Pomorski Uniwersytet Medyczny w Szczecinie

SYLLABUS of the MODULE (SUBJECT)
General Information

Module title: Neurosurgery	
Module type	Obligatory
Faculty PMU	Faculty of Medicine and Dentistry
Major	Dentistry
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	Year 4th, semester 7th
ECTS credits (incl. semester breakdown)	1
Type/s of training	lectures (5h) /seminars (5h) / classes (3h)
Form of assessment*	☒graded assessment: ☐descriptive ☒test ☐practical ☐oral ☐non-graded assessment ☐final examination ☐descriptive ☐test ☐practical ☐oral
Head of the Department/ Clinic, Unit	prof. dr hab. n. med. Leszek Sagan
Tutor responsible for the module	dr n. med. Bartosz Limanówka bartosz.limanowka@pum.edu.pl
Department's/ Clinic's/ Unit's website: https://www.pum.edu.pl/studia_iii_stopnia/informacje_z_jednostek/wmis/katedra_neurochirurgii/	
Language	English

* replace ☐ into ☒ 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)**	**Method of verification of learning outcomes***
W01	knows and understants principles of management in multi-organ injuries	E.W4.	ET
W02	knows and understands life-threatening states	E.W18.	ET
W03	knows and understands cases in which the patient should be referred to the hospital	E.W20.	ET
U01	is able to identify normal and pathological structures and organs in additional imaging examination (X-ray, USG, computer tomography)	E.U5.	O
U02	is able to identify life-threatening risk	E.U8.	O
U03	is able to recognize symptoms of brain injury and cerebrovascular disease, dementia and consciousness disturbances	E.U10.	ET
U04	is able to diagnose headaches, facial pains and neurological diseases in adults and children that posing problems in dental practice	E.U11.	O
K01	is ready to establish and maintain deep and respectful contact with the patient as well as to show understanding for ideological and cultural differences	K.1.	O
K02	is ready to be guided by the patient wellbeing	K.2.	O
K03	is ready to respect physician-patient privilege and patient's rights	K.3.	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	knows and understants principles of management in multi-organ injuries	X			X			
W02	knows and understands life-threatening states	X			X			
W03	knows and understands cases in which the patient should be referred to the hospital	X			X			
U01	is able to identify normal and pathological structures and organs in additional imaging examination (X-ray, USG, computer tomography)				X			
U02	is able to identify life-threatening risk	X			X			
U03	is able to recognize symptoms of brain injury and cerebrovascular disease, dementia and consciousness disturbances	X			X			
U04	is able to diagnose headaches, facial pains and neurological diseases in adults and children that posing problems in dental practice	X			X			
K01	is ready to establish and maintain deep and respectful contact with the patient as well as to show understanding for ideological and cultural differences				X			
K02	is ready to be guided by the patient wellbeing				X			
K03	is ready to respect physician-patient privilege and patient's rights				X			

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	**Teaching programme**	**No. of hours**	**References to learning outcomes**
Winter semester			
	Lectures		
TK01	Lecture 1: Intracranial hypertension. Unconscious patient evaluation.	1	W01, W02, W03, U01, U02, U03
TK02	Lecture 2: Spine diseases	1	W03, U01
TK03	Lecture 3: Intracranial hemorrhages	1	W01, W02, W03, U01, U02, U03
TK04	Lecture 4: Head trauma	1	W01, W02, W03, U01, U02, U03
TK05	Lecture 5: Head trauma in children	1	W01, W02, W03, U01, U02, U03
	Seminars		
TK01	Seminar 1: Tumors of the central nervous system	1	W02, W03, U01, U02
TK02	Seminar 2: Intracranial vascular malformations	1	W02, W03, U01, U02, U03

TK03	Seminar 3: Surgical treatment of intracranial hematomas	1	W01, W02, W03, U01, U02, U03
TK04	Seminar 4: Trigeminal neuralgia	2	W03, U01, U04
Practical classes			
TK01	Clinical class 1: Psychical examination of unconscious patients and affected by craniocerebral trauma, subarachnoid haemorrhage and spine degeneration.	1	W01, W02, W03, U01, U02, U03, U04, K01, K02, K03
TK02	Clinical class 2: B Psychical examination of unconscious patients and affected by neoplastic tumors of central nervous system. Craniotomy show in the operating room.	2	W02, W03, U01, U02, U03, U04, K01, K02, K03

Booklist
Obligatory literature:
1. Greenberg M.S. (ed.): Handbook of neurosurgery. Thieme Medical Publishers, 2019.
Supplementary literature:
2. Winn H.R. (ed.): Youmans Neurological Surgery. Elsevier, 2016.

Student's workload	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor
Contact hours with the tutor	13
Time spent on preparation to seminars/ practical classes	5
Time spent on reading recommended literature	10
Time spent on writing report/making project	0
Time spent on preparing to colloqium/ entry test	0
Time spent on preparing to exam	5
Other …..	0
Student's workload in total	33
ECTS credits for the subject (in total)	**1**
Remarks	

* Selected examples of methods of assessment:
EP – written examination
EU – oral examination
ET – test examination
EPR – practical examination
K – colloqim
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…