



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2017/2018

General Information

Module title	<i>Neurosurgery</i>
Module type	<i>Obligatory</i>
Faculty	<i>Faculty of Medicine</i>
Field of study	<i>Medicine</i>
Major	<i>not applicable</i>
Level of study	<i>long-cycle (S2J)</i>
Mode of study	<i>intramural</i>
Year of studies, semester	<i>5th year, 1st and 2nd semester</i>
ECTS credits (incl. semester breakdown)	
Type/s of training	<i>seminars (5h)/ classes (10h)</i>
Form of assessment	<p>- <i>graded assessment: *</i></p> <p><input type="checkbox"/> <i>descriptive</i></p> <p><input type="checkbox"/> <i>test</i></p> <p><input type="checkbox"/> <i>practical</i></p> <p><input type="checkbox"/> <i>oral</i></p> <p>x <i>non-graded assessment *</i></p> <p>- <i>final examination: *</i></p> <p><input type="checkbox"/> <i>descriptive</i></p> <p><input type="checkbox"/> <i>test</i></p> <p><input type="checkbox"/> <i>practical</i></p> <p><input type="checkbox"/> <i>oral</i></p>
Head of the Department/ Clinic, Unit	<i>dr hab. n. med. prof. PUM Leszek Sagan</i>
Tutor responsible for the module	<i>dr n. med. Bartosz Limanówka</i> <i>blimanowka@gmail.com</i>
Department's/ Clinic's/ Unit's website	<i>https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-stomatologiczny/Klinika-Neurochirurgii-i-Neurochirurgii-Dzieciecej</i>
Language	<i>English</i>

*replace ☐ with X where applicable

Detailed information

Module objectives		1. To recognize symptoms and causes of intracranial hypertension and its consequences. 2. To get acquainted with medical issues in the diagnosis and therapeutic methods in neurosurgical diseases, incl.: craniocerebral trauma, cerebral edema, hydrocephalus, vascular diseases, central nervous system tumors, degenerative spine disease. 3. To acquire skills in evaluating condition of unconscious patient.	
Prerequisite /essential requirements	Knowledge	1. Basic knowledge of neuroanatomy and neurophysiology. 2. Knowledge of neurological diseases.	
	Skills	1. Practical skills in neurological examination.	
	Competences	1. Ability to deal adequately with an inpatient.	
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) ZEK	Method of verification of learning outcomes *
W01	knows and explain causes, symptoms, diagnosis and therapeutic procedures to most frequent diseases of central nervous system, incl.: a) cerebral edema and its consequences, in particular emergency states, b) other forms of intracranial stenosis and its consequences, c) craniocerebral trauma, d) vascular defects of central nervous system, e) neoplastic tumors of central nervous system, f) spondylopathy and myelopathy	K_F.W13	ET
W02	knows rules regarding assumptions and diagnosis of brain death	K_F.W15	ET
W03	knows issues regarding laryngology, phoniatics and audiology, incl.: a) causes, clinical course, therapeutic procedures, complications and prognosis of otopathy, rhinopathy, nasal sinus diseases, stomatopathy, pharynx and larynx diseases in adults, b) diseases of facial nerve and selected neck structures, c) diagnosis and therapeutic procedures with regard to mechanical injuries to the ear, nose, pharynx and larynx, d) procedures regarding emergency states of otorhinolaryngology, in	K_F.W12	ET

	particular larynx dyspnea, e) diagnosis and therapeutic procedures with regard to disturbance of hearing, voice and speech, f) diagnosis and therapeutic procedures with regard to head and neck neoplasms		
U01	evaluates condition of unconscious patient and classifies according to the international grading systems	K_F.U21	ET
U02	recognizes symptoms of increasing intracranial pressure	K_F.U22	ET
U03	performs basic resuscitation procedures with the help of automatic defibrillator and other rescue operations and provides first aid	K_F.U10	O
U04	monitors post-operation period according to basic life parameters	K_F.U12	O
U05	evaluates result of radiography with regard to most frequent types of fracture, in particular fractures of long bones	K_F.U7	O
U06	assists with performing typical operation, prepares operation area and administers local anesthetic	K_F.U1	O
U07	adheres to rules of asepsis and antisepsis	K_F.U3	O
U08	stems external bleeding	K_F.U9	O
U09	dresses simple wound, puts on and changes sterile surgical dressing	K_F.U4	O
U10	makes circumferential insertion	K_F.U5	O

Table presenting learning outcomes of the subject/module in relation to the form of classes

No.	SYMBOL (referring the standards) ZEK	Type/s of training							
		Lecture	Seminar	Practical classes	Clinical classes	Other...
1.	W01		X		X				
2.	W02		X		X				
3.	W03		X		X				
4.	U01		X		X				
5.	U02		X		X				
6.	U03				X				
7.	U04				X				
8.	U05				X				
9.	U06				X				
10.	U07				X				
11.	U08				X				
12.	U09				X				
13.	U10				X				

Module (subject) contents no.	Description of teaching programme	No. of hours	References to learning outcomes
TK01	Seminar 1: Intracranial hypertension. Unconscious patient evaluation.	2	W01, W02, W03, U01, U02
TK02	Seminar 2: Craniocerebral trauma. Neoplastic tumors of central nervous system.	2	W01, W03, U02
TK03	Seminar 3: Vascular defects of central nervous system. Spine surgery.	1	W01, U02
TK04	Clinical class 1: Psychical examination of unconscious patients and affected by craniocerebral trauma, subarachnoid haemorrhage and spine degeneration.	5	W01, W02, W03, U01, U02, U03, U04, U05, U06, U07, U08, U09, U10
TK05	Clinical class 2: B Psychical examination of unconscious patients and affected by neoplastic tumors of central nervous system. Craniotomy show in the operating room.	5	W01, W02, W03, U01, U02, U03, U04, U05, U06, U07, U08, U09, U10
Booklist			
Obligatory literature:			
1. Greenberg M.S. (ed.): Handbook of neurosurgery. Thieme Medical Publishers, 2016.			
Supplementary literature:			
2. Winn H.R. (ed.): Youmans Neurological Surgery. Elsevier, 2016.			
Student's workload (balance sheet of ECTS credits)			
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]		
	Tutor	Student	Average
Contact hours with the tutor	15		
Time spent on preparation to seminars/ practical classess	10		
Time spent on reading recommended literature	10		
Time spent on writing report/making project	0		
Time spent on preparing to colloquium/ entry test	0		
Time spent on preparing to exam	5		
Other	0		
Student's workload in total	40		

ECTS credits for the subject (in total)	
Remarks	

* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquium

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 – multimedial presentation

other...