



MEDICAL UNIVERSITY

“PROF. DR. PARASKEV STOYANOV” - VARNA

FACULTY OF DENTAL MEDICINE

Approved:

DEAN:



EDUCATIONAL PROGRAMME

OF

“NEUROLOGY AND PSYCHIATRY“

Specialty “DENTAL MEDICINE”

Educational- qualification degree “MASTER”

Professional qualification “PHYSICIAN IN DENTAL MEDICINE”

	Semester	Horarium weekly	Total horarium
Lectures	IX	2	16
Exercises	IX	2 (1)	14
Total	IX		30
Monitoring and evaluation forms	Current control		Exam– IX semester
Credits (ECTS)		2	

Lecturer:

Borislav Ivanov, MD, PhD, Associate Professor of Neurology

Varna, 2026

FOR THE EDUCATIONAL DISCIPLINE OF NEUROLOGY

Neurology encompasses the study of the structure, function, and pathology of the nervous system.

Patients with neurological disorders necessitate specialized dental management, which includes comprehensive pretreatment planning, tailored therapeutic techniques, and specific post-treatment protocols. Practitioners frequently encounter neurological conditions including cranial nerve abnormalities, facial sensory deficits, and facial paralysis, as well as systemic conditions such as epilepsy, Parkinson's disease, multiple sclerosis, stroke, myasthenia gravis, and various forms of dementia.

The objectives of the neurology curriculum are to establish a foundational understanding of the recognition, management, and appropriate referral of neurological conditions encountered within dental practice.

Students are expected to demonstrate proficiency in conducting initial neurological evaluations, actively participating in the diagnostic process, and contributing to the longitudinal management of patients throughout the course of their neurological treatment. Furthermore, students must consistently exhibit professional and ethical conduct in patient care and in their interdisciplinary collaborations with other healthcare providers.

MONITORING AND EVALUATION FORMS:

The primary method of assessment is the semester examination, which comprises a theoretical component featuring both written and oral presentations.

This examination is based on pre-established question sets covering general and clinical neurology, derived from the syllabus provided at the start of the academic year.

The final grade is determined by integrating the theoretical exam results with the student's performance during practical sessions and ongoing semester evaluations as assessed by the assistant professor.

NEUROLOGY

PLAN OF TOPICS OF LECTURES AND PRACTICAL CLASSES

Lectures IX semester

GENERAL NEUROLOGY		
№	Topic	Hours
1.	Introduction to neurology. Reflex activity. Motor activity – central and peripheral motor neuron. Cerebellum. Coordination of movements. Extrapyramidal system. Muscle tone	2
2.	Cranial nerves (I- XII). Peripheral nervous system. Sensation - general and specialized. Cognitive functions. Consciousness. Sleep. Diagnostic methods in neurology.	2
3.	Cervicobrachial and lumbosacral radiculitis and plexitis. Polyneurites and polyneuropathies. Guillain- Barre syndrome. Facial paralysis. Trigeminal neuralgia. Glossopharyngeal neuralgia. Occipital neuralgia. Inflammatory diseases of central nervous system: meningitis, encephalitis, myelitis. Cerebrovascular disease. Ischemic stroke. Hemorrhagic stroke. Subarachnoid hemorrhage.	2
4.	Brain tumors. Spinal cord tumors. Epilepsy. Multiple sclerosis. Parkinson`s disease. Huntington`s disease. Wilson`s disease. Traumatic brain injury. Headache. Myasthenia gravis. Amyotrophic lateral sclerosis. Dementia.	2
Total		8

Practical classes IX semester

№	Topic	Hours
1.	History and neurological examination. Control of movement. Upper and lower motor neuron. Reflexes. Coordination of movements. Muscle tone.	2
2.	Cranial nerves (I- XII). PNS. Sensation and pain. Meningeal irritation. Cognitive functions. Consciousness. Sleep. Diagnostic methods in neurology.	2
3.	Cervicobrachial and lumbosacral radiculitis and plexitis. Polyneurites and polyneuropathies. Guillain- Barre syndrome. Facial paralysis. Trigeminal neuralgia. Glossopharyngeal neuralgia. Occipital neuralgia. Inflammatory diseases of central nervous system: meningitis, encephalitis, myelitis. Cerebrovascular disease. Ischemic stroke. Hemorrhagic stroke. Subarachnoid hemorrhage.	2
4.	Brain tumors. Spinal cord tumors. Epilepsy. Multiple sclerosis. Parkinson`s disease. Huntington`s disease. Wilson`s disease. Traumatic brain injury. Headache.	1

	Myasthenia gravis. Amyotrophic lateral sclerosis. Dementia.	
	Total	7

EXAM SYNOPSIS:

General Neurology

1. Reflexes. Anatomico- physiology. Normal reflexes. Pathologic changes of normal reflexes. Pathologic (abnormal) reflexes.
2. Peripheral nervous system. Roots, ganglia, plexuses, peripheral nerves. Anatomico- physiology. Symptoms and syndromes.
3. Cranial nerves III, IV, and VI. Anatomico- physiology. Symptoms and syndromes.
4. Cranial nerve V. Anatomico- physiology. Symptoms and syndromes.
5. Cranial nerve VII. Anatomico- physiology. Symptoms and syndromes.
6. Cranial nerves IX, X, XI, XII. Anatomico- physiology. Symptoms and syndromes.
7. General sensation. Anatomico- physiology. Symptoms and syndromes.
8. Special senses. Vision, olfaction, taste, hearing, equilibrium. Anatomico- physiology. Symptoms and syndromes.
9. Motor system. Central and peripheral motor neuron. Anatomico- physiology. Symptoms and syndromes.
10. Extrapyramidal system. Anatomico- physiology. Symptoms and syndromes.
11. Cerebellum. Anatomico- physiology. Symptoms and syndromes.
12. Spinal cord. Anatomico- physiology. Symptoms and syndromes.
13. Cognitive functions. Agnosia, apraxia, aphasia.
14. Consciousness. Sleep.
15. Diagnostic methods in neurology.

Special Neurology

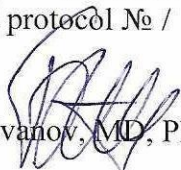
16. Cervicobrachial and lumbosacral radiculitis and plexitis.
17. Polyneurites and polyneuropathies. Guillain- Barre syndrome.
18. Facial paralysis.
19. Trigeminal neuralgia. Glossopharyngeal neuralgia. Occipital neuralgia.
20. Inflammatory diseases of central nervous system: meningitis, encephalitis, myelitis.
21. Cerebrovascular disease. Ischemic stroke. Hemorrhagic stroke. Subarachnoid hemorrhage.
22. Brain tumors. Spinal cord tumors.
23. Epilepsy.
24. Multiple sclerosis (MS).
25. Parkinson`s disease (PD). Huntington`s disease (HD). Wilson`s disease (WD).
26. Traumatic brain injury.
27. Headache.
28. Myasthenia gravis (MG).
29. Amyotrophic lateral sclerosis (ALS).
30. Dementia.

REFERENCES:

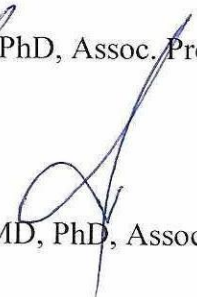
1. Bear, M., Connors, B., Paradiso, M. Neuroscience. Exploring the brain. Baltimore: Williams & Wilkins, 1996.
2. C. D. Marsden, T. J. Fowler. Clinical Neurology. Oxford University Press, 1998.
3. Fix, J. Neuroanatomy. Lippincott Williams & Wilkins, 2008.
4. Kaprelyan A, I. Dimitrov. Lecture Notes in Neurology for the English Language Education Programme. Part I General Neurology "Prof. Paraskev Stoyanov" Medical University Department of Neurology Varna 2012.
5. Lindsay, K., Bone, I., Callander, R. Neurology and neurosurgery illustrated. Churchill Livingstone, 1997.
6. McKeough, D. M. The Coloring review of Neuroscience, 1995, Little, Brown and Company.
7. Mumenthaler, M., Mattle, H. Fundamentals of Neurology: An Illustrated Guide. Thieme, 2005.
8. Ropper, A., Samuels, M. Adams and Victor's Principles of Neurology, Ninth Edition. McGraw-Hill, 2009.
9. Royden Jones, H. Netter's Neurology, Second edition. Icon Learning Systems, 2011.
10. Russel, S., Triola, M. The Precise Neurological Exam. New York University School of Medicine, 2006. <http://cloud.med.nyu.edu/modules/pub/neurosurgery/index.html>
11. S.L. Hauser, S.A. Josephson, J.D. English, J.W. Engstrom, eds. Harrison's Neurology in Clinical Medicine, Second Edition. McGraw-Hill, 2006.
12. Schwartzman, R. Neurologic examination. Blackwell Publishing, 2006.
13. Simon, R., Greenberg, D., Aminoff, M. Clinical Neurology, 7th ed. McGraw-Hill, 2009.
14. Specialized information in neurology, accessible in the library of the medical University– Varna and online.

Department's council protocol №
Faculty's council protocol № /

PREPARED:

 Borislav Ivanov, MD, PhD, Assoc. Prof. in Neurology

HEAD OF DEPARTMENT:

 Darina Georgieva- Hristova, MD, PhD, Assoc. Prof. in Neurology

Outcomes for students at the end of the course:

The worlds of medicine and psychiatry have changed rapidly during the recent decades. Health care reform is transforming the way that physicians treat their patients and organize their work. The education of Psychiatry is also becoming more responsive to these changes.

Psychiatry is a branch of medicine that focuses on the diagnosis and treatment of mental illnesses. As a discipline within medicine, the primary purposes of psychiatry are to define and recognize illnesses, to identify methods for treating them and to develop methods for discovering their causes and implementing preventive measures. A number of physicians are all certain to work with patients with psychiatric problems- depression, substance abuse, schizophrenia, bipolar disorder, anxiety disorders, Alzheimer's disease, etc. They must be able to diagnose mental illnesses on a regular basis and either treat them or refer patients to a psychiatrist as appropriate.

Keeping in view the significant development of science over recent years with expansion of knowledge in molecular biology, neurobiology, genetics, cognitive neurosciences, neuroimaging and psychopharmacology the scientific basis of psychiatry continues to grow and develop. Contemporary psychiatry has a large arsenal of effective medications and other treatments, which give most mental illnesses a better prognosis than some somatic diseases.

The competency-based curriculum of psychiatry is intended to help medical students to understand diagnosis, pathophysiology and latest therapies, to be able to counsel and comfort distraught patients and learn to help patients' functioning in their everyday lives.

Knowledge	▪ To know the clinical presentation of the main mental disorders and disorders affecting all ages and associated with different causes. ▪ To know the basics of general and special psychopathology. ▪ To know the frequency, distribution, cultural, sociodemographic features of the main mental illnesses and disorders.
Skills	▪ Follow the recommended history taking framework. ▪ Accurate classification of mental status and reporting of established disorders with vocabulary appropriate to psychopathological disorders. ▪ Accurately construct a differential diagnosis of common psychiatric conditions using the ICD-10 diagnostic classification. ▪ Identify and summarize the relevant biological, psychological, cultural and social factors contributing to the patient's illness and recovery

	▪ Use of effective and empathetic verbal and non-verbal communication skills in all clinical encounters with the patient, their families and caregivers. ▪ Build communication skills with patients, even when this is a challenge, to respect their rights and interests.
Competences	Patient Care that is compassionate, appropriate, and effective for treating health problems and promoting health. ○ <i>Gather essential and accurate information about the patient</i> ○ <i>Counsel patients and family members</i> ○ <i>Recognize the indicators for procedures</i> ○ <i>Describe the procedure in appropriate language for patients and caretakers</i> ○ <i>Acknowledge the impact of the procedure on patient and family</i> ○ <i>Competently perform all medical procedures required for their scope of practice</i> ○ <i>Perform the procedure in a way that maximizes patient comfort</i> ○ <i>Make informed diagnostic and therapeutic decisions</i> ○ <i>Prescribe and perform essential medical procedures</i> ○ <i>Provide effective health management, maintenance, and prevention guidance.</i> Medical Knowledge about established and evolving biomedical, clinical, and cognate (eg, epidemio-logical and social-behavioral) sciences and the application of this knowledge to patient care. ○ <i>An investigative and analytical approach to clinical problem solving and knowledge acquisition</i> ○ <i>An ability to apply medical knowledge to clinical situations</i> ○ <i>An ability to teach others</i> Practice-Based Learning and Improvement that involves investigation and evaluation of their own patient care, appraisal, and assimilation of scientific evidence, and improvements in patient care. ○ <i>An investigative and analytical approach to clinical problem solving and knowledge acquisition</i> ○ <i>An ability to apply medical knowledge to clinical situations</i> ○ <i>An ability to teach others</i> Interpersonal and Communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals. ○ <i>Investigate and evaluate patient care practices</i> ○ <i>Appraise and assimilate scientific evidence, and improve the practice of medicine.</i> Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a

	diverse patient population. ○ <i>Work effectively as a member or leader of a health care team.</i> ○ <i>Create and sustain a therapeutic relationship with patients and families</i> Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. ○ <i>Demonstrating Professional Conduct and Accountability</i> ○ <i>Demonstrating Humanism and Cultural Proficiency</i> ○ <i>Maintaining Emotional, Physical, and Mental Health, and Pursuing Continual Personal and Professional Growth</i> Systems-Based Practice, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. ○ <i>Work effectively in various health care delivery settings and systems relevant to their clinical specialty.</i> ○ <i>Coordinate patient care within the health care system relevant to their clinical specialty.</i> ○ <i>Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate.</i> ○ <i>Advocate for quality patient care and optimal patient care systems.</i> ○ <i>Work in interprofessional teams to enhance patient safety and improve patient care quality.</i> ○ <i>Participate in identifying system errors and implementing potential systems solutions.</i>
--	--

Key competencies for lifelong learning¹, that the discipline develops:

Literacy competence

Literacy is the ability to identify, understand, express, create, and interpret concepts, feelings, facts and opinions in both oral and written forms, using visual, sound/audio and digital materials across disciplines and contexts. It implies the ability to communicate and connect effectively with others, in an appropriate and creative way.

X

¹

As defined in 2018 r. by the European Union Council ([https://eur-lex.europa.eu/legal-content/BG/TXT/HTML/?uri=CELEX:32018H0604\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/BG/TXT/HTML/?uri=CELEX:32018H0604(01)&from=EN))

Multilingual competence This competence defines the ability to use different languages appropriately and effectively for communication. It broadly shares the main skill dimensions of literacy: it is based on the ability to understand, express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal and cultural contexts according to one's wants or needs.	X
Mathematical competence and competence in science, technology, engineering A. Mathematical competence is the ability to develop and apply mathematical thinking and insight in order to solve a range of problems in everyday situations. Building on a sound mastery of numeracy, the emphasis is on process and activity, as well as knowledge. Mathematical competence involves, to different degrees, the ability and willingness to use mathematical modes of thought and presentation (formulas, models, constructs, graphs, charts). B. Competence in science refers to the ability and willingness to explain the natural world by making use of the body of knowledge and methodology employed, including observation and experimentation, in order to identify questions and to draw evidence-based conclusions. Competences in technology and engineering are applications of that knowledge and methodology in response to perceived human wants or needs. Competence in science, technology and engineering involves an understanding of the changes caused by human activity and responsibility as an individual citizen.	X
Digital competence Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking.	
Personal, social and learning to learn competence Personal, social and learning to learn competence is the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional well-being, to maintain physical and mental health, and to be able to lead a health-conscious, future-oriented life, empathize and manage conflict in an inclusive and supportive context.	X
Citizenship competence the ability to act as responsible citizens and to fully participate in civic and social life, based on an understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability.	
Entrepreneurship competence Entrepreneurship competence refers to the capacity to act upon opportunities and ideas, and to transform them into values for others. It is founded upon creativity, critical thinking and problem solving, taking initiative and perseverance and the ability to work collaboratively in order to plan and manage projects that are of cultural, social or financial value.	

Cultural awareness and expression competence Competence in cultural awareness and expression involves having an understanding of and respect for how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms. It involves being engaged in understanding, developing and expressing one's own ideas and sense of place or role in society in a variety of ways and contexts.	X
---	----------

Methods of education	
▪ lectures ▪ seminars ▪ practicals, case studies, consultations, discussions, presentations, work with patients under observation	

Links with other courses from the curriculum of the specialty	
▪ Psychology	

THEMATIC PLAN OF LECTURES AND SEMINARS

№	THEMATIC PLAN OF THE LECTURES	ACADEMIC HOURS	SEMESTER
1.	Health and illness in term of psychiatry. Psychosis. Bio-psycho-social model of the psychiatric disorders.	1	IX
2.	Main symptoms and syndromes in psychiatry. Disorders of consciousness, senses, psychomotor functions, thinking, emotions, intellectual abilities. Dementia. Intellectual retardation.	1	IX
3.	Exogenous psychiatric disorders. Xerostomia and hyper salivation, due to psychotropic medications.	1	IX
4.	Drug abuse. Psychiatric disorders and their clinical manifestation due to the use of psychoactive substances.	1	IX
5.	Schizophrenia. Forms, clinical manifestation and therapeutic approach.	1	IX
6.	Affective disorders, Forms, clinical manifestation and therapeutic approach.	1	IX
7.	Anxiety, stress-related and neurotic disorders. Clinical manifestation and therapeutic approach.	1	IX
8	Emergency states in psychiatry. Aggression.	1	
TOTAL ACADEMIC HOURS:		8	

№	I. THEMATIC PLAN OF THE LECTURES	ACADEMIC HOURS	SEMESTER	
1	Main principles in obtaining psychiatric anamnesis and status.	1	X	
2	Doctor- Patient communication. Psychotherapeutic approach.	1	X	
3	Schizophrenia			
4	Affective disorders- therapeutic approach.			
5	Neurotic disorders. Therapeutic approach			
6	Psychoactive substances use and abuse.			
7	Emergency states in psychiatry. Aggression.			

MONITORING AND ASSESSMENT OF KNOWLEDGE, SKILLS AND COMPETENCES

The quality and volume of the acquired knowledge, skills and competences is established by:

- **continuous assessment of practical activity:** tests, case studies, presentations.
- **Final Examination:** written/oral part: test, practical skills test, development of a topic from the conspectus

Regulations for the conduct of the Final examination

Admission to the Final Examination is granted on the basis of completed tasks for independent practice (according to the thematic plan and the norm for practical activities) and regular attendance.

The exam is one day only.

There is a stop test at the beginning.

The exam has two components – oral and written.

The final grade is formed from the results of the continuous assessment, stop test and the final examination in a ratio of 30% : 10%: 60%, and is registered as a rounded integer in the student's record.

The objectivity of the assessment is guaranteed by the application of common criteria for determining the level of knowledge and skills acquired in the discipline, as follows:

Six-point evaluation system	CRITERIA FOR DETERMINING THE LEVEL OF KNOWLEDGE, SKILLS AND COMPETENCES	Degree of acquired theoretical and practical skills
Excellent 6	VERY HIGH LEVEL excellent results with minor gaps in the demonstration of knowledge, skills, and competences	91-100 %
Very Good 5	HIGH LEVEL very good results with minimal gaps in the demonstration of knowledge, skills and competences	81-90 %
Good 4	INTERMEDIATE LEVEL satisfactory results with a number of significant errors in the demonstration of knowledge, skills and competences	71-80 %
Satisfactory 3	MINIMAL REQUIRED LEVEL demonstration of knowledge, skills and competences within the scope of the compulsory minimum mastery of the discipline	60-70 %
Poor 2	UNDER THE MINIMAL REQUIRED LEVEL demonstration of knowledge, skills and	< 60 %

	competences below the specified minimum where additional work is required to meet the minimal criteria	
--	--	--

LITERATURE and other sources of information

Recommended literature:

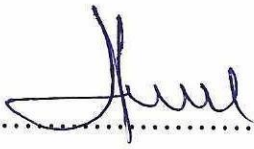
1. J. Scully. NMS psychiatry 3rd edition. William& Wilkins, 1996
2. Nancy Andreasen et al. Introductory Textbook of Psychiatry. Third edition. American Psychiatry Publishing. Inc.2001
3. Kaplan and Sadock's Synopsis of Psychiatry. 11- th edition. William& Wilkins, 2014
4. Psychiatry edited by A. Tasman, J. Kay, J. Lieberman, M. First, M. Riba. Fourth edition, 2015
5. Saxby Pridmore. DOP, 2013
6. Rutter's Child and Adolescent Psychiatry 6th edition – Wiley-Blackwell Publishing, 2017
7. Ebert H., Martin P., Ronis R., Weissman S., McVoy M. CURRENT Diagnosis & Treatment: Psychiatry, 4th Edition. McGraw Hill, 2024
8. World Health Organization : The ICD-10 Classification of Mental and Behavioral Disorders : Clinical Descriptions and Diagnostic Guidelines. World Health Organization, Geneva 1992
9. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Fifth Edition. Washington, DC: American Psychiatric Association; 2013

CONSPECTUS of the Final Examination

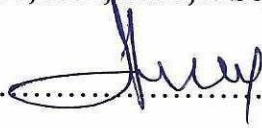
1. Health and illness in term of psychiatry. Psychosis.
2. General psychopathology. Disorders of consciousness.
3. General psychopathology. Disorders of senses, perceptions and notions.
4. General psychopathology. Disorders of memory and intellect. Dementia.
5. General psychopathology. Disorders of emotions and will. Psychomotor functions.
6. General psychopathology. Disorders of thoughts.
7. Exogenous psychiatric disorders-Definitions and forms.
8. Psychiatric disorders due to alcohol and other psychoactive substances. Clinical manifestations.
9. Schizophrenia- clinical manifestations and clinical forms.
10. Affective disorders- Mania
11. Affective disorders- depression
12. Anxiety disorders- clinical manifestations and therapeutic approaches.
13. Neurotic and dissociative disorders. Clinical manifestations and therapeutic approaches.
14. Personality disorders.
15. Communication between doctor and patient. Psychotherapeutic behavior.
16. Emergency in psychiatry. Aggression.
17. Xerostomia and hyper salivation due to the usage of psychotropic drugs.

The syllabus is approved by:

▪ Department Council of the Department of Psychiatry and Medical Psychology	Protocol № 3/14.05.2026r.
▪ Program board of the Faculty of Dental medicine	Protocol № 126.05.2026
▪ Faculty Council	Protocol № 127.05.2026

Developer of the Syllabus: 

(Prof. Petar Petrov, MD, PhD, DSc)

Approved by Chair of the Department: 

(Prof. Petar Petrov, MD, PhD, DSc)