

**Azerbaijan Medical University**

**PRIVATE NEUROLOGY**

**"I approve"**

**Head of Department**

**Prof. A.K. Mammadbeyli**

**(Faculty of Therapy) \_\_\_\_\_**

**12/09/2021**

**Autumn (VII) 4 course**

**Working curriculum**

**(SILLABUS)**

**SPECIALTY CODE:**

**SPECIALTY TYPE: Mandatory**

**SEMESTER OF LEARNING: VII**

**NUMBER OF CREDITS: 3 credits**

**Full-time form of education**

**LEARNING LANGUAGE: English**

**TEACHER**

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**DEPARTMENT CONTACTS:**

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**PRESCRIPTIONS:**

**no**

## Course Description

In this specialty, the following are studied: the structure of the main parts of the nervous system, their interconnections, relationships, physiological characteristics; pathological symptoms and syndromes arising from pathology, their correct assessment and topical diagnosis using additional research methods.

## Purpose of the course

The main goal of teaching neurology is to teach students the theoretical foundations, research methods, methodology for making a diagnosis and choosing tactics for treating neurological diseases.

## Course summary

After studying the educational material, students should master the practical skills of studying the nervous system, the basics of topical diagnosis and assessment of pathological symptoms and syndromes.

## The thematic plan of topics of practical lessons for IV course students of faculty of Therapy autumn vii semestr

| S/n | Topic   | Hours |
|-----|---|-------|
| 1   | Diseases of the peripheral nervous system. Neuralgia, neuropathy, radiculopathy.  | 2     |
| 2   | Polyneuropathy: lead, arsenic, alcohol, diabetes. Wearing - Barre's disease. Damage to the nervous system in diseases of the internal organs: heart, liver, kidneys, pancreas | 2     |
| 3   | Diseases of the autonomic nervous system (migraine, Quincke's edema, Raynaud's disease, Meniere's syndrome, VDS-vegetative dystonia syndrome).                                | 2     |
| 4   | Cerebrovascular diseases, classification. Chronic cerebral ischemia. Dyscirculatory encephalopathy. Transient ischemic attack. Ischemic stroke.                               | 2     |
| 5   | Hemorrhagic stroke. Subarachnoid hemorrhage. Spinal stroke  | 2     |
| 6   | Inflammatory diseases of the nervous system: meningitis, encephalitis, myelitis, polio.   | 2     |
| 7   | Prion diseases. Damage to the nervous system during AIDS, tuberculosis, syphilis, brucellosis   | 2     |
| 8   | Colloquim.  |       |
| 9   | Demyelinating diseases of the nervous system: multiple sclerosis, diffuse encephalomyelitis. Motoneurondisease.   | 2     |
| 10  | Syringomyelia, leukodystrophies, leukoencephalitis.   | 2     |

|                |  |   |
|----------------|--|---|
| 11             | Hereditary diseases of the nervous system. Neuro-muscular diseases (myodystrophies, amyotrophia, polyneuropathy, myotonia, myoplegia). Myasthenia gravis.  | 2 |
| 12             | Pyramidal and extrapyramidal degenerations. Hereditary paraplegia. Huntington's disease Wilson's disease. Parkinson's disease. Cerebrospinal ataxia and cerebellar degeneration. Friedreich's disease.   | 2 |
| 13             | Epilepsy. Classification. Semiology of epileptic seizures. Epidemiology, etiology, pathogenesis. Neonatal seizures. West syndrome. Lennox-Gastaut syndrome. Febrile seizures.  | 2 |
| 14             | Localized epilepsies (frontal,temporal,occipital,parietal lobe epilepsy). Generalized epilepsy: epilepsy with tonic-clonic seizures; absence epilepsy; childhood and juvenile absence epilepsy,juvenile myoclonic epilepsy. Status epilepticus.Neurosis. | 2 |
| 15             | Perinatal pathology and itsconcequences in children. The main syndromes of perinatal encephalopathy. Hemolytic disease of the newborn. Cerebral palsy. Hydrocephalus. Microcephaly. Birth traumatic plexitis.  | 2 |
| 16             | Final lesson.Colloquim.  | 2 |
| Totally: 32 h. |  |   |

**The plan of topics of lectures for IV course students of faculty of Therapy  
autumn vii semestr**

|          |  |          |
|----------|--|----------|
| <b>1</b> | Cerebrovascular diseases (acute and chronic)   | <b>2</b> |
| <b>2</b> | Neuroinfections. Meningitis. Encephalitis. Myelitis. Encephalomyelitis. Multiplesclerosis. | <b>2</b> |
| <b>3</b> | Epilepsy   | <b>2</b> |
| <b>4</b> | Developmental defects of the nervous system. Perinatalneurology.                           | <b>2</b> |
| <b>5</b> | Hereditary pyramidal, extrapyramidal and neuromuscular diseases of the nervous system      | <b>2</b> |

Totally: **10 h.**

**TIME OF PRACTICAL LESSON**

Classroom lessons (survey, discussion of abstracts) - 40 min.

Patient supervision (patients together with a teacher, independent work with patients, participation in procedures and manipulations) - 40 min.

Lesson summary (discussion of the work done, announcement of a new topic) - 10 min.

**Evaluation**

In order to get credits by discipline, you need to score 100 points:

50 points - before the exam

Including:

10 point - admission rate

10 point - completion of the abstract

10 point - practical skills

20 points - points scored for seminars

50 points - exam results

The exam is conducted on a test system. The test includes 50 questions. The answer to each question is worth 1 point. Wrongly answered questions deduct points for correctly answered questions.

### **NOTE**

The exam requires a minimum of 17 points. The points for the exam and the lesson before the exam are summed up:

A - "Excellent" -91 - 100

B - "Very good" -81 - 90

C - "Good" -71 - 80

D - "Mediocre" -61 - 70

E - "Satisfactory" -51 - 60

F - "Unsatisfactory" - less than 51 points

### **Free work**

During the semester, 10 free works are completed. Each task is estimated at 1 point. Acceptance of the abstract ends at the end of the 14th week of classes.

The free work is done in handwritten (legible handwriting) or in writing in a word file; volume 1-2 pages (font 12). Each free work is an independent student's work. Plagiarism is not allowed.

## **PRACTICAL HABITS**

### **Faculty of Therapy Autumn VII semester**

During practical training, students should be able to:

1. Differentiate primary idiopathic and secondary symptomatic trigeminal neuralgia. To determine the primary and secondary status, be able to apply data from the neurological status and additional research methods. **1 point**
2. Neuropathy of the facial nerve: be able to determine the level of damage; be able to determine the functions of the three branches of the nerve. Determine if there is a lesion of the nerve nucleus. **1 point**

3. Differential diagnosis of ischemic and hemorrhagic stroke by clinical manifestations. **1 point**
4. Differential diagnosis of apoplectic and other types of com. **1 point**
5. Differential diagnosis of primary and secondary neuromuscular diseases using an accurate study of the motor system. **1 point**
6. To be able to distinguish an epileptic seizure from seizures of another origin (psychogenic - hysteria, toxic, hypoxic, vegetative, fainting). **1 point**
7. To be able to provide assistance with an epileptic seizure. **1 point**
8. Differential diagnosis of meningeal symptoms in various diseases. **1 point**
9. Differential diagnosis of forms of multiple sclerosis. **1 point**
10. Differential diagnosis of plexopathies, radiculopathies, neuropathies and polyneuropathies. **1 point**

**Total: 10 points**

**Abstract topics (1 points)**

1. Brain layers
2. Meningeal syndrome.
3. Blood supply to the brain.
4. Blood supply to the spinal cord.
5. Symptoms of vascularization disorder in the main vascular basins
6. Acute disorders of cerebral blood circulation.
7. Chronic disorders of cerebral blood circulation
8. Ischemic stroke.
9. Hemorrhagic stroke.
10. Subarachnoid hemorrhage.

- 11 Classification of meningitis
12. Purulent meningitis
13. Serous meningitis
14. Tuberculous meningitis
15. Encephalitis
16. Primary encephalitis
17. Secondary encephalitis
18. Poliomyelitis
19. The concept of neuropathy.
20. Neuropathy of the facial nerve
21. Trigeminal neuralgia
22. Plexopathies
23. Neuropathies of peripheral nerves.
24. Radiculopathy (radiculitis)
25. Diseases of the autonomic nervous system (migraine).
26. Vegetative vascular dystonia.
27. Raynaud's disease
28. Syringomyelia
29. Paroxysmal myoplegia.
30. Epilepsy.
31. Classification of epilepsy
32. Major epilepsy (Grand mal)
33. Minor epilepsy (Petit mal)
34. Status epilepticus.
35. Neuroses
36. Neurasthenia
37. Hysteria
38. Obsessive compulsive disorder.
39. Multiple sclerosis

40. Amyotrophic lateral sclerosis
41. Hepatocerebral dystrophy
42. Friedreich's Ataxia
43. Ataxia Pierre-Marie
44. Hereditary chorea (Huntington's chorea)
45. Myasthenia gravis
46. Spinal amyotrophy (Werdnig-Hoffmann disease)
47. Neural amyotrophy (Charcot-Marie-Tooth disease)
48. Progressive muscular dystrophy (Duchenne disease)
49. Progressive muscular dystrophy (Erb-Roth disease)
50. Progressive muscular dystrophy (Landouzi-Dejerine disease)
51. CSF in health and disease.
52. Technique of lumbar puncture.
53. Craniography, clinical significance
54. Signs of intracranial hypertension on the craniogram.
55. Pneumoencephalography
56. Angiography of cerebral vessels.
57. Methods of ultrasound examination of the brain.
58. Echoencephalography
59. Dopplerography
60. Electrophysiological methods for studying the nervous system.
61. Rheoencephalography
62. Thermography
63. Electromyography.
64. Modern methods of research of the nervous system.
65. Computed tomography of the central nervous system.
66. Electroencephalography
67. Magnetic nuclear resonance.
68. Positron emission tomography

69. Spondylography, clinical significance.
70. Methods for diagnosing diseases of the spinal cord.
71. Methods for studying the blood flow of the nervous system.
72. Migraine

## METHODOLOGICAL SUPPORT

1. Adams and Victor's Principles of Neurology 11 – e. edition 2015. by the Mc GrawWillCjmpnies. 500 p.
2. Editor Stephen J. Hauser. Harrison's Neurology in Clinical Medicine. Fourth edition 2013. by Mc Graw Will Companies. 500 p.
3. John W.Scadding and Nicholas A. Loseff. Clinical Neurology. «Hodder & Stoughton» London. 2012. 730 p.
4. Lange,Clinical Neurology,2018,10<sup>th</sup> edition,446 p.
5. Snell's.Clinical Neuroanatomy,2018,560 p.
6. Swaiman's Pediatric Neurology,6th edition,2017,1432 p.

### Appendix No. 1

Rules for assessing the attendance rate of students enrolled in the credit system

(The decision was approved by the Academic Council of AMU No. 10 of 25.06.2019)

Checkout

| Total hours<br>Number of<br>hours missed | Total hours Number of hours missed |     |      |   |     |     |     |      |                             |                             |
|--|------------------------------------|-----|------|---|-----|-----|-----|------|-----------------------------|-----------------------------|
|  | 1                                  | 2   | 3    | 4 | 5   | 6   | 7   | 8    | 9                           | 10 and more                 |
| 45                                       | 0                                  | 0,5 | 0,75 | 1 | 1,2 | 1,4 | 1,6 | 1,75 | 2<br>point<br>s at<br>limit | Not admitted<br>to the exam |



## Appendix No. 2

A student who missed more than 40% of the lecture (regardless of the absence of practical classes) is not allowed to the exams.

Estimating missed lecture hours

| Number of lecture hours | Number of hours missed<br>(exams not eligible) | Percentage of skips |
|-------------------------|--|---------------------|
| 4                       | 2  | 50%                 |
| 6                       | 3  | 50%                 |
| 8                       | 4  | 50%                 |
| 10                      | 5  | 50%                 |
| 12                      | 5  | 42%                 |
| <b>14</b>               | <b>6</b>                                       | <b>43%</b>          |
| 16                      | 7  | 44%                 |
| 20                      | 9  | 45%                 |
| 30                      | 13   | 43%                 |