

Adopted by the department council with Protocol № 1 / 26.01.2016
ACADEMIC STANDARD FOR THE DISCIPLINE "NEUROLOGY"

1. Purpose of the discipline

The main goal of the training in NEUROLOGY is theoretical and practical training of future doctors for comprehensive care of a neurologically affected person, including the acquisition of skills to assess the need for specialized counseling neurological care, to refer patients with acute neurological problem for emergency hospitalization for active treatment, as well as to conduct ongoing treatment, defined by a neurologist.

The goals are coordinated with:

- the mission and the concept for the university,
- the volume and credit rating of the course (according to the ECTS system), as seen from the curriculum;
- the qualification characteristic of the specialty;
- educational degree (master).

The goal is compliant with the place of the discipline in the specialty by significance and by chronology in the curriculum.

2. Content of the discipline

The content of the topics for lectures and exercises is arranged chronologically so that each subsequent lecture and related exercises, use already studied matter and concepts. Avoided is the unnecessary overlap or the existence of "white spots" between "connected" by the course disciplines.

3. Assumptions

The student must have basic knowledge of anatomy, physiology, pathoanatomy and pathophysiology of the nervous system.

4. Academic resources

The academic staff of the department of Neurology includes 5 habilitated lecturers, 3 habilitated lecturers with the scientific degree "Doctor of sciences", 2 habilitated lecturers with scientific degree "doctor" and 9 non-habilitated lecturers, two of whom have a scientific degree "doctor".

10 of all assistants have a degree in neurological diseases.

The lectures are given by a habilitated lecturer (associate professor or professor) with obtained scientific degree (doctor or doctor of medical sciences) in the relevant doctoral program. Up to 10% of lectures are assigned to non-habilitated lecturers holding a scientific degree in the respective doctoral program.

The practical exercises are led by habilitated and non-habilitated lecturers (associate professor, chief assistant, assistant). The non-habilitated assistants have a Master's degree in Medicine and are appointed after competition.

5. Material resources

The Department of Nervous Diseases of MU-Plovdiv has 4 (four) equipped laboratories with for functional diagnostics (Laboratory of clinical EMG, EEG, evoked potentials and doppler sonography).

3 (three) seminar halls are used for training of students and doctoral students. One of the halls is provided with equipment for multimedia presentation.

The technical means applied in the training include - video films, multimedia presentations, collections of EEG, EMG, ultrasound images, evoked potentials, a collection of neuroimaging studies.

6. Lecture training

The lectures are prepared and delivered in the form of multimedia presentations. The volume and format of the lectures are selected by individual lecturers.

7. Practical exercises

Exercises are held in groups. Methodical instructions and guides are provided for the exercises. Each student is given individual tasks.

Check up's:

- o the student's self-preparation on the topic of each exercise

- o the results (acquired knowledge and skills) from the specific exercise

As a methodological form, preference is given to the independent work of every student.

Discussions are held with groups of students in front of whom the reporting student defends his thesis on specific clinical cases.

8. Information resources. Basic literature. Sites

The teachers have a plan of the developed lectures and exercises on the discipline, and at the request of students provide other training materials.

At the beginning of each academic year, the list of the main recommended literature on the subject is updated. In the course of the learning process, lecturers and assistants recommend various internet resources, from which suitable materials for study preparation can be found.

Textbooks

Essentials for Medical Students

1. Neurology, Textbook for medical students, edited by Academician Prof. Ivan Milanov, , art. Prof. Lachezar Traikov, Medicine and Physical Education, Sofia, 2016.
2. Neurology, edited by Penko Shotekov, at all. Arso, 2004, 2010.
3. Neurology. Ed. Penko Shotekov. Arso, 2015

Additional

St. Yancheva. General Neurology - Volume 1 1998 and Volume 2 - 2000

L. Mavlov. Fundamental Neurology, 2001

R. Raichev and I. Raichev. Foundations of Neuroscience, 2001

Handbooks

Hadjiev D. A Practical Guide to Neurology for Medical Students. Medicine and Physics, Sofia 1998

Zahariev Z, Viteva E. Atlas of EEG. Actavis, 2015

Website of the Department of Neurology:

<http://mu-plovdiv.bg/fakulteti/medicinski/katedri/nevrologiya/>

9. Monitoring and evaluation

- questioning at each exercise and ongoing assessment
- a test colloquium conducted by the assistant after the 7th exercise in the first semester
- colloquium of the material from the first semester - conducted and evaluated by habilitated persons. Those who receive an excellent grade are exempt from practical part of the final exam
- annual exam: test, written, theoretical, practical and final interview

The results of these checks are included as a component in the final assessment for the neurology exam.

10. Independent preparation and extracurricular work of the student

The independent work is supervised by the assistant who guides the student both in the literary sources and in the methods of their

acquisition. They also provide training tests, incl. online, for standalone student work and exercises.

11. Cooperation between assistants and students

This cooperation is expressed in:

- o Commitment of the assistants to the student and his preliminary preparation, ongoing difficulties in mastering the material and opportunities with individual learning program to achieve more
- o Use of consultation hours
- o Involvement of students in research tasks teams, research, projects and others

12. Exams

The ongoing grades scheduled in the discipline course curriculum are given for:

1. The student's results in seminars, coursework and independent tasks, work with the lecturer in scientific research and projects, etc.;
2. At least two (one in the middle and one at the end of the semester) control written works or student developments

13. Evaluation standards

Successful study of the discipline of nervous diseases from the curriculum is evaluated as the value of evaluations divided into two main elements:

- **The first** includes the assessment of the student's learning activity during both semesters. Includes separate assessments for ongoing control, for complete and quality implementation of the independent work forms, provided in the curriculum
- **The second** includes a colloquium at the beginning of the VIII semester, held by a habilitated person on the material from the VII semester
- **The third** includes an entrance exam on general neurology
- **The fourth** includes a written exam in special neurology and practical exam by the patient's bed

Clear standards for evaluation have been developed. Assessment is formed from average grades for each semester, the conducted colloquia, the written theoretical examination (after a successful entrance test with a limit of 65%) and practical exam.

- **Weak (2)** gets a student with scarce knowledge which can't serve as a basis for the next levels of training in other clinical disciplines.
- **Intermediate (3)** receives a student who reproduces the knowledge in "Ready scheme", as there are no main points of the developed topic; there is no readiness for independent

use of the acquired knowledge and professional competencies; the terminology is not mastered in satisfactory degree, the exposition is characterized by poor language; only some basic practical skills have been mastered

- **Good (4)** gets a student who develops the topic descriptively, reproductive, has limited autonomy when using the acquired knowledge and the acquired professional competencies; in the exposition, although there is a good language culture, there are inaccuracies in the concepts used; basic practical skills are present, but not fully and there are some gaps.

- **Very good (5)** gets a student who develops the topic independently, productive, non-standard, looking for a new algorithm and analysis of the literature data used; makes an attempt to bring out and substantiate his own thesis; adequately uses the concepts from the scientific field of the studied discipline, has a good language culture; does well practically by the patient's bed with small gaps

- **Excellent (6)** receives a student who independently, logically, with the presence of a creative element brings out the theme; reasonably and originaly uses and interprets the literature related to the revealed issue; is well informed and ready to use the acquired knowledge and professional competencies; possesses accuracy and rich language culture of exposure, practically does perfectly by the patient's bed.

At the beginning of the school year of lectures and exercises, students get acquainted with the standards for assessment, the procedures for conducting ongoing control and opportunities to get feedback on their progress through the semester.

14. Formation of the final assessment

The final grade determines, to which extent the student has achieved the purpose of the training set at the beginning. It is multicomponent and includes assessment from colloquium in VIII semester, written final exam, assessment from oral final exam, practical exam and grades from the ongoing control. The ultimate grade is obtained as a sum of the grades on a six-point system from the different components. If one of the components of the final exam is weak 2, the final assessment is mandatory weak 2. The components involved in the formation of the assessment and the coefficients of significance for each discipline are determined by The Academic council with the adoption of this academic standard for the discipline.

15. Documentation, storage of results and control of the evaluation

- The evaluated students have the right and the obligation to be informed about the regulation, the procedures and the results of the evaluation, to make claims and complaints on non-compliance with these rules.
- The student's right within the meaning of the previous point is valid in the cases of identified technical omissions or errors (for instance, in calculation or application of

the assessment) as well as in case of serious grounds for discrepancies of the actual knowledge, skills and competencies shown and the final assessment for them.

- Adjustments of the assessments are allowed in the cases under the previous paragraph in the student's book, the examination report or the account in the general book only by the holder of the discipline.
- Any disputes and claims by students are addressed in writing to the evaluation team, which should give a reasoned answer to the end of the next working day.
- Identified and proven cases of serious violation of the rights of the student in evaluation of his knowledge, skills and competencies are referred in written complaint to the Vice Rector of Quality Management.

The test materials are stored and the students are given the opportunity to get acquainted with them and the means for assessment in order and procedure announced in advance.

The period in which students are granted access to the test materials and results are not longer than 3 (three) working days after the date of the exam.

The characteristics of the course are given to the student at the beginning of the training. This is in accordance with the Law on higher education art. 56. para. 1 “teachers should develop and announce in an appropriate manner a description of the lecture course including titles and a sequence of topics from the educational content, recommended literature, means of assessment formation and form of testing of knowledge and skills”.

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