

Course name: Internal Medicine 4th year
Course No.: 471-8-4073

<p><u>Credit points:</u> 17 <u>ECTS:</u> <u>Academic year:</u> 4 <u>Semester:</u> 2 <u>Duration:</u> 12 weeks <u>Location:</u> Internal Medicine depts. in Soroka and Barzilai hospitals <u>Teaching language:</u> Hebrew <u>Degree:</u> MD <u>Course characteristic:</u> primary course in clinical internal medicine <u>Discipline:</u> internal medicine <u>Supervising dept.:</u> internal medicine <u>Requirements:</u> introductory course in internal medicine <u>Grades key:</u> metric grade for all test components <u>Lecturer name:</u> Dr. Lior Nesher <u>Contact details:</u> <u>Office No.:</u> <u>E-mail:</u> <u>Office hours:</u> internal dept. "hey", sun-thu, 14:00-15:00 <u>Course evaluation:</u> at the end of the course students will evaluate it in order to draw conclusions for the benefit of the university <u>Course approval:</u> the course has been approved by the faculty teaching committee for 2012 <u>Last updated:</u> November 2012</p>	<p><u>Course description:</u> basic clinical teaching course in Internal Medicine using the Problem Oriented Record (POR) system <u>Course objectives:</u> Internal Medicine is the basis of a doctor's training. The goal of teaching in internal medicine is understanding the clinical way of thinking along with increasing the student's medical knowledge. <u>Course Goals:</u> Clinical thinking comprises a few stages including collecting information about the patient's condition by history and search of the patient's medical record, physical exam and relevant tests. While progressing in the course the student will gain tools that will enable him or her to process the information relevant to the patient's condition, while distinguishing the important information, defining the patient's problems and bringing to discussion any other problems including relevant differential diagnosis, discussing possible avenues for further diagnosis and developing a treatment program in order to deepen an understanding of the patient's problems (Problem Oriented Record). <u>Learning input:</u> In completing the course the student will be able to:</p> <ol style="list-style-type: none">1. do an admission for an internal medicine patient using POR2. present the patient both verbally and in writing3. discuss common problems in internal medicine, including differential diagnosis and basic knowledge of these diseases <p><u>Attendance regulations:</u> attendance mandatory <u>Teaching technique:</u> Bedside teaching is the main component of teaching in rounds and includes:</p>
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1. – Rounding with medical staff and guided rounds

- Students will join staff for visits and will learn from a senior physician about the approach to patients' medical problems. During the visit students will perform partial physical examination while emphasizing pathological findings. Students will take part in discussions about treatment and diagnostic program for each patient, while working with multi-discipline staff.
- Guided rounds are for students only. The purpose is to have an in-depth discussion about the medical approach to the patient and his or her problems. The rounds are done by the dept. doctors as well as doctors from other disciplines: hematology, endocrinology, infectious disease, pulmonology, gastroenterology, cardiology, and rheumatology.

Usually the rounds are with patients who were received by the students: the student presents the patient to the other students and the tutor, performs a full physical examination, interprets the results of the patient's tests, defines the patient's problems, discuss the differential diagnosis and suggests a program for diagnosis and treatment.

2. receiving patients for learning purpose – includes taking a history, collecting data from the patient's file, full physical examination, interpreting relevant tests. Defining a patient's problems using the SOAP (subjective, objective, assessment, plan) method. These admissions form the basis of learning clinical reasoning along with learning the different medical problems a student should be familiar with. The admissions are reviewed by the dept. doctors and are checked by a senior doctor/ head of the dept.

Frontal teaching – short seminars (1 hour) about approach to patients with the most common problems in internal medicine – while emphasizing the clinical aspect of the diseases: symptoms, physical findings, differential diagnosis etc (see a list of subjects).

Course tasks: attendance mandatory

1. Performing 2 admissions a week
2. **Drug of the day** – in order to get to know better the common medications used in internal medicine, the student should prepare a short lecture about each medication including activity mechanism, indications, contraindications, side effects:
 - nitrates, digoxin
 - Beta blocks
 - Calcium blocks
 - Antiarrhythmic medications
 - Hypertension treatment – ACE inhibitors & After load Reduction
 - Beta-lactames: penicillin's, cephalosporins
 - Aminoglycosides (including monitoring levels of medication), tetracyclines and chloramphenicol

- Medications for Tuberculosis
- Anti thrombin, anti 10a, heparin and Coumadin
- Insulin and Oral hypoglycemic drugs, GLP-1 agonists and DPP4 – inhibitors
- NSAIDS and steroids

3. Accompanying the patient to tests and diagnostic procedures. Eg: endoscopy, echocardiography, heart catheterization, bronchoscopy, different punctures (abdominal, pleural), bone marrow biopsy
4. Actions the student should perform during the round:
 - Taking blood tests
 - Inserting IVs
 - Taking vital signs: blood pressure and pulse manually, number of breaths per minute
 - Perform and interpret ECGs
 - Taking urine samples and examine them under a microscope
5. Once a week every student should do a shift until 23:00 with the staff doctor and accompany him or her
6. Once a week there will be a short test (10 questions) by subjects: cardiology, lungs, gastroenterology, endocrinology, viral diseases, rheumatology, nephrology, emergency situations in internal medicine.

Course Structure: Daily Activity:

7.30-8.30 taking bloods
 8.30-9.30 morning meeting (including academic activity in the dept.)
 9.30-10.30 Medication of the day
 10.30-12.30 morning visit (guided or xxx)

13.30-14.30 seminar (twice-three times a week)

14.30-16.300 “kabalat” a patient

Main Subjects:

- **Cardiovascular diseases:**
- Approach a patient with hypertension
- Approach a patient with chest pain
- Approach a patient with acute coronary event
- Approach a patient with a heart failure
- Approach a patient with an Atrial Fibrillation
- Approach a patient with arrhythmia

- **Viral Diseases**
- Approach a patient with a fever
- Approach a patient with Sepsis
- Approach a patient with TB
- Approach a patient with HIV
- Approach a patient with SBE
- Approach a patient with urinary infection

- **Respiratory diseases**
- Approach a patient with pneumonia
- Approach a patient with COPD
- Approach a patient with Asthma
- Approach a patient with pulmonary embolism
- Approach a patient with shortness of breath

- **Hematological diseases**
- Approach to Thrombophilia
- Approach to Anemia
- Lymphoma
- Leukemia

- **Nephrology diseases**
- Approach to acute lungs failure
- Approach to disorders of Sodium

balance

- Approach to disorders of Potassium balance
- Fluids and electrolytes program for an internal patient
- disorders of Acid-Base balance
- **Endocrinology and Metabolic disease**
- Approach a patient with Dislipidemia
- Approach a patient with thyroid disorders
- Approach a patient with hyperglycemia and diabetes
- Approach a patient with hypoglycemia
- **Gastroenterology Diseases**
- Approach to chronic Gastroenterology Diseases
- Liver Enzyme disorder

Required time for self study: approx. 3 hours a day for completing tasks and reading relevant material

Student Evaluation:

Evaluation according to 3 criteria:

1. Dept. evaluation – the dept. where the student worked will evaluate the student’s clinical abilities and knowledge during the round: 25% of final grade
2. Verbal test in which the student will have to “receive” a patient and present him to a committee of doctors, and diagnose the case. Physical examination skills will also be tested: 25% of final grade
3. Written test: 50% of final grade

	<p><u>Reading List:</u></p> <p>Mandatory reading</p> <p>Optional reading</p>