REQUIREMENTS

Semmelweis University, Faculty of Medicine

Name of the managing institute (and any contributing institutes):

Department of Neurosurgery

Name of the subject: Neurosurgery

in English: Neurosurgeryin German: Neurochirurgie

Credit value: 2

Number of lessons per week: 2 lecture: 14 practical course: - seminar: -

Subject type: compulsory course elective course optional course

Academic year: 2020/2021

Subject code:

AOVIDS279 1A

Name of the course leader: Prof. Péter Banczerowski

His/her workplace, phone number: SE- Dept. of Neurosurgery, 1145 Bp., Amerikai út 57.,

+361-467-9325

Position: Head of Department

Date and registration number of their habilitation: 2010, reference number: 289

Objectives of the subject, its place in the medical curriculum:

Neurosurgery is a medical specialty concerned with the prevention, diagnosis and treatment of complex neurological disorders. Neurosurgeons deal with pathologies of the central and peripheral nervous system.

There are several subspecialities in neurosurgery. In neurotraumatology, cranial and spinal injuries caused by an external mechnical forces are treated. Neuro-oncology is an important and developing field in neurosciences, that primarily deals with diagnosis and treatment of both primary central nervous system tumours and complications of systemic cancer. Vascular neurosurgery involves the treatment of abnormalities of blood vessels of the brain and spinal cord. Neurological spine surgeons treat several degenerative, neoplatic and vascular pathologies involving the bony spine or the nerual structures. Neurological spine surgeons rather use minimally invasive operative techniques in order to minimaze hospital stay and tissue damage. Functional neurosurgery involves the restoration of neurological condition and function. Pediatric neurosurgery is also a subspeciality and it aims to treat children with operable disorders of the nervous system.

Place where the subject is taught (address of the auditorium, seminar room, etc.):

SE- Dept. of Neurology (1st floor lecture hall), 1083 Bp., Balassa u. 6.

Successful completion of the subject results in the acquisition of the following competencies:

In our institute students can experience the various clinical presentations of central and peripheral nervous system abnormalities. We are able to introduce the diagnostic algorithm and special operative techniques with which they gain practical knowledge about neurology and neurosurgery.

Course prerequisites:

Neurology and neurosurgery, Medical Imaging

Number of students required for the course (minimum, maximum) and method of selecting students:

10/80

How to apply for the course:

Trough the Neptun system

Detailed curriculum:

(Theoretical and practical lessons shall be given separately by numbering the lessons (by weeks). Please provide the names of the teachers of the lectures and practical lessons and indicate guest

lecturers. Do not use attachments!

Always attach a CV for guest lecturers!)

- 1. Introduction to neurosurgery: history of neurosurgery. Prof. Dr. Nyáry István
- 2. Basics of micro-neurosurgical anatomy. Dr. Balogh Attila
- 3. Neurological investigation of the neurosurgical patient. Prof. Dr. Bereczki Dániel
- 4. Increased intracranial pressure. Hydrocephalus. Prof. Dr. Nyáry István
- 5. Head and injury and neurotrauma basics. Prof. Dr. Banczerowski Péter
- 6. Spine and spinal cord injuries. Prof. Dr. Banczerowski Péter
- 7. Spinal tumors. Prof. Dr. Banczerowski Péter
- 8. Brain tumors, neurooncology. Dr. Bagó Attila
- 9. Vascular malformations of CNS. Prof. Dr. Nyáry István
- 10. Degenerative spine diseases. Dr. Nagy Gábor
- 11. Epilepsy surgery and investigations. Dr. Erőss Loránd
- 12. Functional neurosurgery and stereotactic procedures. Dr. Erőss Loránd
- 13. Radiosurgery. Dr. Szeifert György
- 14. Visiting the operating theatre and examination.

Other subjects concerning the border issues of the given subject (both compulsory and optional courses!). Possible overlaps of themes:

Neurology

Anesthesiology and Intensive Care

Radiology

Neuroradiology

Traumatology

Special study work required to successfully complete the course:

(E.g. field exercises, medical case analysis, test preparation, etc.)

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Requirements for participation in classes and the possibility to make up for absences:

To take part on lectures every Monday. In case of absences the lectures will be find in Moodle system.

Methods to assess knowledge acquisition during term time:

(E.g. homework, reports, mid-term test, end-term test, etc., the possibility of replacement and improvement of test results)

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Requirements for signature:

To gain knowledge from the lectures

Type of examination:

written essay and/or written test

Requirements of the examination:

(In case of a theoretical examination, please provide the topic list; in case of a practical exam, specify the topics and the method of the exam)

Lectures of the topics of the curriculum

Method and type of evaluation:

(Method of calculating the final mark based on the theoretical and practical examination. How the mid-term test results are taken into account in the final mark.)

The students will be graded from 1 to 5.

offered mark: the students have opportunity to get offered mark, if they write an essay the end of the semester (until a predetermined deadline).

-written multiple choise test: written test comprises 15 multiple choice quiz questions.

How to register for the examination?:

Trough in Neptun system

Possibilities for exam retake:

According to the generals rules of the University

Printed, electronic and online notes, textbooks, guides and literature (URL address for online material) to aid the acquisition of the material

- online notes: https://semmelweis.hu/idegsebeszet/english/education/
- Schmidek & Sweet's operative neurosurgical techniques / Alfredo Quinones-Hinojosa 62. publishing (Notes: I1/412 és I1/413)

| Signature of the habilitated instructor (course leader) who announced the subject: |
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| Signature of the Director of the Managing Institute: |
| Hand-in date: 15.05.2020. |
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| Opinion of the competent committee(s): |
| Comments of the Dean's Office: |
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| Dean's signature: |
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