

## The Hebrew University of Jerusalem

Syllabus

### NEUROLOGY- FIFTH YEAR- FINAL EXAM - 96513

Last update 08-11-2023

<u>HU Credits:</u> 4

Degree/Cycle: 2nd degree (Master)

Responsible Department: Medicine

<u>Academic year:</u> 0

Semester: Yearly

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> Ein Karem

Course/Module Coordinator: Prof. Netta Levin

Coordinator Email: netta@hadassah.org.il

Coordinator Office Hours:

Teaching Staff:

Dr. benjamin uliel, Dr. dana ekstein, Dr. David Arkadir, Dr. maxim bauerr, Prof. tamir ben hur, Dr. ecaterina ben zion, Prof. Marc Gotkine, Dr. eduard linetsky, Prof. Netta Levine, Dr. fatma shalabi, Prof. dimitrios karosis, Dr. tal friedman korn, Dr. panayiota petrou, Dr. mordekhy medvedovsky, Dr. yossef lerner, Prof. Ronen Leker, Dr. Todd Lynn, Dr. Shlomzion kahan merhavi. Dr. nour eddine yagmor, Dr. gubran hamza, Prof. Adi Vaknin. Dr. asaf honig, Dr. diya doufish, Dr. ROY DAYAN, Dr. Muneer Abu-Snineh. Prof. Shahar Arzy, Dr. Muler Caroline, gad majadele, levy michaelshwilli, renim awdeh. Tarek Keadan, yoel schwartzmann, Zlil Shifman. david spizzichino, Dr. RONIT GILAD, Yigal Shoshan, Dr. Zvi Israel, Andres Vargas, Andrew Kaye, Guy Rosenthal, Iose Cohen. Dr. Samuel Moscovici. Dr. Moatasim Shweiki, Saadit Houri. Lea Kahanov, Juan Leon,

wenad najar, michael farverov, Rotem Hershkowitz, Uri avdelsberg, Waed Maslaha, Marco Zorita, lea morjon, Dr. tal ben uliel, Dr. Ido Paldor, Dr. Michael Teitcher, Raslan Abu Housin, Dr. Netaniel Rein, Dr. Maria Anelo, Sol Zamir, Ioav Chinchilla, Karam Daka, Issa Metanis. Tamer Juaba, Yusef Najjar, namnah montaser, Dr. YAKOV BALASH, Dr. VOLODYMIR SAMOGALSKY, Dr. NADYA Khmelev, Dr. TATIANA LIPSHITZ, Dr. YOAV LIPKIN. Dr. Moses Aaronov, Dr. Yosef Schechter, Dr. Avi Ashkenazi. Dr. Roni Eichel, Dr. Gilad Yahalom, Prof. Natan Bornstein, Dr. Betina Birmanns, Dr. Shira Markowitz. Dr. Malek Abu-Lafi, Ms. Mikhal Cohen, Dr. Yoel Cohen, Amir Janah, Danielle Wasserman, Mossab Harbawi. Lamya Ahmad Abddalla, Ms. Melania Kassem. Stefan Mausbach. Ms. Garcia Mellisa, Dr. Rami Abudalu. Dr. Marina Dano, Dr. Nevo Margalit,

Dr. Tal Shahar, Dr. Lior Gonen, Ms. John Winestone, Ms. Shapiro Henry, Ms. Rajz Gustavo, Ms. Isabelle Korn-Lubetzki, Ms. Dani Rapport, Ms. Angel Golimstok, Ms. Shaqir Salam, Maswadeh Ahmed, Ms. Yarden Cohen, Dr. Cezar Mizrahi, Dr. Yitzhak Friedman, Dr. Ora Ben-Hadar

#### Course/Module description:

A neurology and neurosurgery course for fifth-year medical students is given at Hadassah Medical Center and Shaare Zedek Medical Center. The duration of the course is 4 weeks, according to the division into student groups

#### Course/Module aims:

To learn the emphases of the history and neurological examination, including the identification of pathological signs.

To learn how to connect the preclinical knowledge and the principles of neuroanatomical localization.

To study neurology and neurosurgery at a basic level that every doctor needs, and to identify situations in which a neurologist or neurosurgeon should be involved

# Learning outcomes - On successful completion of this module, students should be able to:

At the end of this course, students will be able to:

Obtain a neurological history and perform a fluent neurological examination at a level which allows pathological signs to be identified.

Determine the location of lesions in the nervous system according to the findings on clinical evaluation.

Identify and manage emergency situations in neurology and neurosurgery.

To characterize the common diseases in neurology and neurosurgery and the

therapeutic approaches to those diseases

<u>Attendance requirements(%):</u> 80

Teaching arrangement and method of instruction: Independent work in the departments, examining patients, face-to-face classes, clinics, PBL, guided visits, participation in surgeries and shifts in the emergency room

<u>Course/Module Content:</u>

Neurology round:

1. Emergency situations:

A. Stroke of all types

B. Epilepsy

*C.* Acute infection conditions in the central nervous system including meningitis and encephalitis

*d.* Acute / subacute muscle weakness - differential diagnosis and treatment and emphasis on urgent treatment

2. Other situations:

A. Movement disorders

B. Tumor diseases of the nervous system

*C. Diseases of the peripheral nervous system (including muscle diseases)* 

*D. Immunologically mediated diseases - neuroimmunology – multiple sclerosis. Vision: disorders of neurological origin: pathologies in the optic nerve, the visual pathways and the visual cortex* 

*F.* Acute and chronic cognitive disorders

G. Neurology of pain (headache and neuropathic)

*Neurosurgery rotation:* 

1. Management of a patient with a minor head injury - definition, follow-up, advanced imaging criteria and case management, including determining the need for a neurosurgical evaluation.

2. Management of a patient suffering from headaches For the emergency room, emergency investigation, referral for imaging and referral to a neurosurgeon

*3. The approach to head tumors - intracerebral and extracerebral tumors, benign and malignant tumors, treatment indications and methods of management.* 

4. Management of a patient suspected of suffering from subarachnoid hemorrhage, cerebral aneurysm, and other vascular malformations 5. Tumors of the column and spinal cord, degenerative diseases of the spinal cord and evaluation of spinal stability <u>Required Reading:</u> Introduction videos (96505) Preclinical neuropathology course (96306)

<u>Additional Reading Material:</u> Harrison's Principles of Internal Medicine 21st edition

5th Edition by Stephen Goldberg M.D

*Apps to help localization https://apps.apple.com/us/app/nerve-whiz/id380714187* 

*Apple https://apps.apple.com/us/app/neuro-localizer/id590275694* 

Android version called Neuropupil https://www.neuropupil.com/localizer/ https://apps.apple.com/app/id590275694

<u>Grading Scheme:</u> Written / Oral / Practical Exam 70 % Other 30 %

Additional information:

The requirements for successfully passing the course include: Receiving a passing grade in the department entrance exam - a student who fails will not start the rotation. Submission of the required assignments in the round's assignment book. Compliance with the attendance conditions of the round. Obtaining a passing grade in the final exam of the rotation and in the final exam at the end of the year