Name of the course	**Neurosurgery**			***Code***	MSE502
Type of study program	Integrated university study program, Medicine			***Year of study***	5
Credits (ECTS):	1	***Semester***	IX	***Number of hours per semester (l+s+e)***	25 (7+8+10)
Status of the course:	obligatory	***Preconditions:***	Passed all exams of the 4th year	***Comparative conditions:***	/
Access to course:	Fifth year students			***Hours of instructions:***	According to schedule

***Course teacher*:**	Assistant professor Goran Lakičević, MD, PhD
Consultations:	As agreed with students
E-mail address and phone number:	goran.laki@gmail.com
Associate teachers	Prof. Josip Paladino, MD, PhD Assistant professor Vjerislav Peterković, MD, PhD Marko Bošnjak, MD Ivana Bulić, MD Anel Livaja, MD
Consultations:	An hour before and after the lectures
E-mail address and phone number:	

Aims of the course:	The objectives of this course are: to introduce medical students with basic facts about neurosurgery, introduce to the concepts ofneurosurgical procedures, diagnoses and treatment.
Learning outcomes (general and specific competences):	Students will develop knowledge of clinical examination of a neurosurgical patient, of diagnostic and therapeutic procedures to treat patients with injuries and/or diseases of central and/or peripheral nervous system, of the degree to which a neurosurgery is urgent, types of neurosurgeries, their successfulness or possible complications.
Course content (Syllabus):	Introduction to neurosurgery; History of neurosurgery; Diagnostic procedures in neurosurgery (history taking, clinical neurological examination, EMG, EEG, CT, MRI, LM); Principles of neurosurgical treatment (burr-holes, craniotomy, pain treatment; Space- compressive intracranial processes-pathophysiology of intracranial space (ICP, different types of impaction and signs); Intracranial tumors-neurooncology; Hydrocephalus in children and adults – circulation of CS fluid; Differential diagnosis of neurosurgical diseases; Children neurosurgery; Cerebrovascular surgery; Craniocerebral injuries- neurotraumatology; Intracranial hematoma;Concussion-contusion- pressing of the brain; Glasgow coma scale score (GCS score). Diseases and injuries of the spine and spinal cord. Discoradicular conflict C 5, 6, 7, 8/ L2, 3, 4, 5, S1. Prognosis and rehabilitation of neurosurgical patients.

Format of instruction (mark in bold)	**Lectures**	**Exercises**	**Seminars**	Independent assignments
	Consultations	Work with mentor	Field work	Other
	Remarks: Students are required to attend in the emergency unit under the supervision of licensed surgeon.			
Student responsibilities	In accordance to Rules of studying and Deontological code for MostarUniversity Medical School students			
Screening student	**Class attendance**	**Class participations**	Seminar essay	**Practical training**

work (mark in bold)	**Oral exam**	**Written exam**	Continuous assessment	Essay

Detailed evaluation within a *European system of points*

STUDENTS RESPONSIBILITIES	**HOURS**	**PROPORTIONS OF ECTS CREDITS**	**PROPORTIONS OF MARK**
Class attendance and participations	25	0.8	0%
Written and oral exam	5	0.2	100%

Written and oral test.
According to the regulations of the study, final grade on the test is obtained as:
A = 91-100% 5
B = 79 to 90% 4
C = 67 to 78% 3
D = 55 to 66% 2
F = 0 to 54% 1

Required literature:	Ante Kvesić and colleagues, Surgery, 1st edition, Medicinska naklada, 2016 - selected chapters
Optional literature:	Presentations and handouts from lectures and seminars
Additional information about the course	Methods of monitoring the quality of teaching: Student survey Quality control analysis Analysis of exam results External evaluation (teams for quality control)

Annexes: calendar classes

The number of teaching units	**TOPICS AND LITERATURE**
I.	Title: History of neurosurgery; Diagnostic procedures in neurosurgery
	Short description: history taking, clinical neurological examination, EMG,EEG, CT, MRI, LM
	Literature: mandatory and optional
II.	Title: Principles of neurosurgical treatment
	Short description: trepanation, craniotomy, pain treatment; Space-compressive intracranial processes-patophysiology of intracranial space (ICP, differenttypes of impaction and signs)
	Literature: mandatory and optional
III.	Title: Intracranial tumors-neurooncology; Hydrocephalus in children and adults
	Short description: circulation of CS fluid; Differential diagnosis of neurosurgical diseases; Children neurosurgery; Cerebrovascular surgery.
	Literature: mandatory and optional
IV.	Title: Craniocerebral injuries-neurotraumatology
	Short description: Intracranial haematoma; Concussion-contusion- pressing of the brain; Glasgow coma scale score (GCS score). Diseases and injuries of the spine and spinal cord. Discoradicular conflict C 5, 6, 7, 8/ L2, 3, 4, 5, S1. Prognosis and rehabilitation of neurosurgical patients.
	Literature: mandatory and optional