted to the age and general health of the patient.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Terminology used in periodontics, history of periodontics	PC, video projector	-	-	2
2	Structure of normal periodontium, superficial periodontium	PC, video projector	-	-	2
3	Deep(supporting) marginal periodontium,	PC, video projector	-	-	2
4	Physiology of marginal periodontium	Pc, video projector	-	-	2
5	Epidemiology of periodontal disease	PC, video projector	-	-	2
6	Clinical examination of periodontal patient	PC, video projector	-	-	2
7	Etiopathogenesis of chronic marginal periodontitis. The role of bacterial plaque in the production of periodontal disease	PC, video projector	-	-	2
8	Mechanisms of bacterial pathogenicity in periodontal disease	TBL	-Individual testing of students, solving the test in working groups, clarification of difficult aspects.	-	2
9	Immunological mechanisms and periodontal disease	PC, video projector	-	-	2
10	The role of dental tartar in the production of chronic marginal periodontitis	PC, video projector, oral presentation	-	-	2
11	Local factors favoring chronic marginal periodontitis	TBL	-Individual testing of students, solving the test in working groups, clarification of difficult aspects.	-	2
12	The role of general factors in the evolution of chronic marginal periodontitis	PC, Video projector, oral presentation	-	-	2

13	Diagnosis of gingival-periodontal diseases	PC, Video projector, oral presentation	-	-	2
14	Classification of diseases of the marginal periodontium	PC, video projector, oral presentation	-	-	2

Bibliography

References:

1. Newman MG, Takei H, Klokkevoold PR, Carranza FA. Newman and Carranza's Clinical Periodontology. 13th Edition. Elsevier Health Sciences. 2019

2. Dumitriu H: Parodontologie, Ed. Medicală București, 2009

3. Roman A, Lazăr L, Șurlin P, Stratul ȘI. Parodontologie 1 Noțiuni de bază. Editura Medicală Universitară Iuliu Hațieganu Cluj-Napoca,

Optional references:

1. Lazăr L, Monea AI. Chiuretajul subgingival în practica ambulatorie de parodontologie. Editura University Press Tg. Mureș, 2009

2. Lazăr L. Elemente de parodontologie clinică. Editura University Press Tg. Mureș, 2015,

3. Newman MG, Takei H, Klokkevoold PR, Carranza FA. Newman and Carranza's Clinical Periodontology. 13th Edition. Elsevier Health Sciences. 2019

4. Ionescu E. Manual pentru rezidentiat. Ed. Univ Carol Davila, Bucuresti, 2021

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	.Presentation of the consultation instrumentation, of the manual and ultrasonic scaling instrumentation	Multimedia presentation, practical demonstrations and clinical cases	-	-	3
2	Presentation of instruments for periodontal surgical treatment	Multimedia presentation, practical demonstrations and clinical cases.	-	-	3
3	Presentation of the periodontal file	Multimedia presentation, practical demonstrations and clinical cases.	-	-	3
4	.Determination of periodontal health indices (plaque index, tartar index, PBI, CPITN)	CBL	The students receive the material in time, so they have the possibility to make individual study	-	3
5	Performing specific measurements in periodontal therapy (periodontal pocket depth, attachment loss, tooth mobility).	Multimedia presentation, practical demonstrations and clinical cases	-	-	3
6	Evaluation of the condition of the alveolar bone with the help of retroalveolar radiographs, orthopantomographies	CBL	The students receive the material in time, so they have the possibility to make individual study	-	3
7	Completion of the periodontal file	Multimedia presentation, practical demonstrations and clinical cases	-	-	3
8	Completion of the periodontal file	Multimedia presentation, practical demonstrations and clinical cases	-	-	3
9	Learning the correct methods of manual and ultrasonic scaling	CBL	The students receive the material in time, so they have the possibility to make individual study	-	3
10	Completion of the periodontal file	Multimedia presentation, practical demonstrations and clinical cases	-	-	3
11	Realization of practical treatment included in the minimum scale of practical knowledge - manual and ultrasonic scaling.	Multimedia presentation, practical demonstrations and clinical cases	-	-	3

12	Correct dental brushing techniques. Adjunctive methods of maintaining the oral hygiene.	CBL	The students receive the material in time, so they have the possibility to make individual study	-	3
13	Realisation of practical treatment included in the minimum scale of practical knowledge - manual and ultrasonic scaling.	Multimedia presentation, practical demonstrations and clinical cases	-	-	3
14	Realisation of practical treatment included in the minimum scale of practical knowledge - manual and ultrasonic scaling.	Multimedia presentation, practical demonstrations and clinical cases	-	-	3

Bibliography

Bibliography:

1. Newman MG, Takei H, Klokkevold PR, Carranza FA. Carranza's Clinical Periodontology. 13th Edition. Elsevier Health Sciences. 2019

2. Dumitriu H: Parodontologie, Ed. Medicală București, 2009

Facultative bibliography:

1. Lazăr L, Monea AI. Chiuretajul subgingival în practica ambulatorie de parodontologie. Editura University Press Tg. Mureș, 2009

2. Lazăr L. Elemente de parodontologie clinică. Editura University Press Tg. Mureș, 2015,

3. Roman A, Lazăr L, Șurlin P, Stratul ȘI. Parodontologie 1 Noțiuni de bază. Editura Medicală Universitară Iuliu Hațieganu Cluj-Napoca, 2019

4. Ionescu E. Manual pentru rezidentiat. Ed. Univ. Carol Davila, Bucuresti, 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 content of the discipline is corroborated with the need of employers in the fields of health, health management, medical education, drug companies, research in dentistry.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Course attendance, grades obtained on the tests during the TBL courses	Average of the grades obtained during TBL	10
- practical activities	The practical works attendance, fulfilling the minimum scale of activity. Qualifications obtained during the CBL sessions; The practical works attendance, fulfilling the minimum scale of activity	Average of the grades obtained during CBL; Average of the grades obtained in assessing the criteria of evaluation	20
Final evaluation			
- theoretical final exam	Final theoretical exam Knowledge of the anatomical elements of the periodontal tissue and the areas with maximum vulnerability. Acquisition of the knowledge necessary for the examination of the periodontal patient and the elaboration of a complete diagnosis of periodontal disease. Test 50%	Written exam, test	50
- practical final exam	Student's ability to properly examine a patient with periodontal disease, to complete a periodontal file, to put a correct diagnosis, to be able to make properly the initial treatment	Written exam	20

Minimal performance standards:

The accumulation of more than 3 absences on the course, and more than 3 absences on the practical part results in students being forbidden to access the final exam. The motivated absences will be recovered after a schedule established at level of the discipline.

Over 2 unmotivated absences, the recovery will be made for a fee.

- Evaluation during semester:

1. Practical works:

Fulfilling minimum scale of activity: patient examination and completing 1 periodontal file and performing 1 manoper of non-surgical causative periodontal therapy (scaling).

2. Course:

In case of not attending the TBL sessions, note 1 will be granted; there is no possibility to repeat this assessment, but it will still be allowed to take the final exam. In case of absence at the TBL sessions for extremely justified reasons, the student has the possibility to draw up a report from the respective topic.

- The final evaluation:

Minimum promotion mark is 5 in both practical and theoretical exams.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Asist.univ.Dr.Vlasa Alexandru	Monday 9-12 Tuesday 12-15 Wednesday 9-12 Thursday 12-15 Friday 9-12

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Endodontics (2)			
2.2 Course coordinator: Vacant			
2.3 Practical activities coordinator(s): Vacant			
2.4 Year of study: V	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: 22	3.2 lecture: 6	3.3 practical activities: 16
3.4 Total hours in curriculum: 154	3.5 lectures: 42	3.6 practical activities: 112
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: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 5		
- examinations: 4		
- other activities: 2		
3.8 Total hours of individual study: 46		
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:
Laptop
5.2 for practical activities:
Laptop, dental unit, endodontic instruments, obturation materials

6. Specific competencies acquired

6.1 professional competencies: Acquiring knowledge about etiology, diagnosis and treatment options in acute and chronic periapical lesions. Knowledge of the materials used in the root canal disinfection and the complementary methods of physical sterilization of endodontic space. The emphasis is on radiological diagnostic methods starting from classical to modern. The importance of the focal disease and the correlation of the orodental health with the general health of the body.

6.2 transversal competencies: Due to the fact that contemporary medicine ensures the prolongation of life expectancy in patients with systemic diseases, transplants, prostheses of various types, complex teams are organized with doctors of other specialties for establishing the indications of endodontic treatment for root infections. Thus, prognosis and case tracking are teamwork, and the responsibility of the medical act gets new valences.
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 diagnostic methodology and treatment techniques in various forms of pulp inflammatory disease
7.2 Specific objectives: The prophylactic side of the treatment methods applicable in complex complications, on the basis of biological principles, with concrete possibilities of prophylaxis of focal disease and edentations

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Pulp necrosis	oral presentation	-	-	3
2	Pulp gangraene	oral presentation	-	-	3
3	Acute apical periodontitis	TBL1	-	-	3
4	Chronic apical periodontitis	oral presentation	-	-	3
5	Cleaning and shaping of root canals	oral presentation	-	-	3
6	Disinfection of the root canal system	oral presentation	-	-	3
7	Calcium hydroxide as intracanal medication of oral endodontic infections	oral presentation	-	-	3
8	Treatment of acute apical periodontitis	oral presentation	-	-	3
9	Treatment of chronic apical periodontitis	oral presentation	-	-	3
10	Obturation of the root canal system	oral presentation	-	-	3
11	Thermoplastic injection obturation techniques	oral presentation	-	-	3
12	External root resorption	TBL2	-	-	3
13	Focal infections	oral presentation	-	-	3
14	Management of complications induced by endodontic treatment	oral presentation	-	-	3
Bibliography Arnaldo Castellucci: Endodontics vol I and II					

8.2 Content of workout, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours

1	Pulp necrosis: Diagnosis and treatment	clinical training	-	-	8
2	Pulp gangraene:Diagnosis and treatment	clinical training	-	-	8
3	Acute apical periodontitis:Diagnosis and treatment	CBL1	-	-	8
4	Interpretation of periapical and orthopantomographic radiographs	clinical training	-	-	8
5	Chronic apical periodontitis: Diagnosis and treatment	CBL2	-	-	8
6	Microbiologic culturing in endodontics	clinical training	-	-	8
7	Cleaning and shaping of root canals	clinical training	-	-	8
8	Working length determination using apex locators	clinical training	-	-	8
9	Clinical activities	clinical training	-	-	8
10	Clinical activities	clinical training	-	-	8
11	Clinical activities	clinical training	-	-	8
12	Assessing the need for surgical endodontic treatment	clinical training	-	-	8
13	The use of antibiotics in endodontics	clinical training	-	-	8
14	Management of complications of endodontic treatment	clinical training	-	-	8
Bibliography					
Arnaldo castellucci: Endodontics vol I and II					

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

There are a very large number of patients with chronic periapical lesions, and in the absence of treatment they would be condemned to large edentations. Through the acquired knowledge, future physicians will be able to ensure the correct treatment of these lesions and, when appropriate, in conjunction with the oro-maxillo-facial surgeon will ensure that as many teeth as possible are kept in the arch.

Chronic apical periodontitis are considered as aggravating factors of the disease and their elimination has beneficial effects on the health of the patient

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the requirements of the subject	average mark of the TBL sessions	10
- practical activities	According to the requirements of the subject	average mark of the CBL sessions	20
Final evaluation			
- theoretical final exam	According to the requirements of the subject	Multiple choice test	50
- practical final exam	According to the requirements of the subject	Case presentation	20
Minimal performance standards: Minimal promotion grade for the multiple choice exam is 5.00 The correct diagnosis of various forms of pulpal inflammation and apical periodontitis. Knowledge of the therapeutic methods and evaluation of prognosis in endodontic treatments.			

11. Must seen clinical situation list

Gangrenae
Acute apical periodontitis
Chronic apical periodontitis

12. Clinical / practical abilities

Treatment of simple or complicated gangrene (1);
Pulpectomies (1 mono- and 1 pluriradicular teeth).

13. Appointment timetable (for students)

Vacant	On demand in accord with students

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Removable prosthodontics			
2.2 Course coordinator: Șef I dr Hănțoiu Liana-Georgiana			
2.3 Practical activities coordinator(s): Berneanu Florentin , Hanțoiu Liana, Dobreci Claudia			
2.4 Year of study: V	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: 14	3.2 lecture: 6	3.3 practical activities: 8
3.4 Total hours in curriculum: 154	3.5 lectures: 42	3.6 practical activities: 112
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: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 5		
- tutorial activities: 3		
- examinations: 3		
- other activities: 0		
3.8 Total hours of individual study: 46		
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:
Prior theoretical preparation of the clinical stage to be carried out

6. Specific competencies acquired

6.1 professional competencies: The student should be able to restore the bimaxillary total edentation and some unimaxillary edentations by means of classical prostheses in a form, function and aesthetics acceptable to patients of all ages. He must have the necessary knowledge and experience regarding the design and realization of the prosthetic and prosthetic preparation stages of the total edentationl prosthetic field, as well as elements related to the procedures of the dental technician laboratory performed in the process of obtaining total prosthetics. To possess the knowledge necessary for the clinical and paraclinical examination of total edentation.

The student should be familiar with the potential and limitations of the various clinical and technological dental procedures involved in the prosthetic restorations of the total edentation and be able to explain to the patient the indications and contraindications of the various methods of prosthetic solving of the total edentation (including overimplantation).

6.2 transversal competencies:

The student must be competent to ensure safety at work. He must have knowledge of understanding the importance of her own health and of the impact she may have in pursuing her profession. It must have the power to impose the principles of health and safety at work on other colleagues.

Be competent in recognizing one's own limits and in acknowledging the value of continuous study, self-improvement, and critical thinking in maintaining a high degree of professional competence.

Have the knowledge and understanding necessary for the ethical and moral responsibilities involved in providing dental services to the patient as an individual and to the population level.

Establish a physician-patient relationship that allows him / her to carry out his / her activity at the internship.

Be competent to protect the confidential aspect of patient data.

Be competent to team up with colleagues, teachers and dental technicians.

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 total edentation by means of classical total mobile prostheses and with implant support (over-denture).

7.2 Specific objectives:

Student acquiring elements related to clinical and therapeutic aspects of prosthetic treatment of total edentation by mobile prostheses.

Knowledge of the epidemiology and etiology elements of the total edentation, its clinical forms, specific symptoms and complications. Student acquiring the morphology and physiology elements of the total edentation prosthetic field and the biodynamic elements of the total prostheses, correlated with the diagnostic and therapeutic peculiarities. Transmitting the knowledge necessary for the sequential sequence of the clinical technical and technological stages imposed by the classical prosthesis and the modern prosthetic treatment of the total edentation.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1. Total Edentation - Concept, Etiology, Symptomatology, Evolution, Complications. Morphological and functional changes of the orofacial system in the total edentation	Oral and multimedia presentation	-	-	3
2	2. Morphophysiology of the edentulous maxillary and mandibular fields	Oral and multimedia presentation	-	-	3
3	3. Biomechanics of total prostheses. Principles of Clinical Examination of Total Edentated Patient	Oral and multimedia presentation	-	-	3

4	4. Impression of the total edentated prosthetic field - general principles, preliminary impression	Oral and multimedia presentation	-	-	3
5	5. Final impression of the total edentated field: principles, objectives, method and techniques of final impression	Oral and multimedia presentation	-	-	3
6	6. Determination and recording of intermaxillary relationships in the treatment of total edentation	Oral and multimedia presentation	TBL 1	-	3
7	7. Selecting and arranging prosthetic teeth. Occlusion for the edentulous patient	Oral and multimedia presentation	-	-	3
8	8. Clinical try-in appointment	Oral and multimedia presentation	-	-	3
9	9. Applying total dentures in the oral cavity and adaptation of the patient with dentures	Oral and multimedia presentation	-	-	3
10	10. Relining and rebasing of complete dentures. Total prosthesis repairs	Oral and multimedia presentation	-	-	3
11	11. Prosthetic stomatopathy	Oral and multimedia presentation	TBL 2	-	3
12	12. Combination syndrome and implantoprosthodontic treatment of total edentation	Oral and multimedia presentation	-	-	3
13	13. Immediate dentures	Oral and multimedia presentation	-	-	3
14	14. Unconventional clinical-technical procedures for total prosthesis. Overdenture on implants. Prosthetic rehabilitation of maxillo-facial defects of total edentated patient.	Oral and multimedia presentation	-	-	3
Bibliography Zarb et.al. Prosthodontic treatment for edentulous patients. Elsevier-Mosby, 2013 Oral and multimedia course support					

8.2 Content of workout, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
2	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before	-	-	8

	impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.			
3	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
4	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	CBL 1	-	8
5	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8

	presentation				
6	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
7	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
8	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	CBL 2	-	8
9	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee	-	-	8

	prothesys. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	leader in the topic of the total edentation.			
10	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prothesys. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
11	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prothesys. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
12	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prothesys. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
13	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before	-	-	8

	impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.			
14	Performing the clinical phases of at least a total maxillary prosthesis and total mandibular prosthesis. Preliminary impression. Try-in and adaptation of the individual tray. Final impression. Determination and recording of the intermaxillary relationship. Try-in appointment and insertion of the prosthesis. Performing or participating in a total prosthesis relining. Realization of a report based on scientific literature. Patient examination and clinical case presentation	Clinical examination of the total edentulous patient -presentation and practical demonstration of specific clinical maneuvers for the examination of the total edentulous patient. Before completing the clinical phase, the student is required to study the characteristics of the phase and is interviewed by the trainee manager. Presentation by students in front of the group of a report established by the trainee leader in the topic of the total edentation.	-	-	8
Bibliography N.Forna (sub redactia) Protetica Dentara, vol II. Ed Enciclopedica, Bucuresti, 2011,pag: 379-705 S. Popșor, Lia Maria Coman, Carmen Biriș: Diagnostic și tratament în edentația totală, Lito UMF Tg.Mureș, 2010 Fabian T, Gotz Gy, Kaan M, Szabo I: A fogpotlantan alapjai, Szemmelweis Kiado, Budapest, 2001					

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 relevant and updated to the requirements of practical practice of dental prosthesis in the dental office, a pathology that concerns a large category of patients and constitutes a good part of the current dental activity of the graduate. The training offers to European standards the qualitative qualities specific to this type of activity.

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	Continuous checking tests at courses for TBL	10
- practical activities	Semestrial activity (attendance, grades during the semester, fulfillment of practical activity scale)	Assessment of knowledge before each therapeutic phase, presence and punctuality CBL sessions	20
Final evaluation			
- theoretical final exam	Acquiring theoretical knowledge according to the bibliography and the contents of the university lectures	Verification test with short narrative questions	40

- practical final exam	Fulfillment of the minimum set of activities recorded in the Practice Book Assessment of the student's applied knowledge	Performing a clinical phase of treatment, or a diagnostic procedure	30

Minimal performance standards:

1. A case presentation, diagnosis and therapeutic plan
2. Treatment of an edentation by total prosthesis
3. Adaptation of the individual tray and acceptable final impression of the edentulous field
4. Paraclinical analysis of study and diagnostic models.
5. Presentation of the report based on the literature
6. Attendance to activities (accumulating a number of unmotivated absences of more than 7 does not allow the student to enter the final exam)

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Hănţoiu Liana-Georgiana	Monday 9-10

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Removable prosthodontics			
2.2 Course coordinator: Șef I dr Hănțoiu Liana-Georgiana			
2.3 Practical activities coordinator(s): Berneanu Florentin			
2.4 Year of study: VI	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: 40		
- supplemental documentation at the library, from specialized information portals and in the field: 10		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 30		
- tutorial activities: 3		
- examinations: 3		
- other activities: 5		
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:
Prior theoretical preparation of the clinical stage to be carried out

6. Specific competencies acquired

6.1 professional competencies: The student should be able to restore the partial, extended and subtotal partial edentation by means of classical partial acrylic dentures in a form, function and aesthetics acceptable to patients of all ages. He/she has to be familiar with the basic notions of conception of the treatment planning of frame designed partial dentures. The students must have the necessary knowledge and experience regarding the principles of partial denture design and the principles of mouth preparation for removable partial dentures, as well as elements related to the specific laboratory procedures .

To possess knowledges for the clinical and paraclinical examination of partial edentation, with the identification of positive and negative elements. The student should be familiar with the potential and the limitations of different dental clinical and technological processes involved in prosthetic restorations of the partial edentation and be able to explain to the patient the indications and contraindications of the various modalities of prosthetic approaches in the partial edentation (including frame designed prostheses, overdentures or implant retained partial dentures).

6.2 transversal competencies:

The student must be competent to ensure safety at work. They need to have knowledge about understanding the importance of their own health and the impact that they may have in the pursuit of their profession.

It must have the power to impose the principles of health and safety at work to the other colleagues.

Be competent in recognizing one's own limits and in acknowledging the value of continuous study, self-improvement, and critical thinking in maintaining a high degree of professional competence. Have the necessary knowledge and understanding for the ethical responsibilities involved in providing dental services to the patient .

Establish a dentist-patient relationship that will allow him / her to carry out his / her activity at an internship. Be competent to protect the confidential aspect of patient data.

Be competent to team up with colleagues, teachers and dental technicians.

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 by means of removable partial dentures

7.2 Specific objectives:

Acquiring elements related to clinical and therapeutic aspects of prosthetic treatment of partial edentation by means of acrylic and frame designed removable prostheses. Knowledges on the polymorphism of the partial edentation, the concepts and classifications of the partial edentations. Knowledge of the therapeutic possibilities of the partial edentation using various types of removable dentures, the indications, the advantages and their limits. Knowledges on structural features of partial dentures, principles of dentures design in different clinical situations of edentation technical phases in particular situations.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Partial edentation: concept , terminology, etiology, classification of partially edentulous arches, symptomatology, evolution and, complications	Oral and multimedia presentations	-	-	3
2	Partial edentate prosthodontic field: the toothsupport and the mucosa support areas features.	Oral and multimedia presentations	-	-	3
3	The indications of the removable treatment in partial edentation;,, preliminary and final clinical and the principles of model	Oral and multimedia presentations	-	-	3

4	Preparation of mouth and of the abutment teeth in removable prosthodontics	Oral and multimedia presentations	-	-	3
5	The removable partial dentures: concept, classifications, components, treatment sequencing for the acrylic partial dentures with wire clasps.	Oral and multimedia presentations	-	-	3
6	The component parts of the frame designed removable partial dentures: major connectors, minor connectors, conectorii principali, conectorii secundari, rest and seats, direct and indirect retainers, denture base considerations, artificial teeth.	Oral and multimedia presentations	-	-	3
7	The usual retainers in removable prosthodontics: dental clasps, basic principles of clasp design	Oral and multimedia presentations	-	-	3
8	Telescopic systems for partial dentures and other attachments in removable prosthodontics	Oral and multimedia presentations	-	-	3
9	Biomechanical considerations in removable prosthodontics	Oral and multimedia presentations	TBL	-	3
10	Impression materials and procedures for Removable Partial Dentures	Oral and multimedia presentations	-	-	3
11	Establishing jaw relations for removable partial dentures: desirable occlusal contacts, methods	Oral and multimedia presentations	-	-	3
12	Initial placement, adjustment, and servicing of the removable partial dentures	Oral and multimedia presentations	-	-	3
13	Principles of removable partial denture design: essentials of partial denture design, components of partial denture design, additional considerations influencing design.	Oral and multimedia presentations	TBL	-	3
14	Relining and rebasing of removable partial dentures; repairs and additions to removable partial dentures	Oral and multimedia presentations	-	-	3

Bibliography

Sakar Olcay. Removable Partial Dentures. A practitioner's manual. Springer International Switzerland, 2016. (available at UMFST Library)
Marta Radnai. Removable Partial Dentures, Medicina Publishing House, Budapest, 2014
N.Forna (sub redacția): Protetică dentară, vol.2, Ed. Enciclopedică, București, 2011
S.Popșor: Tratatul protetic al edentației parțiale prin proteze parțiale mobilizabile. Note de curs pentru studenții Facultății de Medicină dentară și medicii rezidenți în specialitatea Protetică dentară, University Press. 2018.

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
2	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression,	Interactive clinical examinations Designing the treatment plan	ONLINE AND ONSITE.CBL	-	8

	final impression, determination of the intermaxillary relationship	on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique			
3	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
4	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
5	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
6	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
7	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
8	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory	ONLINE AND ONSITE.CBL	-	8

		of dental technique			
9	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
10	Treatment of partial edentation with an acrylic plaque prosthesis; active participation in the realization of the clinical phases: clinical examination, preliminary impression, final impression, determination of the intermaxillary relationship	Interactive clinical examinations Designing the treatment plan on casts, sketches and in real clinical situations Demonstrations in the laboratory of dental technique	ONLINE AND ONSITE.CBL	-	8
11	Paraclinical analysis at parallelograph - demonstrations	Laboratory demonstrations, Video film	ONLINE AND ONSITE.CBL	-	8
12	Making the project of a removable prosthesis on a hypothetical or real clinical situation	Drawing the project of a removable prosthesis on a sketch	ONLINE AND ONSITE.CBL	-	8
13	Making the project of a removable prosthesis on a hypothetical or real clinical situation	Drawing the project of a removable prosthesis on a sketch	ONLINE AND ONSITE.CBL	-	8
14	Making the project of a removable prosthesis on a hypothetical or real clinical situation	Drawing the project of a removable prosthesis on a sketch	ONLINE AND ONSITE.CBL	-	8
Bibliography Sakar Olcay. Removable Partial Dentures. A practitioner s manual. Springer International Switzerland, 2016. (available at UMFST Library) N.Forna (sub redactia): Protetică dentară, vol.2, Ed. Enciclopedică, Bucuresti, 2011 S.Popșor: Tratatamentul protetic al edentației parțiale prin proteze parțiale mobilizabile. Note de curs pentru studenții Facultății de Medicină dentară și medicii rezidenți în specialitatea Protetică dentară, University Press, Tîrgu 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

The content of the discipline is relevant and updated to the requirements of the practical practice of mobile dental prosthesis in the dentistry, a pathology that concerns a large category of patients (the partial acrylic plaque dentures continue to represent the 'social' prosthesis of the partial edification in Romania) and constitute a good part of the current dental work of the graduate's future. The training provides the European quality standards with the qualitative qualities specific to this type of activity

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	TBL	10
- practical activities	Half-year activity (attendance, qualifications along the way, fulfillment of practical activity scale)	CBL	20
Final evaluation			

- theoretical final exam	Acquiring theoretical knowledge according to the bibliography and the contents of the university lectures	Test with short narrative questions, image recognition	40
- practical final exam	Fulfillment of the minimum set of activities recorded in the Practice Book Assessment of the student's practical knowledge	Clinical and paraclinical examination of partial edentation, treatment, or diagnostic procedures	30
Minimal performance standards: 1. A case presentation, diagnosis and therapeutic plan 2. 1 case of partial edentation treated with a partial denture 3. Be able to make a partial denture design 4. Paraclinical analysis of stone models, including surveying procedures 5. Activity attendance (accumulating more than 7 absences at the practical activities does not allow the student to enter the final exam) 6. The minimum grade to promote the practical and theoretical exams is 5.00			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Hănţoiu Liana-Georgiana	Monday 9-10

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dental office management			
2.2 Course coordinator: Șef I dr Gasparik Andrea Ildikó			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: VI	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: 14		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 6		
- examinations: 4		
- other activities: 4		
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:
UMFST and PHHM discipline internal procedures
5.2 for practical activities:
UMFST and PHHM discipline internal procedures

6. Specific competencies acquired

6.1 professional competencies:
To understand how to apply the principles and functions of management at the dental practice level.
To be able to assess and improve the efficiency of a DM practice.
To be aware of the role and place a dental office occupies, as a provider of medical services, within the public health system.
To be familiar with applying decision theory during the usual activities in a dental office, also to have a strategic view, and apply planning algorithms.
6.2 transversal competencies:
the student will be able to coordinate the activity of a dental office, and to efficiently collaborate with other suppliers or partners (IH)

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 the basics of health management and how it can be applied at the level of a DM office

7.2 Specific objectives:

- To be familiar with the basic concepts (..theories and functions) of management
- To be able to apply the stages of decision theory
- To be able to perform a SWOT analysis
- Be able to set SMART goals
- To be familiar with the way a health system is organized, financed and how it functions.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Health management. Key concepts. Theories and functions	Presentation, discussions	-		1
2	Health management. Key concepts. Theories and functions	Presentation, discussions	-	sleep disturbance	1
3	Management functions applied in DM	Presentation, discussions	-	depression	1
4	Management functions applied in DM	Presentation, discussions	-	sleep disturbance	1
5	Strategical planning. SWOT analysis. Setting objectives	TBL	-	tiredness	1
6	Strategical planning. SWOT analysis. Setting objectives	Presentation, discussions	-	depression	1
7	Managerial authority and responsibility. Decision analysis in dentistry	Presentation, discussions	-	hypertension	1
8	Managerial authority and responsibility. Decision analysis in dentistry	Presentation, discussions	-	tiredness	1
9	Human resource management in the dental office	Presentation, discussions	-	sleep disturbance	1
10	Human resource management in the dental office	Presentation, discussions	-	weight gain	1
11	Understanding of health care systems. Basic concepts. Key components of a well functioning HS	Presentation, discussions	-	diabetes	1
12	Understanding of health care systems. Basic concepts. Key components of a well functioning HS	Presentation, discussions	-	HIV	1
13	Knowledge assessment	test	-	-	1
14	Knowledge assessment	test	-	-	1
Bibliography					
Electronic course material. GAI					

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

In addition to providing medical services, the future MD will be able, to also meet the requirements of efficiency; to coordinate activity, to be involved in the decision-making process at the level of the community and professional associations

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL assessment	TBL technique	10

- practical activities	-	-	0
Final evaluation			
- theoretical final exam	knowledge assessment	multiply choice questions testing	90
- practical final exam	-	-	0
Minimal performance standards: students will have to reach at least 50% (5/10)			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Gasparik Andrea Ildikó	Friday 18-20

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: M2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Professional organisation and legislation			
2.2 Course coordinator: Șef I dr Gasparik Andrea-Ildiko			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: VI	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: 16		
- supplemental documentation at the library, from specialized information portals and in the field: 6		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 2		
- tutorial activities: 4		
- examinations: 3		
- 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:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
in accordance with the UMFST and PHHM discipl. regulations
5.2 for practical activities:
in accordance with the UMFST and PHHM discipl. regulations

6. Specific competencies acquired

6.1 professional competencies:
To be able to understand the concept and legislative aspects of normative acts at EU level
To be able to get involved in making decisions on the legislative framework;
To be familiar with the patient's rights;
To know the legislation specific to the profession of dentist;
6.2 transversal competencies:
To contribute to the professional progress and development;
To get involved in multidisciplinary work;
To participate in solving health problems, as part of the health system, in its area of competence.
Involvement in the development of legislation in 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 aim of the discipline is to give students the basics of legislative and organizational issues of the health system in the field of dentistry.

7.2 Specific objectives:

To be able to analyze a legislative act;

To identify the place occupied by a dentist within the healthcare providers system;

To be familiar and apply the rights of patients;

To know all the aspects related to the practice of dentistry;

To be familiar with the administrative stages of opening a dental practice.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Legislative acts EU	presentation (multimedia), discussion	-	-	1
2	Legislative acts EU	presentation (multimedia), discussion	-	-	1
3	Practicing of dentistry. Professional organizations (dental associations)	presentation (multimedia), discussion	-	-	1
4	Practicing of dentistry. Professional organizations (dental associations)	presentation (multimedia), discussion	-	-	1
5	Establishing a dental practice	presentation (multimedia), discussion	-	HIV	1
6	Establishing a dental practice	presentation (multimedia), discussion	-	tiredness	1
7	Quality and Patient Safety	presentation (multimedia), discussion	-	HIV	1
8	Quality and Patient Safety	presentation (multimedia), discussion	-	hypertension	1
9	Organization of the health system - providers of dental health services	presentation (multimedia), discussion	-	septicaemia	1
10	Organization of the health system - providers of dental health services	presentation (multimedia), discussion	-	-	1
11	Promoting dental health	TBL	-	-	1
12	Promoting dental health	presentation (multimedia), discussion	-	pain management	1
13	Test	multiply choice questions	-	-	1
14	Test	multiply choice questions	-	-	1

Bibliography

Electronic lecture notes (Gasparik A.I.)

EU <https://www.cedentists.eu/pdf>

Standards and their guidance, General Dental Council, UK <https://standards.gdc-uk.org/>

ADA (American Dental Association)

<https://www.ada.org/en/about-the-ada/principles-of-ethics-code-of-professional-conduct/preamble>

STEP-UP to USMLE STEP 2 CK, 5th Edition

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 knowledge gained, students will be able to adapt to the labor market requirements in the field and to meet the expectations of the community. Beyond the clinical part, a dentist should be familiar, from a legislative point of view, with their rights and obligations, the level of

responsibilities. They will be able to deal with possible unexpected situations arising during their professional activity.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL assessment	TBL assessment techniques	10
- practical activities	-	-	0
Final evaluation			
- theoretical final exam	knowledge assessment	test	90
- practical final exam	-	-	0
Minimal performance standards: test performance at least 50%			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Gasparik Andrea-Ildiko	Wednesday 18-20

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Interdisciplinary confluences in orthodontics			
2.2 Course coordinator: Prof dr Păcurar Mariana			
2.3 Practical activities coordinator(s): -			
2.4 Year of study: VI	2.5 Semester: 1	2.6 Type of evaluation: V	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:		
- supplemental documentation at the library, from specialized information portals and in the field:		
- preparation for seminars / laboratories, homework, reports, portfolios and essays:		
- tutorial activities:		
- examinations:		
- 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:
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
Bibliography					

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			0
- practical final exam			0
Minimal performance standards:			

11. Appointment timetable (for students)

Prof dr Păcurar Mariana	

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD 1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Oral pathology			
2.2 Course coordinator: Șef I dr Monea Adriana-Maria			
2.3 Practical activities coordinator(s): Șef I dr Kovacs Monika, Șef I dr Monea Adriana			
2.4 Year of study: VI	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 seminars / laboratories, homework, reports, portfolios and essays: 6		
- tutorial activities: 2		
- examinations: 4		
- 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: videoprojector, PC
5.2 for practical activities: case presentation

6. Specific competencies acquired

6.1 professional competencies: To recognise different forms of oral lesions in systemic diseases. To know the changes in the oral mucosa and the correct diagnosis of the conditions. To identify cases requiring complex therapy in other medical units (hematological disorders, dermatological or infectious diseases). To apply proper treatment methods indicated in each clinical situation
6.2 transversal competencies: To develop the ability to identify pathological changes and collaborate with other disciplines in establishing the correct treatment plan.

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:

Particular emphasis on diagnosis of the most common conditions that are found in the oral cavity

7.2 Specific objectives:

Epidemiological and histopathological aspects of oral lesions. Specific local and general treatments for these conditions

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Oral biology	oral and ppt presentation	-	-	2
2	Elementary lesions. Histopathological changes of oral mucosa. Plaque induced gingivitis	oral and ppt presentation	TBL	-	2
3	Necrositing ulcerative gingivitis	oral and ppt presentation	-	-	2
4	Specific stomatitis. Oral tuberculosis. Oral syphilis	oral and ppt presentation	-	-	2
5	Viral herpetic infections of oral cavity	oral and ppt presentation	-	-	2
6	Candidal infections of oral cavity	oral and ppt presentation	TBL	-	2
7	Aptha	oral and ppt presentation	-	-	2
8	Keratotic lesions. Lichen planus. Leukoplakia	oral and ppt presentation	-	-	2
9	Hematologic diseases	oral and ppt presentation	-	-	2
10	Acute and chronic leukemia	oral and ppt presentation	-	-	2
11	Anemias	oral and ppt presentation	-	-	2
12	Oral manifestations in AIDS	oral and ppt presentation	-	-	2
13	Tongue disease	oral and ppt presentation	-	-	2
14	Erythema multiformis. Pemphigus	oral and ppt presentation	-	-	2

Bibliography

Brad Neville Douglas D. Damm Carl Allen Angela Chi: Oral and Maxillofacial Pathology 4th Edition, 2015

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Patient examination	PPT presentation, practical part	-	-	2
2	Oral biopsy	PPT presentation, practical part	-	-	2
3	Other complementary diagnosis methods	PPT presentation, practical part	-	-	2
4	Elementary lesions	PPT presentation	-	-	2
5	Bacterial infections	PPT presentation	CBL	-	2
6	Viral infections	PPT presentation	-	-	2
7	Aptha	PPT presentation	-	-	2
8	Fungal infections	PPT presentation	-	-	2
9	Hyperkeratotic lesions	PPT presentation	CBL	-	2

10	Hematologic diseases	PPT presentation	-	-	2
11	Anemia. Leukemia	PPT presentation	-	-	2
12	Oral lesions in AIDS	PPT presentation	-	-	2
13	Tongue lesions	PPT presentation	-	-	2
14	Erythema multiformis. Pemphigus	PPT presentation	-	-	2

Bibliography

Brad Neville Douglas D. Damm Carl Allen Angela Chi: Oral and Maxillofacial Pathology 4th Edition, 2015

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	specific for Oral Pathology	2 x TBL	15
- practical activities	specific for Oral Pathology	2 x CBL	15
Final evaluation			
- theoretical final exam	specific for Oral Pathology	Theoretical exam (multiple choice test)	50
- practical final exam	specific for Oral Pathology	practical exam	20

Minimal performance standards:

- Minimum criteria for validating the assessments during the semester (in correlation with the Discipline Regulation)
- Minimum conditions for admission to final examination - recognition of oral mucosal lesions: positive and differential diagnosis criteria, treatment indications
- the minimum conditions required to fulfill the final summative assessment (practical + theoretical examination) - obtaining the 5.00 mark for both the practical and the theoretical examination.
- Recognition of pathological changes in the buccal mucosa and oral manifestations of serious systemic disorders.
- Ability to formulate treatment protocols and collaborate with other medical specialties.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Șef I dr Monea Adriana-Maria	Tuesday 16-18

Head of department

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Medical and surgical emergencies in dental medicine			
2.2 Course coordinator: Șef I dr Iacob Alina			
2.3 Practical activities coordinator(s): Șef I dr Iacob Alina, Șef I Dr. Petrovan Cecilia, Șef I Dr Cosarca Adina, Asist Univ Berecki Temistocle Despina			
2.4 Year of study: VI	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: 15		
- supplemental documentation at the library, from specialized information portals and in the field: 15		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 6		
- examinations: 8		
- other activities: 2		
3.8 Total hours of individual study: 56		
3.9 Total hours: 126		
3.10 Credits: 5		

4. Prerequisites (where applicable)

4.1 curricular:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Course room / internet connection
5.2 for practical activities:
Practical activity room, various disposable syringes and needles, gloves, swabs, alcohol, tourniquet, blood pressure measurement device, if possible access to Simulation Center (UMFST).

6. Specific competencies acquired

6.1 professional competencies:
Students are learning to take a good, correct, complete history of patients with different general conditions, to recognize possible emergency situations that may occur during dental treatments, then they learn to prevent them, and guide the patient to specialized health care, in order to assess and correct these conditions.
6.2 transversal competencies:
Effective collaboration with other specialties for a fair, efficient interdisciplinary treatment.

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:

Prevention and management of emergency situations in dental office.

7.2 Specific objectives:

Students will learn to approach and treat patients with different systemic diseases from the dental medicine point of view.

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Classification of dental procedures according to patients general conditions	Oral and multimedia presentation, discussions	-	-	2
2	The importance of history taking and the general clinical examination in the prevention of emergency situations in dental office	Oral and multimedia presentation, discussions	-	-	2
3	Risk factors for the occurrence of systemic complications related to local anesthetic substances	Oral and multimedia presentation, discussions	-	-	2
4	The management of the patient with cardiovascular diseases (part I)	Oral and multimedia presentation, discussions	-	-	2
5	The management of the patient with cardiovascular diseases (part II)	Oral and multimedia presentation, discussions	-	-	2
6	The management of the patient with cardiovascular diseases (part III)	TBL	TBL 1	-	2
7	The management of the patient with endocrine disorders	Oral and multimedia presentation, discussions	-	-	2
8	The management of the patient with hepatic (liver) disorders	Oral and multimedia presentation, discussions	-	-	2
9	The management of the patient with allergy, neuropsychiatric disorders	Oral and multimedia presentation, discussions	-	-	2
10	The management of the patient with infectious diseases	TBL	TBL 2	-	2
11	The management of the patient with kidney and lung disease	Oral and multimedia presentation, discussions	-	-	2
12	Treatment of medical emergencies (situations) occurred in the dental office	Oral and multimedia presentation, discussions	-	-	2
13	Emergency kit for the dental office	Oral and multimedia presentation, discussions	-	-	2
14	Discussions, revision	Oral and multimedia presentation, discussions	-	-	2

Bibliography

1. Scully C.: Oxford Handbook Of Dental Patient Care, Second Edition, Oxford University Press, USA, 2005

2. Iacob A., Ormenișan A.: Prevenirea și tratamentul urgențelor medicale în cabinetul de medicină dentară, curs pentru studenții anului VI MD, University Press, Tg-Mureș, 2015

3. Naftali Gh., Puskas A.: Prevenirea urgentelor medicale in cabinetele stomatologice. Curs pentru studenti, Litografia UMF Tg-Mures, 2004
4. Voroneanu M., Bucur A., Iordache N., Balan H.: Urgente medico-chirurgicale in cabinetul de medicina dentara. Ghid practic de diagnostic si tratament prespitalicesc, Ed. Medicala. Bucuresti 2014

8.2 Content of laboratory, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Blood pressure and pulse measurement	Case presentation, discussions, examples, exercises	-	-	3
2	Exercise different antibio-prophylaxy regimens. Writing a prescription	CBL	CBL 1	-	3
3	Determination of blood glucose	Case presentation, discussions, examples, exercises	-	-	3
4	Intradermal testing of different specific allergens, and interpretation of the results	Case presentation, discussions, examples, exercises	-	-	3
5	Subcutaneous injection technique	CBL	CBL 2	-	3
6	Intramuscular injection technique (deltoid)	Case presentation, discussions, examples, exercises	-	-	3
7	Intravenous injection technique / peripheral venous cannulation	Case presentation, discussions, examples, exercises	-	-	3
8	Interpretation of laboratory test results	CBL	CBL 3	-	3
9	How to manage patients with oral anticoagulant therapy	Case presentation, discussions, examples, exercises	-	-	3
10	Relevant history of patients with general disorders	Case presentation, discussions, examples, exercises	-	-	3
11	Completing medical questionnaires	Case presentation, discussions, examples, exercises	-	-	3
12	Examination the contents of the emergency kit	CBL	CBL 4	-	3
13	How to use the drugs and supplies from emergency kit	Case presentation, discussions, examples, exercises	-	-	3
14	Revision of studied knowledge	Case presentation, discussions, examples, exercises	-	-	3

Bibliography

1. Scully C.: Oxford Handbook Of Dental Patient Care, Second Edition, Oxford University Press, USA, 2005
2. Iacob A., Ormenișan A.: Prevenirea și tratamentul urgențelor medicale în cabinetul de medicină dentară, curs pentru studenții anului VI MD, University Press, Tg-Mureș, 2015
3. Naftali Gh., Puskas A.: Prevenirea urgentelor medicale in cabinetele stomatologice. Curs pentru studenti, Litografia UMF Tg-Mures, 2004
5. Voroneanu M., Bucur A., Iordache N., Balan H.: Urgente medico-chirurgicale in cabinetul de medicina dentara. Ghid practic de diagnostic si tratament prespitalicesc, Ed. Medicala. Bucuresti 2014

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

Students should be able to recognize emergency situations that may occur in the dental office, to prevent them and, if necessary, to perform a preliminary treatment until the arrival of the emergency crew that will take the patient into specialized units (according to their general situation developed).

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 discipline	The mean of the TBL	15
- practical activities	According to the specific objectives of the discipline	The mean of the CBL	15
Final evaluation			
- theoretical final exam	According to the specific objectives of the discipline	Written evaluation / test - multiple choice questions.	50
- practical final exam	According to the specific objectives of the discipline	Written evaluation / test - multiple choice questions (based on case presentations)	20
Minimal performance standards: Final Theoretical Examination Mark - minimum 5; mark <5 = exam failed; Practical final exam mark - minimum 5; mark <5 = exam failed; Final mark - minimum 5; mark <5 = exam failed. The presence - mandatory for practical activity; 20% unmotivated absences are allowed (4 hours PA = 2 PAs); > 20% unmotivated and unrecovered absences = exam failed			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

Students should be able to take a good medical history of the patient, to prevent possible medical emergencies. If they occur, the students must be able to start basic treatment in each situation, call ambulance and send patient to Emergency Unit.

13. Appointment timetable (for students)

Şef I dr Iacob Alina	30 minutes after each course/PA.

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Periodontology (2)			
2.2 Course coordinator: Șef I dr Bukhari Csilla			
2.3 Practical activities coordinator(s): Conf dr. Lazăr Luminița, șef lucrări dr. Bukhari Csilla, Asist.univ. Buka Imola, Asist.univ. drd. Vlăsa Alexandru			
2.4 Year of study: VI	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: 112	3.5 lectures: 28	3.6 practical activities: 84
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 seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 7		
- examinations: 7		
- other activities: 7		
3.8 Total hours of individual study: 63		
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:
Video projector, computer (PC)
5.2 for practical activities:
Video projector, computer (PC)

6. Specific competencies acquired

6.1 professional competencies:
Knowledge of the methods used in formulating the complete diagnosis of periodontal diseases (clinical, radiological, laboratory examination). Acquisition of methods for evaluating the depth of periodontal pockets and the possibility of medicinal and surgical treatment of different forms of inflammation in the supporting tissues of the tooth. Knowledge of the types of surgery that are part of the complex treatment of these forms of disease.
6.2 transversal competencies:
Formation of interdisciplinary collaboration skills with related medical specialties (microbiology, immunology, histopathology, dento-alveolar surgery) in order to achieve a complex treatment of periodontal disease. The knowledge of the working methodologies in the medium and long term studies regarding the results of the periodontal therapy in different groups of 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:

Knowledge of data related to the etiology, pathogenesis and treatment of different forms of periodontal disease, because the dentist cannot avoid the responsibility in examining, treating or advising all patients' periodontal problems.

7.2 Specific objectives:

Acquisition of knowledge regarding the etiology, diagnosis, prognosis and treatment of the periodontal diseases..

8.1 Content of lecture, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1.Diagnosis of gingival-periodontal diseases. Classification of the diseases of the marginal periodontium.	Oral and multimedia presentation	-	-	2
2	2.Gingivitis. Clinical forms.	Oral and multimedia presentation	-	-	2
3	3.Periodontitis. Clinical forms.	Oral and multimedia presentation	-	-	2
4	4.The treatment of gingivitis and periodontitis. Initial therapy.	Oral and multimedia presentation	-	-	2
5	5.Systemic anti-infective therapy for periodontal diseases.	TBL	Individual testing of students, solving the test in working groups, clarification of difficult aspects.	-	2
6	6.Surgical treatment – subgingival curettage, gingivectomy.	Oral and multimedia presentation	-	-	2
7	7.Surgical treatment – flap surgery, gingival recession coverage methods	Oral and multimedia presentation	-	-	2
8	8.Surgical treatment – mucogingival surgery.	Oral and multimedia presentation	-	-	2
9	9.Surgical treatment – periodontal regeneration and reconstructive surgery	Oral and multimedia presentation	-	-	2
10	10.Surgical treatment – guided tissue regeneration	Oral and multimedia presentation	-	-	2
11	11.Occlusal adjustment.	Oral and multimedia presentation	-	-	2
12	12.Periodontal splinting.	TBL	Individual testing of students, solving the test in working groups, clarification of difficult aspects.	-	2
13	13.Treatment schemes in periodontal diseases.	Oral and multimedia presentation	-	-	2
14	14.The maintenance therapy.	Oral and multimedia presentation	-	-	2

Bibliography
Bibliography:

1. Dumitriu H. – Periodontology, Ed. Medicala, Bucuresti, 2009
2. Gera I. – Periodontology, Ed. Semmelweis, Budapest, 2009
3. Newman MG, Takei H, Klokkevoold PR, Carranza FA. – Newman and Carranza`s Clinical Periodontology, 13th Edition, Elsevier Health Sciences, 2019

Facultative bibliography:

1. Roman A, Lazăr L, Șurlin P, Stratul ȘI. Parodontologie 1 Noțiuni de bază. Editura Medicală Universitară Iuliu Hațieganu Cluj-Napoca, 2019
2. Lazăr L, Monea AI. Chiuretajul subgingival în practica ambulatorie de parodontologie. Editura University Press Tg. Mureș, 2009
3. Lazăr L. Elemente de parodontologie clinică. Editura University Press Tg. Mureș, 2015
4. Ionescu E. Manual pentru rezidentiat. Ed. Univ. Carol Davila, Bucuresti, 2021

8.2 Content of workout, semester 1

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	1.The algorithm of the diagnosis in periodontal diseases.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
2	2.Completion of periodontal file.	CBL	The students receive the material in time, so they can make individual study	-	6
3	3.Methods of correct determination of periodontal pocket depth.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
4	4.Methods of evaluation of the clinical attachment loss.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
5	5.The instruments used in subgingival curettage.	CBL	The students receive the material in time, so they can make individual study	-	6
6	6.Completion of periodontal file.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
7	7.Periodontal surgery instrumentation.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
8	8.The antimicrobial therapy in periodontology.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
9	9.Periodontal emergencies.	CBL	The students receive the material in time, so they can make individual study	-	6
10	10.Case presentation.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
11	11.Realization of practical maneuvers included in the minimum scale of practical knowledge: - non-surgical causal periodontal therapy.	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
12	12.Realization of practical maneuvers included in the minimum scale of practical knowledge: - non-surgical causal periodontal therapy	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6
13	13.Realization of practical maneuvers included in the minimum scale of practical knowledge: - non-surgical causal periodontal therapy	Multimedia presentation, practical demonstrations and clinical cases.	-	-	6

14	14.Periodontal splinting	CBL	The students receive the material in time, so they can make individual study	-	6

Bibliography
Bibliography:

1. Dumitriu H. – Periodontology, Ed. Medicala, Bucuresti, 2009
2. Gera I. – Periodontology, Ed. Semmelweis, Budapest, 2009
3. Newman MG, Takei H, Klokkevold PR, Carranza FA. – Newman and Carranza's Clinical Periodontology, 13th Edition, Elsevier Health Sciences, 2019

Facultative bibliography:

1. Roman A, Lazăr L, Șurlin P, Stratul ȘI. Parodontologie 1 Noțiuni de bază. Editura Medicală Universitară Iuliu Hațieganu Cluj-Napoca, 2019
2. Lazăr L, Monea AI. Chiuretajul subgingival în practica ambulatorie de parodontologie. Editura University Press Tg. Mureș, 2009
3. Lazăr L. Elemente de parodontologie clinică. Editura University Press Tg. Mureș, 2015
4. Ionescu E. Manual pentru rezidentiat. Ed. Univ. Carol Davila, Bucuresti, 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 content of the discipline is corroborated with the need of employers in the fields of health, health management, medical education, drug companies, research in dental medicine.

10. Evaluation

10. Evaluation			
Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Course attendance, grades obtained on the tests during the TBL courses	Average of the grades obtained in assessing the criteria of evaluation	10
- practical activities	The practical works attendance, fulfilling the minimum scale of activity.	Average of the grades obtained in assessing the criteria of evaluation	20
	Qualifications obtained during the CBL sessions	Average of the grades obtained during CBL	
Final evaluation			
- theoretical final exam	Acquiring knowledge required to develop a complete diagnosis by covering all stages of the clinical cases of the gingival and periodontal disease patient. The knowledge of the treatment schemes in different types of periodontal and gingival diseases.	Test	50
- practical final exam	Student's ability to properly examine a patient with periodontal disease, to complete a periodontal file, to put a correct diagnosis, to be able to make properly the initial treatment	Written evaluation	20

Minimal performance standards:

- The accumulation of more than 3 absences on the course, and more than 3 absences on the practical part results in students being forbidden to access the final exam. The motivated absences will be recovered after a schedule established at level of the discipline.

- Evaluation during semester:

1. Practical works:

Fulfilling minimum scale of activity: patient examination and completing 2 periodontal files and performing 2 maneuvers of non-surgical causative periodontal therapy.

2. Course:

In case of not attending the TBL sessions, note 1 will be granted; there is no possibility to repeat this assessment, but it will still be allowed to take the final exam. In case of absence at the TBL sessions for extremely justified reasons, the student has the possibility to draw up a report from the respective topic.

- The final evaluation:

Minimum promotion mark is 5 in both practical and theoretical exams.

11. Must seen clinical situation list

- MUST SEEN CLINICAL SITUATIONS LIST:

1. Chronic gingivitis (simple, not complicated) – plaque induced
2. Hyperplastic gingivitis (plaque induced)
3. Gingivitis related with physiological conditions
4. Gingivitis related with systemic diseases (diabetes, haematological disorders)
5. Medicine induced hyperplastic gingivitis
6. Acute necrotizing ulcerative gingivitis and gingivostomatitis
7. Primary herpetic gingivitis and gingivostomatitis
8. Recurrent aphthous gingivitis and gingivostomatitis
9. Gingivitis and gingivostomatitis of fungal origin
10. Chronic periodontitis
11. Localized aggressive periodontitis
12. Generalized aggressive periodontitis
13. Acute necrotizing ulcerative periodontitis
14. Periodontal abscess

12. Clinical / practical abilities

To recognize the previously listed diseases

13. Appointment timetable (for students)

Şef I dr Bukhari Csilla

Tuesday 15-17

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MDII
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Oral and maxillo-facial surgery (2)			
2.2 Course coordinator: Senior Lecturer Coșarcă Adina-Simona			
2.3 Practical activities coordinator(s): Senior Lecturer Iacob alina Senior Lecturer Petrovan Cecilia Assistant Lecturer Dr.. Bereczki-Temistocle Despina			
2.4 Year of study: VI	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: 22		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 14		
- tutorial activities: 7		
- examinations: 12		
- other activities: 15		
3.8 Total hours of individual study: 98		
3.9 Total hours: 154		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular:
-
4.2 competency:
-

5. Conditions

5.1 for lectures:
Laptop
5.2 for practical activities:
Surgery room, Demonstration room

6. Specific competencies acquired

6.1 professional competencies:
Regarding the appearance of the pathology studied description of concepts, theorys and fundamental notions .Signs and symptoms description for tumors that are useful for clinic diagnostic. For first aid - identification of resuscitation maneuvers. Correct interpretation for signs, clinical and paraclinical symptoms for presumptive diagnostic.
For the treatment planit correct elaboration interpretation of the clinical and paraclinical data is necesary.
For the final diagnostic and the prognosis of the clinical case correct application of the techniques and the clinical acknowledgements must be achieved.
Obtaining an individualized treatment plan according to the disease status and the particularities of every patients is mandatory.

For diagnosis of the benign and malignant tumors in oro maxillo facial territory correct clinical assessment is necessary.

6.2 transversal competencies:

Identification of the objectives to be achieved resources available, work stages, the conditions for their completion, the working times, the related risks.

Identifying roles and responsibilities in a multidisciplinary team and applying relationship techniques and effective work within the team and in relation to the patient. Effective use of communication resources and assisted professional training.

Knowledge and observance of safety principles at the workplace, protection of work and individual protection.

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 dentist's correct attitude to premalignant lesions, namely benign and malignant tumoral lesions in the oro-maxillo-facial sphere, salivary gland pathology, ATM pathology, complex dento-maxillary abnormalities, and labio-maxillo-palatinus that appear on the face and oral cavity.

7.2 Specific objectives:

Performing anamnesis, complete and correct clinical examination as well as basic diagnostics, requiring adequate complementary examinations; formulating a positive and differential diagnosis

Achieving a personalized therapeutic plan and performing basic therapies, including those aimed at qualified first aid. Familiarize students with precancerous conditions and benign, malignant conditions encountered in the oro-maxillofacial sphere that you may encounter in dental practice. Therapeutic attitude in the dental office towards the oncological patient and drug treatments that could complicate dental treatments.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The cysts and fistulas of oro-facial soft tissues	Oral presentation + multimedia, discussions	-	-	2
2	Benign tumors of soft oro-facial parts	Oral presentation + multimedia, discussions	-	-	2
3	Non-odontogenic maxillary benign tumors	Oral presentation + multimedia, discussions	-	-	2
4	Benign odontogenic maxillary tumors	TBL	TBL1	-	2
5	Precancerous lesions in oro-maxillo-facial territory	Oral presentation + multimedia, discussions	-	-	2
6	Etio-pathogenesis of cancers in the oro-maxillo-facial area	Oral presentation + multimedia, discussions	-	-	2
7	Paraclinical examinations, diagnosis in oro-maxillo-facial cancers	Oral presentation + multimedia, discussions	-	-	2
8	Malignant tumors of oro-facial soft parts -1	Oral presentation + multimedia, discussions	-	-	2
9	Malignant tumors of oro-facial soft parts -2	Oral presentation + multimedia, discussions	-	-	2
10	Malignant maxillary tumors	Oral presentation + multimedia, discussions	-	-	2

11	Pathology of salivary glands	Oral presentation + multimedia, discussions	-	-	2
12	Pathology of the temporomandibular joint	Oral presentation + multimedia, discussions	-	-	2
13	Congenital labio-maxilo-palatine cleft - Etiopathogenesis, clinical aspects and surgical treatment in multidisciplinary therapy	Oral presentation + multimedia, discussions	-	-	2
14	Complex congenital malformations. Surgical orthognatic treatment	Oral presentation + multimedia, discussions	-	-	2

Bibliography

2. Bucur A., Navarro C.V., Lowry J., Acero J.: Compendiu de chirurgie oro-maxilo-facială, vol. 1 și 2, Editura 2009 Q Med Publishing București

Bibliografie facultativă:

1. Burlibașa C.: Chirurgie Orală și Maxilofacială, Editura Medicală, București, 2003
2. Rotaru A., G. Băciut, Rotaru H.: Chirurgie Maxilo-Facială vol. I-II, Editura Medicală Universitară „Iuliu Hațieganu”, Cluj Napoca, 2003
3. Szabó Gy.: Oral and Maxillofacial Surgery, Semmelweis Publishing House, Budapest, 2001
4. Stolnicu Simona, Mocan Simona, Naftali Gh.: Patologie orală, University Press, Tîrgu Mureș, 2005
5. Jatin Shash's, Head and neck surgery and oncology, fourth edition, ISBN: 978-0-323-05589-5 Elsevier 2012
6. Lars Andersson, Karl-Eric Kahnberg, M Anthony Pogrel, Oral and maxillo facial surgery, Wiley Blackwell 2010
7. Jaypee Brothers, Textbook of oral and maxillo facial surgery 3rd edition

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The cysts and fistulas of oro-facial soft tissues	Case presentation, multimedia, discussions	-	-	2
2	Benign tumors of soft oro-facial parts	Case presentation, multimedia, discussions	-	-	2
3	Non-ontogenic maxillary benign tumors	CBL	CBL1	-	2
4	Benign odontogenic maxillary tumors	Case presentation, multimedia, discussions	-	-	2
5	Precancerous lesions in oro-maxillo-facial territory	CBL	CBL2	-	2
6	Malignant tumors of oro-facial soft parts	Case presentation, multimedia, discussions	-	-	2
7	Malignant tumors of oro-facial soft parts	CBL	CBL3	-	2
8	Malignant tumors of oro-facial soft parts	Case presentation, multimedia, discussions	-	-	2
9	Malignant maxillary tumors	CBL	CBL4	-	2
10	Pathology of salivary glands	Case presentation, multimedia, discussions	-	-	2
11	Pathology of the temporomandibular joint	Case presentation, multimedia, discussions	-	-	2
12	Congenital labio-maxilo-palatine cleft - Etiopathogenesis, clinical aspects and surgical treatment in multidisciplinary therapy	Case presentation, multimedia, discussions	-	-	2
13	Complex congenital malformations. Surgical orthognatic treatment	Case presentation, multimedia, discussions	-	-	2
14	Revision	Case presentation, multimedia, discussions	-	-	2

Bibliography

3. Bucur A., Navarro C.V., Lowry J., Acero J.: Compendiu de chirurgie oro-maxilo-facială, vol. 1 și 2, Editura 2009 Q Med Publishing București

Bibliografie facultativă:

1. Burlibașa C.: Chirurgie Orală și Maxilofacială, Editura Medicală, București, 2003

2. Rotaru A., G. Băciuț, Rotaru H.: Chirurgie Maxilo-Facială vol. I-II, Editura Medicală Universitară „Iuliu Hațieganu”, Cluj Napoca, 2003

3. Szabó Gy.: Oral and Maxillofacial Surgery, Semmelweis Publishing House, Budapest, 2001

4. Stolnicu Simona, Mocan Simona, Naftali Gh.: Patologie orală, University Press, Tîrgu Mureș, 2005

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 year students can correctly diagnose malignant and benign tumors; can guide the patient to surgical service.

Diagnosis for the patients with salivary gland disorders, joint disorders and malformations

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	According to the department of Oral and maxillofacial surgery	Mean TBL	15
- practical activities	According to the department of Oral and maxillofacial surgery	Mean CBL	15
Final evaluation			
- theoretical final exam	According to the department of Oral and maxillofacial surgery	Written evaluation-multiple choice test	50
- practical final exam	According to the department of Oral and maxillofacial surgery	Oral /written revision on pathology studied in the course of the semester	20

Minimal performance standards:

Clinical examination, investigation of the medical history of the patient- oncologic risk zones examination, basic diagnosis, complementary test request.

Positive and differential diagnose.

Individualized therapeutic plan, basic therapeutic manoeuvres regarding the first aid.

Final theoretic exam note– min. 5; note < 5 = failed exam;

Final practical exam(verification)) – min 5; note < 5 =failed exam;

Final note – min 5; not < 5 = Failed exam

Presence - mandatory at practice. 20% absence are allowed (4 hours class= 2 classes and 4 hours practice=2 practice

20% absence groundless and unrecovered= failed exam

Absences for practice can be recovered and only during the year and the summer practice and according to the teachers program.

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Senior Lecturer Coșarcă Adina-Simona	30 minute dupa orele de curs

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Orthodontics (2)			
2.2 Course coordinator: Prof dr Mártha Ildikó-Krisztina			
2.3 Practical activities coordinator(s): Prof. Krisztina Martha, Lecturer dr. Silvia Pop, lecturer dr. Eugen Bud, asist. dr. Mahmoud ElSaafim			
2.4 Year of study: VI	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: 20		
- supplemental documentation at the library, from specialized information portals and in the field: 18		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 18		
- tutorial activities: 2		
- examinations: 5		
- other activities: 3		
3.8 Total hours of individual study: 66		
3.9 Total hours: 150		
3.10 Credits: 6		

4. Prerequisites (where applicable)

4.1 curricular: Establish complex orthodontic diagnosis and knowledge of therapeutical goals
4.2 competency: Basic knowledge of static and dynamic occlusion, cardiology, and dental morphology

5. Conditions

5.1 for lectures: Video projector, PC, flipchart
5.2 for practical activities: Treatment halls, dental units, negatoscope

6. Specific competencies acquired

6.1 professional competencies: Elaboration of a complex and individualized treatment plan by clinical examination, complementary examinations (model analysis, radiography examination (OPG and teleradiography), photostatic exam, static and dynamic occlusion examination, anthropometric measurements) Establishing a morphological, etiological, and functional orthodontic complex diagnosis. Establishing therapeutic goals. Preparing the patient for the orthodontic appliance Knowing the stages of ADM growth and development, the importance of maintaining the support area in the etiology of malocclusions Knowledge of methods to combat ADM parafunctions and dysfunctions. Selective grinding, stripping, exercises of

myogymnastics.

6.2 transversal competencies:

Identifying the objectives to be achieved, the working steps, the implementation deadlines, the available resources, the risks and the conditions for completion in the projects under coordination;

Identifying role and responsibility in a multidisciplinary team;

Performing orthodontic screenings in different age groups to identify the epidemiological aspects of dento-maxillary anomalies;

Early identification of serious skeletal abnormalities, with harmony of facial harmony and orientation towards specialist surgery.

Effective use of information sources, communication and training resources both in Romanian, Hungarian and in an international language, in order to elaborate and present a specialized work;

Identifying objectives, work phases, available resources, risk factors in targeted 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:

Establish complex orthodontic diagnosis and identification of all treatment goals

7.2 Specific objectives:

Acquiring the particularities of organogenetic disorders in the form of certain dento-maxillary abnormalities, approaching dysfunctions, and parafunction.

Clinical and therapeutic particularities of orthodontic malocclusions.

Knowing the optimal moment to establish an orthodontic treatment;

Designing a complex orthodontic treatment plan depending on the child's age and general health, with an emphasis on the nature of the anomaly.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Classification of orthodontic appliances	Oral, multimedia presentation	-	-	2
2	Removable orthodontic appliances. The acrylic basis, clasps, acrylic splints	Oral, multimedia presentation	-	-	2
3	Removable orthodontic appliances. Active elements: springs, orthodontic screw	Oral, multimedia presentation	-	-	2
4	Removable orthodontic appliances: functional elements. Types of appliances. Appliance wearing.	Team-based learning TBL 1	Early communication of the topic in order to prepare	-	2
5	Classic functional orthodontic appliances. The principle of the inclined plane. Activator - monobloc. Indications and contraindications.	Oral, multimedia presentation	-	-	2
6	Modern functional orthodontic appliances. The Frankel appliance. Balters bionator.	Oral, multimedia presentation	-	-	2
7	Passive orthodontic appliances. Removable and fixed space maintainers.	Team-based learning TBL 2	Early communication of the topic in order to prepare	-	2
8	Fixed orthodontic appliances. Advantages, actions, and indications. Orthodontic bands, tubes, ligatures, and brackets.	Oral, multimedia presentation	-	-	2
9	Fixed orthodontic appliances. Wires: selection and action. Elastics: types of elastics.	Oral, multimedia presentation	-	-	2
10	Fixed orthodontic appliances. Anchorage control: transpalatal arch - Goshgarian, lingual arch, Quad helix, Nance appliance.	Oral, multimedia presentation	-	-	2
11	Intra-extraoral orthodontic devices. Headgear, Delaire mask.	Oral, multimedia presentation	-	-	2

12	Rapid palatal expansion. Types of devices and actions.	Oral, multimedia presentation	-	-	2
13	Relapse after orthodontic treatment. Cause and prevention. Retainers.	Oral, multimedia presentation	-	-	2
14	Orthodontic management of patients with LMP clefts. Impression taking and usable appliances	Oral, multimedia presentation	-	-	2

Bibliography

1. Mártha Krisztina, Cristina Bică: OrthoAtlas, Ed. University Press Tg. Mureș, 2015, ISBN: 978-973-169-329-3
2. Păcurar Mariana : Aparatura ortodontica functionala, de la clasic la modern, Editura University Press, Tg.Mures, 2007. 2. Păcurar Mariana ,Irina Zetu: Introducere în tehnica arcului drept, Vol.2, Editura Lyra, Tg. Mureș, 2003.
3. Păcurar Mariana, Bud Eugen, Eșian Daniela, Chibelea Manuela: Ancorajul în ortodonție. Ed.University Press, UMF Tg.Mureș, 2015

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Monomaxilar and bimaxillary static examination on casts. Resume.	Practical demonstration, individual work	-	-	4
2	Complementary orthodontic examination. Resume.	Practical demonstration, individual work	-	-	4
3	Indices and measurements. Resume.	Practical demonstration, individual work	-	-	4
4	Design of removable orthodontic appliances. Section possibilities of the basis.	Case-based learning CBL 1	Complex clinical case study and appliance design	-	4
5	Clasps manufacturing on work casts. Practical demonstration.	Practical demonstration, individual work	-	-	4
6	Springs manufacturing on work casts. Practical demonstration.	Practical demonstration, individual work	-	-	4
7	Working bite determination: indirect method. Demonstration.	Practical demonstration, individual work	-	-	4
8	Activation of inclined planes on functional appliances. Demonstration.	Practical demonstration, individual work	-	-	4
9	Functional components manufacturing on working casts.	Case-based learning CBL 2	Complex clinical case study and appliance design	-	4
10	Orthodontic chart. Demonstration of direct bonding technique.	Practical demonstration, individual work	-	-	4
11	Fixed appliance control. Demonstration.	Practical demonstration, individual work	-	-	4
12	Anchorage improving devices: Quad helix, lip-bumper, Nance appliance.	Case-based learning CBL 3	Complex clinical case study and appliance design	-	4
13	Interceptive orthodontics: trainers and labial plate.	Practical demonstration, individual work	-	-	4
14	Case presentation.	Case-based learning CBL 4	Complex clinical case study and appliance design	-	4

Bibliography

1. Martha Krisztina, Bică Cristina: Ortho-Atlas, Ed. University Press Tg.Mureș, 2015.
2. Păcurar Mariana, Bud Eugen, Eșian Daniela, Chibelea Manuela: Ancorajul în ortodonție. Ed. University Press, UMF Tg.Mureș, 2015
3. Pop Silvia Izabella, Bratu Dana Cristina, Păcurar Mariana: Noțiuni de biomecanică în tratamentul ortodontic fix, Editura University Press, Tg.Mures, 2015
4. Stanciu : Ortodonție și Ortopedie dento-facială, Ed. Medicală, București 2009.

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 corroborated with the need of employers in the health, health management, medical education, research in dental medicine.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL	Average of the two TBL sessions	15
- practical activities	CBL	Average of the 4 CBL modules	25
Final evaluation			
- theoretical final exam	Final test	Theoretical test	40
- practical final exam	Practical exam	Practical exam	20
Minimal performance standards: The final mark of promotion is 5 (five) and consists of the semesters of the assessments during the semester (TBL, CBL) respectively the final examinations. The student is required to attend all the evaluations throughout the year. If absent from a TBL module, the mark will be 1; there is no possibility of repeating this assessment, but it will still be possible to support the final exam. In case of absences at TBL sessions for extremely justified reasons, the student has the possibility to draw up a paper on the topic (refferatum). The final practical examination is mandatory, with the minimum promotion mark being 5.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

Minimum bar for practical works during the semester, which condition the participation in the practical exam in the session: Case presentation (complex orthodontic diagnosis) 2 Removable appliances (design of an orthodontic plate) 2 Making the orthodontic plate anchor elements - Stahl clasp (demonstration) 1 Making the active elements of the orthodontic plate - auxiliary springs (demonstration) 2 Functional devices. Corrected occlusion on model 2 Fixed orthodontic appliances: bonding (demonstration) 1 Fixed orthodontic appliances: adapting bands on study cast (demonstration) 2 Fixed orthodontic appliances: arc ligature on Typodont 1 Fixed orthodontic appliances: bending arches 2 Anchorage auxiliaries: adapting a lingual / transpalatal arch to the study model (demonstration) 1 Preparation of the orthodontic treatment sheet 1 Preparation of the Laboratory Sheet 1 Repairing a Plate in the Cabinet (Demonstration) 1 Preparing the License 1

13. Appointment timetable (for students)

Prof dr Mártha Ildikó-Krisztina	Thursday, 9.00-10.00 am

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Dentofacial cosmetics			
2.2 Course coordinator: Șef I dr Stoica Alexandra-Mihaela			
2.3 Practical activities coordinator(s): Șef Lucr Dr Stoica Alexandra Mihaela			
2.4 Year of study: VI	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: 21		
- supplemental documentation at the library, from specialized information portals and in the field: 19		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 11		
- tutorial activities: 4		
- examinations: 2		
- 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:
laptop, video-projector
5.2 for practical activities:
Rubber dam kit, composite set, low and high hand-pieces, polishing kit, matrix system.

6. Specific competencies acquired

6.1 professional competencies:
Elaboration of the treatment plan according to the the principles of cosmetic odonto-therapy, applied both individually for each tooth, and generally, at the level of the dental arches. Information regarding the application of color characteristics, valid both for dental structures and for composite materials used in direct dental restoration. Acquiring the knowledge necessary to whiten vital and non-vital teeth.
6.2 transversal competencies:
The use of photographic examination and modern digital methods for visualizing the final post-treatment aesthetic image, for a complex approach to cosmetic-dental treatment plans.

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:

Although dental aesthetics continues to develop in all directions of dentistry, in the course we wanted to focus on dental cosmetic treatments of vital and non-vital teeth.

7.2 Specific objectives:

Students acquire data on the basic concept of dental aesthetics, development of treatment plan, approach and correction of non-carious and carious dental lesions using composite materials, gain information on the possibilities of aesthetic reshaping of front teeth and teeth whitening techniques.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	The concept of dental aesthetics. Elaboration of the treatment plan.	Oral and multimedia presentation.	-	-	2
2	Optical characteristics of hard dental tissues.	Oral and multimedia presentation.	-	-	2
3	Non-carious dental lesions.	Oral and multimedia presentation.	-	-	2
4	Direct dental restorations with composite materials.	Oral and multimedia presentation.	-	-	2
5	Aesthetic reshaping of teeth.	TBL	-	-	2
6	Basic principles in teeth whitening techniques.	Oral and multimedia presentation.	-	-	2
7	Application of cosmetic techniques in the aesthetic restoration of endodontic treated teeth.	Oral and multimedia presentation.	-	-	2

Bibliography

1. George Freedman: Contemporary esthetic dentistry. Elsevier.2010

2. W. Kenneth Aschheim: Esthetic Dentistry - A Clinical Approach to Techniques and Materials.2001

3. N Wilson: Esthetic Dentistry.2015

4. D Marrisoni: Precision in dental esthetics.2007

5. Nairn H. F. Wilson: Essentials of Esthetic Dentistry Principles and Practice of Esthetic Dentistry.2015

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Examinarea pacientului. Stabilirea diagnosticului și realizarea planului de tratament.	Prezentare multimedia, demonstrație practică.	-	-	4
2	Examinarea țesuturilor dure dentare. Utilizarea magnificației pentru evaluarea smalțului și a dentinei.	Prezentare multimedia, demonstrație practică.	-	-	4
3	Efectuarea restaurărilor odontale directe la grupul dinților frontali.	Prezentare multimedia, demonstrație practică.	-	-	4
4	Efectuarea restaurărilor odontale directe la grupul dinților laterali.	CBL	-	-	4
5	Tehnici de albire a dinților vitali. Albirea internă a dinților devitali.	Prezentare multimedia, demonstrație practică.	-	-	4
6	Reconturarea estetică a obturațiilor de compozit.	Prezentare multimedia, demonstrație practică.	-	-	4
7	Refacerea unghiurilor și a marginilor incizale cu ajutorul materialelor compozite.	Prezentare multimedia, demonstrație practică.	-	-	4

Bibliography

1. George Freedman: Contemporary esthetic dentistry. Elsevier.2010

2. W. Kenneth Aschheim: Esthetic Dentistry - A Clinical Approach to Techniques and Materials.2001

3.N Wilson: Esthetic Dentistry.2015
 4.D Marrisoni: Precision in dental esthetics.2007
 5.Nairn H. F. Wilson:Essentials of Esthetic Dentistry Principles and Practice of Esthetic Dentistry.2015

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 corroborated with the need of employers in the fields of health, health management, medical education, dental companies, research in dentistry.

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.	TBL	15
- practical activities	Depending on the specifics of the discipline.	CBL	15
Final evaluation			
- theoretical final exam	Depending on the specifics of the discipline.	multiple choice and editorial test.	50
- practical final exam	Depending on the specifics of the discipline.	Applying an correct aesthetic front filling.	20
Minimal performance standards: 5.00			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Stoica Alexandra-Mihaela Luni 12:00-13:00 (onsite)
Joi 12:00-13:00(onsite)

Head of departament

Course coordinator

Practical activities coordinator(s)



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 Faculty of: Dental medicine
1.3 Department: MD2
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Oral rehabilitation			
2.2 Course coordinator: Conf dr Bechir Edwin-Sever			
2.3 Practical activities coordinator(s): Prof.dr. Suciú Mircea, Conf. dr. Bechir Edwin Sever, Șef lucr. dr. Horga Claudiu Vasile, Șef lucr. dr.Biriș Carmen Ioana, Asist. Lazăr Ana Petra			
2.4 Year of study: VI	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: 10		
- supplemental documentation at the library, from specialized information portals and in the field: 20		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 0		
- examinations: 3		
- other activities: 1		
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:
Multimedia equipment
5.2 for practical activities:
Multimedia equipment

6. Specific competencies acquired

6.1 professional competencies:
Performing a complete and complex clinical examination of the patient.
The ability to correlate the notions of general medicine with those of dentistry and to establish mutual interconditioning.
Ability to request and use crucial paraclinical investigations in establishing the diagnosis.
Ability to formulate a suite of correct diagnoses.
Establishing an individualized treatment plan, formulated in a logical, coherent and effective sequence.
Ability to predict the prognosis and evolution of the disease.
Ability to provide the patient with several treatment solutions in accordance with various concepts of oral rehabilitation.

6.2 transversal competencies: Cognitive skills: Notions about the concepts that define complex oral rehabilitation. Notions about signs, symptoms or diseases within the general medical pathology reflected in dentistry. Notions about diseases of the dento-maxillary system that influence the general state of health. Notions regarding paraclinical investigations useful in formulating effective diagnoses. Notions regarding oral rehabilitation therapy. Affective-value skills: Relationship with patient and medical staff. Communication with the patient. Communication with the dental technician.
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 acquire general notions about the concepts of oral rehabilitation.
7.2 Specific objectives: To know and understand the principles that govern the concepts of oral rehabilitation. To use specialized terms. To know the basic medical notions of the general pathology that influence oral health. To know the medication that may affect your oral health, diagnosis, or treatment plan. To know and explain the therapeutic principles / maneuvers used in oral rehabilitation. To know the stages of the complete and complex clinical examination of the patient. To know the paraclinical investigations and their role in documenting and formulating the diagnosis and the treatment plan. To know the types of diagnoses that are formulated after examining the patient. To know the maneuvers / procedures to be applied for the oral rehabilitation of clinical cases. To adopt the behavior of the future dentist. To work in a team, developing the ability to collaborate with specialties in different fields of dentistry or general medicine.

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Introduction to oral rehabilitation. Current concepts in complex oral rehabilitation. Patient management.	Multimedia presentation	-	-	2
2	The specifics of examining the patient in dentistry. Patient history questionnaire. Functional disorders of the body in systemic diseases. Functional disorders of the oro-facial system (OFS). Oral rehabilitation clinical record.	Multimedia presentation	-	-	2
3	Elements of pathophysiology of the oral cavity. Age-specific changes. Oral cavity as an ecosystem-relevant aspects in oral rehabilitation	Multimedia presentation	-	-	2
4	Pre and prosthetic treatments in oral rehabilitation. Periodontal, orthodontic and orthognathic aspects. Principles of endodontically treated teeth rehabilitation.	Multimedia presentation	TBL	-	2
5	The intrinsic and extrinsic value of the abutment teeth. Criteria for choosing abutment teeth. Paraclinical and complementary examinations. Criteria for establishing the diagnosis.	Multimedia presentation	-	-	2
6	Aesthetics in oral rehabilitation. Dento-facial and dento-alveolar harmony. Color selection criteria.	Multimedia presentation	-	-	2
7	Therapeutic algorithm of the patient with coronary destruction in oral rehabilitation. Clinical cases.	Multimedia presentation	-	-	2
8	Therapeutic algorithm of the patient partially edentulous patient by fixed prostheses in oral rehabilitation. Clinical cases.	Multimedia presentation	-	-	2

9	Therapeutic algorithm of the patient partially edentulous by partial dentures in oral rehabilitation. Clinical cases.	Multimedia presentationv	-	-	2
10	Oral rehabilitation of the partially edentulous patient by total dentures. Clinical cases.	Multimedia presentation	TBL	-	2
11	Dental implants. Clinical opportunities and considerations.	Multimedia presentation	-	-	2
12	Oral implanto-prosthetic rehabilitation. Restorations on a single implant. Immediate loading implantology. Clinical cases.	Multimedia presentation	-	-	2
13	Craniomandibular dysfunction. Concept. Etiology. Clinical features and signs. Therapeutic principles.	Multimedia presentation	-	-	2
14	Prosthetic rehabilitation of congenital and acquired maxillofacial defects	Multimedia presentation	-	-	2
Bibliography 1.Preti G. Prosthetic Rehabilitation. Part I, II, Quintessence Publishing Co. Ltd., 2008 2.Course notes 3. Jacobs S.H., O'Connell B.C.: Dental Implant Restoration. Principles and Procedures, Ed. Quintessence Publishing, 2011 4.Zinner I.D., Panno F.V., Small S.A., Landa L.S.:Implant Dentistry: From Failure to Success, Ed. Quintessence Publishing, 2004					

8.2 Content of workout, semester 2

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.	Multimedia presentation	-	-	2
2	The role of medical and dental history in establishing the diagnosis. The importance of the patient's chronic medication in establishing the treatment plan. Clinical activity.	Clinical and multimedia presentation	-	-	2
3	The role of paraclinical investigations in establishing the diagnosis and treatment plan. OPT, CT, CBCT investigations. Clinical activity.	Clinical activity	-	-	2
4	Documentation of clinical cases based on data from the literature. Clinical activity.	Practical activity. Querying databases.	-	-	2
5	Documentation of a clinical case. Clinical activity	Clinical activity	Elaboration of a diagnosis and treatment plan based on the clinical file, paraclinical investigations and data from the literature.	-	2
6	Case presentation. Clinical activity.	Multimedia presentation	-	-	2
7	Case presentation. Clinical activity.	Multimedia presentation	-	-	2
8	Case presentation. Clinical activity.	Multimedia presentation	-	-	2
9	Case presentation. Clinical activity.	Multimedia presentation	During 4 weeks each student makes a case presentation, according to the rules of these presentations, which is then discussed and argued in front of colleagues. Equivalent to CBL 1.	-	2
10	Case presentation. Clinical activity.	Multimedia presentation	-	-	2
11	Case presentation. Clinical activity.	Multimedia presentation	-	-	2
12	Case presentation. Clinical activity.	Multimedia presentation	-	-	2

13	Case presentation. Clinical activity.	Multimedia presentation	-	-	2
14	Case presentation. Clinical activity.	Multimedia presentation	During 5 weeks each student makes a case presentation, according to the rules of these presentations, which is then discussed and argued in front of colleagues. Equivalent to CBL 2	-	2

Bibliography

1. Preti G. Prosthetic Rehabilitation. Part I, II, Quintessence Publishing Co. Ltd., 2008
2. Course notes
3. Jacobs S.H., O'Connell B.C.: Dental Implant Restoration. Principles and Procedures, Ed. Quintessence Publishing, 2011
4. Zinner I.D., Panno F.V., Small S.A., Landa L.S.: Implant Dentistry: From Failure to Success, Ed. Quintessence Publishing, 2004
5. PA 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 acquisition of the presented notions and the stimulation of active, logical thinking, contributed to the training of competitive specialists on the labor market, able to execute complex treatments.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	Knowledge of the theoretical aspects within the course topic.	TBL average	20
- practical activities	Knowledge of the theoretical and practical aspects within the topic of practical works.	CBL average	30
Final evaluation			
- theoretical final exam	Knowledge of the theoretical aspects within the course topic.	Multiple choice test	40
- practical final exam	Knowledge of the theoretical and practical aspects within the topic of practical works.	Interpretation of paraclinical examinations in the context of a given clinical situation.	10
Minimal performance standards: Minimum performance standard: Obtaining a minimum grade of 5 (five) for each component of the assessment: course: - to know the basic notions regarding oral rehabilitation, - to participate in the discussion groups in the TBL system, on the mentioned topics Practical works*: - to perform the complete and complex examination of the patient, - present at least one CBL 1 documented case presentation, - to interpret a CT / CBCT in order to formulate the diagnosis and the treatment plan. - treat and document a patient's treatment plan for CBL 2 clinical activity.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Conf dr Bechir Edwin-Sever	Miercuri 10-11

Head of departament

Course coordinator

Practical activities coordinator(s)



Syllabus

academic year: 2020 - 2021

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 Faculty of: Dental medicine
1.3 Department: MD1
1.4 Field of study: Health, level of regulation: sectorial
1.5 Cycle of study: license
1.6 Program of study: Dental medicine

2. Data regarding the discipline

2.1 Name of discipline: Community dentistry			
2.2 Course coordinator: Șef I dr Tohati Adrian-Roland			
2.3 Practical activities coordinator(s): Șef I dr. Tohati Adrian,Șef I dr. Bereșescu Liana,Șef I dr. Petcu Blanka dr. Asist univ.drd Bechir Farah			
2.4 Year of study: VI	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: 28		
- supplemental documentation at the library, from specialized information portals and in the field: 14		
- preparation for seminars / laboratories, homework, reports, portfolios and essays: 10		
- tutorial activities: 3		
- examinations: 4		
- other activities: 7		
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:
Video-projector, laptop
5.2 for practical activities:
dental units, handpieces, various consumables

6. Specific competencies acquired

6.1 professional competencies:
The student must be able to know the main methods and procedures for conducting an epidemiological investigation as well as the main techniques for developing projects for analysis and optimization of oral hygiene in different communities. The student will be competent in explaining the risks of exposure to various drugs and vices of various population groups, as well as exposing various measures to prevent the spread of these vices among the population.
6.2 transversal competencies:
The student will acquire the ability to detect and correlate interdisciplinary oral health issues as an integral aspect in the general system of human health and society.

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:

Carrying out an epidemiological exploratory investigation.

Design and presentation of oral prophylaxis sessions for different population categories.

7.2 Specific objectives:

Knowledge of different methods and techniques of elaboration and execution of the elements of the epidemiological investigation

The technique of elaboration and communication of group prophylaxis sessions regarding the dental health and the extension of the different vicious habits

8.1 Content of lecture, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	History and introductory elements	Oral and multimedia presentation	-	-	2
2	Primary, secondary and tertiary health care	Oral and multimedia presentation	-	-	2
3	Family health	Oral and multimedia presentation	-	-	2
4	WHO indices of epidemiological surveys	TBL Course	-	-	2
5	Epidemiological inquiry: definition, aim, methodology	Oral and multimedia presentation	-	-	2
6	Epidemiological inquiry: training of medical staff, data collection	Oral and multimedia presentation	-	-	2
7	Epidemiological inquiry: interpretation and reporting of collected data	Oral and multimedia presentation	-	-	2
8	Compilation of statistics and verification of the feasibility of epidemiological surveys	Oral and multimedia presentation	-	-	2
9	Community oral health education: generalities, objectives, principles	Oral and multimedia presentation	-	-	2
10	Community oral health education: methods, techniques for transmitting information	Oral and multimedia presentation	-	-	2
11	Alcohol	Oral and multimedia presentation	-	-	2
12	Smoking	TBL course	-	-	2
13	Drugs: Social issues and terminological clarifications	Oral and multimedia presentation	-	-	2
14	Actual Drugs	Oral and multimedia presentation	-	-	2

Bibliography

Tohati Adrian. Elements of community dentistry Curs Lito UMF Tg.Mures 2018

Tohati Adrian, Bechir Farah. Concepts in Preventive Dentistry UMFST Tg. Mures 2019

8.2 Content of laboratory, semester 2

No	Subject	Teaching methods	Observations	ICS correlation	Hours
1	Practical establishment of the epidemiological investigation strategy	Practical demonstrations	-	-	4
2	Scheduling, detailing and management of trips in preschool communities	Practical demonstrations	-	-	4
3	Travel in preschool communities	Practical demonstrations	-	-	4

4	Travel in preschool communities	Practical demonstrations	-	-	4
5	Scheduling, detailing and managing trips in school groups I-IV	Practical demonstrations	-	-	4
6	Travel in school groups grades I-IV	CBL session	-	-	4
7	Travel in school groups grades I-IV	Practical demonstrations	-	-	4
8	Scheduling, detailing and management of trips in groups of students grades V-VIII	Practical demonstrations	-	-	4
9	Travel in school groups V-VIII	Practical demonstrations	-	-	4
10	Travel in school groups V-VIII	Practical demonstrations	-	-	4
11	Scheduling, detailing and managing travel in college level communities	Practical demonstrations	-	-	4
12	Travel to community at the college level communities	Practical demonstrations	-	-	4
13	Scheduling, detailing and managing travel in communities with special needs	Practical demonstrations	-	-	4
14	Travel in communities with special needs	Practical demonstrations	-	-	4
Bibliography					
-					

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

The student must know different methods of designing and executing the epidemiological investigations, as well as the elaboration of a group oro-dental prophylaxis session.

10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Percent of final grade
Evaluation during the semester			
- lecture	TBL (TBL average)	TBL sessions	20
- practical activities	CBL (CBL average)	CBL sessions	20
Final evaluation			
- theoretical final exam	According to the specifics of the discipline	Written - multiple choice examination	40
- practical final exam	According to the specifics of the discipline	Verification during the session	20
Minimal performance standards: Minimum performance standard: Elaboration and practical realization of an exploratory epidemiological investigation plan, realization of a presentation of oro-dental prophylaxis on different population groups. -To validate the evaluations, the grade of each component that is included in the calculation of the final grade must be at least 5. - the minimum conditions for admission to the final examination require the completion of a number of 2 trips in groups of preschoolers or schoolchildren grades I-IV, as well as a number of 2 trips in groups of schoolchildren grades V-VIII, high school or special needs school in order to perform oro-dental prophylaxis sessions. -No more than 2 absences are allowed for the activity of practical works.			

11. Must seen clinical situation list

-

12. Clinical / practical abilities

-

13. Appointment timetable (for students)

Şef I dr Tohati Adrian-Roland	Friday 15-16

Head of departament

Course coordinator

Practical activities coordinator(s)