



# Pomorski Uniwersytet Medyczny w Szczecinie

## SYLLABUS of the MODULE (SUBJECT) General Information

Module title: neurology	
Module type	Obligatory
Faculty PMU	Faculty of Medicine and Dentistry
Major	medicine
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	V
ECTS credits (incl. semester breakdown)	6
Type/s of training	lectures (5h) /seminars (20)/ practical 60h
Form of assessment*	<input type="checkbox"/> graded assessment: <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral  <input type="checkbox"/> non-graded assessment  <input checked="" type="checkbox"/> final examination <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department/ Clinic, Unit	Dr hab.n.med. Marta Masztalewicz
Tutor responsible for the module	Dr n. med. Agnieszka Meller <a href="mailto:agnieszka.meller@pum.edu.pl">agnieszka.meller@pum.edu.pl</a>
Department's/ Clinic's/ Unit's website	Department of Neurology Unii Lubelskiej 1, 71-252 Szczecin <a href="https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-stomatologiczny/katedra-i-klinika-neurologii">https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-stomatologiczny/katedra-i-klinika-neurologii</a>
Language	English

\* replace  into  where applicable

## Detailed information

<b>Module objectives</b>		The aim of the classes is to learn the technique of neurological examination, as well as to acquire the ability to interpret the results of neurological examination and differential diagnosis in neurology, as well as to broaden knowledge about the treatment of diseases of the nervous system. The aim is also to learn about the interdisciplinary (consultative) nature of neurology, i.e. its relationship with other clinical fields.
Prerequisite /essential requirements	Knowledge	Student knows anatomical, histological and embryological denominations in the field of neurology in English. Knows the structure of the human body in topographic and functional approach Student knows the basic cellular structures and their function. Student knows the anatomy of the nervous system and the concept of the reflex arc.
	Skills	Basic scope of the physical examination The basic scope of the internal medicine examination
	Competences	Social maturity. Socialization. Ability to position oneself appropriately.

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards)	Method of verification of learning outcomes*
W01	Student lists the environmental and epidemiological conditions of the most common neurological diseases	E.W.1	ET
W02	Student will differentiate the basic sets of neurological symptoms	E.W13	SP, ET
W03	Student will characterize the causes, symptoms, rules of diagnosis and therapeutic management in the most common diseases of the nervous system, including: <ul style="list-style-type: none"> <li>a) headaches: migraine, tension headache and headache syndromes and neuralgia of nerve V</li> <li>b) cerebrovascular diseases, in particular stroke</li> <li>c) epilepsy</li> <li>d) Alzheimer's disease, frontal dementia, vascular dementia and other dementia syndromes</li> <li>e) Basal ganglia disorders, in particular Parkinson's disease</li> <li>f) demyelinating diseases, in particular multiple sclerosis,</li> <li>g) diseases of the neuromuscular system, in particular myasthenia gravis and sciatica;</li> </ul>	E.W14	SP, ET
U01	Student takes history from an adult patient	E.U1	S
U02	Student performs an assessment of the neurological status of an adult patient, including examination of cranial nerves, muscle strength of the limbs, physiological reflexes, pathological reflexes, assessment of superficial sensation, deep sensation, tests of agility, assessment of gait, meningeal signs, spinal symptoms	E.U3	S
U03	Student assesses patient general status, awareness, consciousness	E.U7	S
U04	Student perform differential diagnosis of the most common diseases of adults and children	E.U12	S, SP, ET
U05	Evaluates and describes the patient's somatic and mental state	E.U13	S
U06	Recognizes states of immediate threat to life	E.U14	S, SP, ET
U07	Recognizes the condition after consuming alcohol, drugs and other stimulants	E.U15	S, SP
U08	Plans diagnostic, therapeutic and prophylactic procedures	E.U16	SP

U09	Proposes individualization of existing therapeutic guidelines and other methods of treatment in the face of ineffectiveness or contraindications to standard therapy	E.U18	SP
U10	Qualifies the patient for home and hospital treatment	E.U20	SP
U11	Interprets the results of laboratory tests and identifies the causes of deviations from the norm	E.U24	S
U12	Assists with lumbar puncture and interprets the results	E.U30	SP, S
U13	Plans specialist consultations	E.U32	SP
U14	Participates in keeping medical records of a neurological patient	E.U38	O
K01	establishes and maintains deep and respectful contact with the patient, as well as demonstrates understanding for differences in worldview and culture	K01	O
K02	Guided by the good of the patient	K02	O
K03	Respects medical confidentiality and patient rights	K03	O
K04	Takes action towards the patient based on ethical principles, with awareness of social conditions and limitations resulting from the disease	K04	O

**Table presenting LEARNING OUTCOMES in relation to the form of classes**

No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other...
W01	E.W1		X				X	
W02	E.W13		X				X	
W03	E.W14		X				X	
U01	E.U1				X			
U02	E.U3				X			
U03	E.U7		X		X			
U04	E.U12		X		X			
U05	E.U13				X			
U06	E.U14		X		X			
U07	E.U15				X			
U08	E.U16		X		X			
U09	E.U18				X			
U10	E.U20		X		X			
U11	E.U24				X			
U12	E.U30				X			
U13	E.U32		X		X			
U14	E.U38				X			
K01	K01				X			
K02	K02				X			
K03	K03				X			
K04	K04				X			

**Table presenting TEACHING PROGRAMME**

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
<b>Lectures</b>			
TK01	Emergencies in neurology	1	W01 -W03, U06
TK02	Cognitive dysfunction and dementia in neurological diseases	1	W01 -W03, U03-U05, U07, U08
TK03	Upper and lower back pain, including cervical myelopathy	1	W01 -W03, U04, U08
TK04	Autoimmune disorders	1	W01 -W03, U04, U08
TK05	Short- and longterm unconsciousness. Diagnostic and therapeutic procedures in consciousness disorders	1	W01-W03, U04 - U08
<b>Seminars</b>			
TK01	The upper and lower motor neuron and the cerebellum – anatomical and physiological consideration. Differences between upper and lower motor neuron lesion. The signs of cerebellar syndrome.	1	W02, U04
TK02	The basal ganglia. Anatomical and physiological considerations. Abnormalities due to involvement of basal ganglia. Stance and gait disorders.	2	W02, U04
TK03	Multiple sclerosis	2	W01 -W03, U04, U08, U09
TK04	Epilepsia	2	W01 -W03, U04, U06, U08, U09
TK05	Brain and spinal cord tumors	2	W01 -W03, U04, U08, U09
TK06	Degenerative diseases of central nervous system	2	W01 -W03, U04, U08
TK07	Peripheral nerves disorders (peripheral neuropathies)	2	W01 -W03, U04, U08, U09
TK08	Disorders of muscles (myasthenia gravis , myopathies)	2	W01 -W03, U04, U06, U08, U09
TK9	The cranial nerves: anatomical and physiological considerations. Disorders of speech. Apraxia and agnosia. Paraneoplastic syndromes	2	W02, U04, U08
TK10	Headache	2	W01-W03, U04, U06, U08
<b>Practical classes</b>			
TK01	Neurological examination in practice, technique, discussion of the normal neurological state; maintaining a proper medical attitude towards the patient	5	U01 – U04, K01 - K04
TK02	Patient in an emergency; Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U05, K01 - K04
TK03	Patient with impaired consciousness, consciousness; Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U05, K01 - K04
TK04	Patient with shoulder pain, low back pain, neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U04, K01 - K04
TK05	Patient with multiple sclerosis. Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U04, K01 - K04
TK06	Patient after a seizure. Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U05, K01 - K04
TK07	Patient with a stroke. Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U04, K01 - K04
TK08	Patient with speech disorders. Assessment of speech disorders; Differentiation	5	
TK09	Patient with a tumor of the central nervous system (brain, spinal cord). Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U05, K01 - K04
TK10	Patient with polyneuropathy. Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U04, K01 - K04
TK11	Patient with miasthenia. Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U04, K01 - K04
TK12	Patient with headache. Neurological examination in practice, with the interpretation of the deviations found, planning diagnostics, possible treatment; while maintaining an appropriate medical attitude towards the patient	5	U01 – U04, K01 - K04

<b>Booklist</b>
Obligatory literature:
1. Crash Course Neurology by Vivekananda Umesh, Elsevier Fifth Edition, 2018
Supplementary literature:
1. Neurological Examination Made Easy by Fuller Geraint, Elsevier, Sixth Edition 2019

<b>Student's workload</b>	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor
Contact hours with the tutor	85
Time spent on preparation to seminars/ practical classes	24
Time spent on reading recommended literature	12
Time spent on writing report/making project	0
Time spent on preparing to colloquium/ entry test	0
Time spent on preparing to exam	54
Other .....	0
Student's workload in total	175
<b>ECTS credits for the subject (in total)</b>	6
<b>Remarks</b>	
Hours in Neurological ambulatory care = 4h	

\* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquim

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedia presentation

other...