Załącznik nr 5 do zarządzenia nr 189/2025

COURSE SPECIFICATION

Course code: 0912-7LEK-C-N

Course title in Polish: Neurologia
Course title in English: Neurology

1. Placement of the course within the study programme

1.1. Field of study	Medical
1.2. Mode of study	Full-time
1.3. Level of study	Uniform Master's studies
1.4. Profile of study	General academic
1.5. Course specification author	dr n.med. Elzbieta Jasińska
1.6. Contact	ejasinska@ujk.edu.pl, +48 607570949

2. Generał characteristics of the course

2.1. Language of instruction	English
2.2. Entry requirements	The basic knowledge of anatomy and physiology of the nervous system

3. Detailed characteristics of the course

3.1. Type of classes	Lecture-15 (including 3 hours of e-learning), classes-15 , practical classes-30
3.2. Place of course delivery	Courses in the teaching rooms of the UJK, Practical classes: CSM UJK, Department of Neurology Regional Hospital and Outpatient Clinic of Neurology RESMEDICA in Kielce
3.3. Form of assessment	Positive assessment of the case presentation written by a student, passing the practical exam, CSM practical exam, passing the final exam
3.4. Teaching methods	Verbal (lecture), viewing (demonstration, case demonstration, movie), practical (neurological examination, differential diagnosis, writing a medical history), CSM
3.5.a. Basic reading list	1. Netter's Concise Neurology –Karl Misulis, Thomas Head; 2017 2. A.H. Ropper , M.A.Samuels – *Adams and Victor's Principles of Neurology*; McGraw-Hill Education; 11*th edition* 2019 3. Sara E.Hocker and Eelco F.M.Wijdicks *Simulation in acute neurology* 2019
3.5.b. Supplementary reading list	1. Neurology – Mark Mumenthaler; 2003 2..E.Louis, S.A. Mayer et al.- *Merritt's Neurology Wolterd Kluwert* 13*th edition* , (Oct 3, 2015) 3.G.Fuller - *Neurological Examination Made Easy* Elsevier 2019, 6th edition 4. J.S.Kass, E.M.Mizrahi - *Neurology secrets.* Elsevier *6th edition 2017* 5. Michael J Aminoff and S.Andrew Josephson - *Aminoffs Neurology and General* Medicine 6th edition 2021 6. Bret L.,Cuccichiara and Raymond S. Price- *Decision making in adult neurology* 2020

4. Objectives, content and learning outcomes

4.1. Course objectives (taking into account the form of classes)
Lectures (including e-learning)

C1. (knowledge) - providing students with knowledge of standards in neurology, familiarization with the principles of conducting interviews and clinical examination, acquiring knowledge about diagnosis and management of both common and rare neurological conditions, familiarize with

ethical problems related to patient care, including end-of-life problems, termination of support for people with severe brain damage and palliative choices care.

C2. (skills) - the acquisition by students of the ability to observe and recognize a neurological condition and inter-pretation of tests used in neurology: Lumbar Puncture, Carotid Duplex Sonography, Computer Tomography, Magnetic Resonance, neurophysiological assessment: EEG, EMG, VEPs.

C3. (social competences) - familiarizing students with the specifics of work in neurological clinic and showing the importance of communication skills, both with patients, families, and the hospital staff and colleagues in and out-side the hospital

4.2. Course content (taking into count the form of classes)

Lectures

1. Interview and clinical syndromes in neurology - 3h

   Headache and facial pain – 1 h

2. Stroke – 2 h

   Epilepsy and other episodic disorders of neurologic function – 2h

3. Demyelinating diseases – 1h

   Parkinson disease and other common extrapyramidal diseases– 2h

   Motor neuron disease -1h

4. Polyradiculitis and polyneuropathy – 1,5 h

   Myopathy, myositis and disorder of neuromuscular transition – 1.5h

Seminars

1. The importance of medical interviev in neurology. Knowledge and consolidation of knowledge about the neurological diseases, neurological tests and assessment of the functional state of a neurological patient.
2. Diagnostic methods used in neurology: computed tomography, magnetic resonance imaging, cerebrospinal fluid examination, carotid and vertebral artery tests, neurophysiological tests.
3. Differential diagnosis of neurological diseases.
4. Intensive therapy in neurology. Rules for the management of patients after head trauma, with brain tumors, intracranial haemorrhage, status epilepticus,, Guillain – Barre syndrom
3. Diagnosis and treatment of vascular diseases of the brain and spinal cord.
4. Diagnosis and treatment of extrapyramidal system diseases, neurodegenerative diseases, neuromuscular diseases, demyelinating diseases, spinal diseases and radiculopthy
5. Prevention of nervous system diseases.
6. Rules for the treatment of acute and chronic pain
7. Neurological symptoms in internal diseases.

8. Rules of rehabilitation treatment.

Practical Classes:

1. Approach to diagnosis. Neurological examination: reflexes, symptoms and neurological syndromes. Examination of the unconscious patient and assessment of life-threatening conditions.

2. Management of suspected stroke, neuroinfection, status epilepticus, intoxication, psychoactive substances, consequences of craniocerebral trauma, myasthenic crisis, and relapses of multiple sclerosis.

3. Principles of diagnostics and treatment of basic neurological diseases.

4. Differential diagnosis of the most common neurological diseases.

5. Behavioral disorders, confusion and agitation in neurological diseases - methods of management and immediate patient protection.

CSM Medical Simulatory Center:

1. Expanding the knowledge of emergencies in neurology (vascular diseases, consciousness disorders, epilepsy, G-B syndrome, myasthenia gravis).

2. Acquisition of practical skills in dealing with emergencies in neurology, especially in conditions ER.

3. Raising social competences, building a team, acquainting with the role of a leader.

4.3. Course learning outcomes

Course learning outcomes (code)	Upon completion of the course, the student	Alignment with programme learning outcomes
	in the area of knowledge:	
W01	environmental and epidemiological conditions for the most common diseases;	E.W1.
W02	basic neurological syndromes;	E.W13.
W03	causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases of the nervous system, including: 1) headaches: migraine, tension headaches and bands headaches and trigeminal neuralgia of nerve V; 2) vascular diseases of the brain, in particular the stroke; 3) epilepsy; 4) infection of the nervous system, in particular meningitis, Lyme disease, HSV encephalitis, neurotransmitter disorders; 5) dementia, in particular in Alzheimer's disease, frontotemporal dementia, vascular dementia, and other types of dementia; 6) diseases of the basal ganglia, in particular Parkinson's disease; 7) demyelinating diseases, in particular multiple sclerosis; 8) diseases of the neuromuscular system, in particular amyotrophic lateral sclerosis and sciatica; 9) cranio-cerebral trauma, in particular concussion;	E.W14.
	in the area of skills:	
U01	conduct full and targeted physical examination of the adult patient;	E.U3.
U02	conduct indicative study of hearing and sight as well as the otoscopic examination;	E.U6.
U03	assess patient’s general condition, consciousness and awarenes;	E.U7.

U04	perform differential diagnosis of the most common diseases in adults and children;	E.U12.
U03	assess and describe the somatic and mental state of patients;	E.U13.
U04	recognize states of a direct threat to life;	E.U14.
U05	plan diagnostic, therapeutic and preventive procedures;	E.U16.
U06	conduct analysis of the potential side effects of each drug and the interaction between them;	E.U17.
U07	qualify the patient for home treatment and hospitalization;	E.U20.
U08	recognize states in which functional status of the patient's or his/her preferences restrict the treatment in accordance with specific guidelines for the disease;	E.U21.
U09	interpret laboratory tests/results and identify the reasons for deviations;	E.U24.
U10	assist when the following procedures and medical treatments are performed: 1) transfusions of blood and blood products, 2) drainage of the pleural cavity, 3) puncture of the pericardium, 4) puncture of the peritoneal cavity, 5) lumbar puncture, 6) needle biopsy, 7) epidermal tests, 8) intradermal and scarification tests and interpret their results;	E.U30.
U11	plan specialist consultations;	E.U32.
U12	evaluate decubitus and apply appropriate dressings;	E.U35.
U13	comply with the aseptic and antiseptic rules;	F.U3.
U14	perform differential diagnosis of the most common diseases in adults and children;	E.U12.
U15	assess and describe the somatic and mental state of patients;	E.U13.

in the area of social competences:

K01	establish and maintain deep and respectful contact with the patient and show understanding towards ideological and cultural differences;	H.S1.
K02	do what is right for the patient;	H.S2.
K03	respect medical confidentiality and patient's rights;	H.S3.
K04	take actions concerning the patient on the basis of ethical principles, being aware of social conditions and restrictions resulting from illness;	H.S4.
K05	recognize his/her own limitations and self-evaluate educational deficiencies and needs;	H.S5.
K06	promote healthy lifestyle;	H.S6.
K07	use reliable information sources;	H.S7.
K08	conclude on the basis of own surveys and observations;	H.S8.
K09	introduce rules of social conduct and teamwork to the group of specialists, including specialists form other medical professions also in the multicultural and multinational environment;	H.S9.
K10	give opinions concerning various aspects of professional activity;	H.S10.
K11	take responsibility for own decisions made during professional activities including own safety and safety of other people;	H.S11.

4.4. Assessment methods for learning outcomes

Assessment method (+/-)

Course learning outcomes (code)	Oral/written/ practical examinaion /other (specify)*	Test*	Project*	In-class activity*	Independent study*	Group work*	Other (specify)*

Type of classes

1: / 2:	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…
W01	+																				
W02	+																				
W03	+																				
U01				+	+																
U02				+	+																
U03				+	+																
U04				+	+																
U05				+	+																
U06				+	+																
U07				+	+																
U08				+	+																
U09				+	+																
U10				+	+																
U11				+	+																
U12				+	+																
U13				+	+																
U14				+	+																
U15				+	+																
K01-K11				+	+																

Annotation. 1: form of classes; 2: learning outcomes

4.5. Assessment criteria for learning outcomes

Type of classes:

LECTURE (L) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	61-68% The student sufficiently knows the symptoms of neurological diseases, performs a neurological examination..
3,5	69-76% The student sufficiently knows the basic symptoms of neurological diseases, performs a neurological examination, plans therapies.
4,0	77-84% The student knows the pathogenesis, symptoms of neurological diseases well, performs differential diagnosis and neurological examination, plans therapies.
4,5	85-92% The student has more than good knowledge of the etiology, pathogenesis and symptoms of neurological diseases, performs differential diagnosis and neurological examination, plans therapies. He has good contact with the patient and staff.
5,0	93-100% The student perfectly knows the pathogenesis, symptoms of neurological diseases, carries out differential diagnosis, neurological examination and plans therapies. He establishes a very good contact with the patient and staff

Type of classes:

SEMINAR (S) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	The student knows the symptoms of neurological diseases sufficiently and performs a neurological examination. 61-68%
3,5	The student sufficiently knows the basic symptoms of neurological diseases, carries out a neurological examination, plans therapies. 69-76%
4,0	The student knows the pathogenesis, symptoms of neurological diseases well, carries out differential diagnosis and neurological examination, plans therapies. . 77-84%
4,5	The student knows the etiology, pathogenesis and symptoms of neurological diseases more than well, carries out differential diagnosis and neurological examination, plans therapies. He has good contact with the patient and staff. 85-92%
5,0	The student perfectly knows the pathogenesis, symptoms of neurological diseases, carries out differential diagnosis, neurological examination and plans therapies. Establishes a very good contact with the patient and staff 93-100%

Type of classes:

OTHER (...) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	61-68%
3,5	69-76%
4,0	77-84%
4,5	85-92%
5,0	93-100%

5. ECTS credit allocation – student workload

Category	Student workload (full-time mode)
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER (CONTACT HOURS)	***60***
Participation in lectures*	15
Participation in seminars/laboratories*	45
Other (specify) e.g. classes conducted with the use of distance learning methods and techniques*	
INDEPENDENT STUDY (NON-CONTACT HOURS)	***40***
Preparation for lectures*	5
Preparation for seminars/laboratories*	20
Preparation for examination/test*	15
Gathering materials for project, online research*	
Preparation of a multimedia presentation*	
Other (specify)*	
TOTAL HOURS	***100***
ECTS CREDITS for the course	**4**

*** delete as appropriate**

Approved for implementation (date and legible signatures of course instructors in the given academic year):

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