



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Rehabilitation - 96525*

*Last update 15-09-2023*

*HU Credits: 1*

*Degree/Cycle: 2nd degree (Master)*

*Responsible Department: Medicine*

*Academic year: 0*

*Semester: Yearly*

*Teaching Languages: Hebrew*

*Campus: Ein Karem*

*Course/Module Coordinator: Dr Elior MOREH*

*Coordinator Email: [elior@hadassah.org.il](mailto:elior@hadassah.org.il)*

*Coordinator Office Hours: Monday 11-12:30*

*Teaching Staff:*

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Dr. Elior Moreh,  
Ms. Yona Ofran,  
Prof. ZEEV Meiner,  
Dr. Isabella Schuartz,  
Ms. Efrat Suraqui,  
Amar Yihya,  
Ms. Lior Reich Israe,  
Eman Aryan,  
Sheer Shabat,  
Salim Ghraiyyib,  
Mahmoud Zahwa,  
Jaenna Tsenter,  
Hashem Rajbi,  
Svetlana Bernovsky

Course/Module description:

*This is a clinical course in rehabilitation, in which students will be exposed to various neurological, neurosurgical and orthopedic injuries which impede patients' function.*

*The students will learn how the goals of rehabilitation medicine- to optimize the functional level of the patient to the maximal achievable level, and to bring him back to his home, his community, and his life stream- are achieved, and what are the means we dispose of in order to reach these goals.*

Course/Module aims:

*Introduce the students to the comprehensive rehabilitative approach in which:*

- A. The treatment is patient focused and not illness focused.*
- B. The patient undergoing rehabilitation has an active role in the rehabilitation process rather than being a "passive patient"*
- C. The emphasis is on improving the patient's function and exposing him to different tools to help him achieve such improvement.*

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

*At the end of this course, students will know:*

- 1. who needs rehabilitation? -who are the patient populations we take care of, and where are the meeting points with other departments.*
  - clinical exposure to the most frequent diagnoses encountered in rehabilitation: spinal cord injuries, stroke, traumatic brain injury, lower limb amputations.*
- 2. how is rehabilitation performed:*
  - understand the rehabilitation physician's roles: translating an illness in functioning impairments; improving function by interventions such as spasticity treatment,*

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*prescribing orthoses and prostheses to improve gait and mobility, increasing patient's motivation and removing obstacles to rehabilitation.*

*- exposure to rehabilitation professions: occupational therapy, physical therapy, speech therapy, psychology, social workers; -exposure to the multidisciplinary team work of all these professions together with nurses and physiatrists.*

*3. the specificity of the rehabilitation approach: looking at the patient as a whole, and not the sum of his illnesses and diseases; putting an emphasis on restoring function rather than on the pathology itself.*

*4. innovation and technology and how we use it in rehabilitation.*

*The students will write a medical summary according to rehabilitation principles, of an inpatient whom they will meet in pairs.*

#### *Attendance requirements(%):*

*80*

*Teaching arrangement and method of instruction: lectures (part of them online), workshops, and guided medical visits*

#### *Course/Module Content:*

*lectures:*

- 1. principles of the rehabilitation approach and who needs rehab?*
- 2. brain plasticity and stroke rehabilitation*
- 3. rehabilitation after traumatic brain injury, and cognitive rehabilitation*
- 4. principles of speech therapy for Aphasia*

*workshops*

- 1. physical examination (emphasis on ranges of motion, spasticity, muscle strength, cognitive function)*
- 2. spinal cord injury pbl learning, including neurogenic bladder and bowel and sexual dysfunction.*
- 3. Gait laboratory for diagnosis of gait disturbances and prescription of solutions accordingly*
- 4. spasticity- clinical cases*
- 5. chronic pain and CRPS*
- 6. impairments workshop - "how does it feel" to be hemiparetic, aphasic, etc...*

*Guided medical visits*

- 1. stroke*
- 2. spinal cord injury*
- 3. lower limb amputee*
- 4. occupational therapy treatment*
- 5. physiotherapy treatment*

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### Required Reading:

The required material for the course are the lectures that will be given during the course: 1. Functional evaluations 2. Stroke Rehabilitation 3. Traumatic brain injury and cognitive Rehabilitation 4. Spinal cord Rehabilitation 5. Rehabilitation after a lower limb amputation. An online version of the abovementioned lectures is available in the course site on moodle for those who missed the frontal ones.

In addition, for those who prefer reading written material, we chose the following two articles on stroke rehabilitation and spinal cord rehabilitation (but learning from the online lectures suffice for succeeding the quiz):

#### A. Rehabilitation after Stroke

Bruce H. Dobkin, M.D.

*n engl j med*

352;16, april 2005.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4106469/>

#### B. Spinal-cord injury

John W McDonald, MD

Cristina Sadowsky, MD

*LANCET* 2002

DOI:

[https://doi.org/10.1016/S0140-6736\(02\)07603-1](https://doi.org/10.1016/S0140-6736(02)07603-1)

### Additional Reading Material:

selected chapters on rehab of stroke, spinal cord injuries, amputations, pain syndromes, multiple trauma and rheumatologic disorders.

[https://books.google.co.il/books?hl=en&lr=&id=eWGnDwAAQBAJ&oi=fnd&pg=PP1&dq=Cuccurullo+S&ots=z4p-iGjusw&sig=d0nS7EAhwRZn8SXoISWKslPtmmMM&redir\\_esc=y#v=onepage&q=Cuccurullo%20S&f=false](https://books.google.co.il/books?hl=en&lr=&id=eWGnDwAAQBAJ&oi=fnd&pg=PP1&dq=Cuccurullo+S&ots=z4p-iGjusw&sig=d0nS7EAhwRZn8SXoISWKslPtmmMM&redir_esc=y#v=onepage&q=Cuccurullo%20S&f=false)

### Grading Scheme:

Essay / Project / Final Assignment / Home Exam / Referat 40 %

Presentation / Poster Presentation / Lecture/ Seminar / Pro-seminar / Research proposal 40 %

Attendance / Participation in Field Excursion 20 %

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Additional information:

*Student's grade is comprised of the following:*

*20% participation and attendance*

*40% rehabilitation assessment report*

*40% innovation in rehabilitation project*