

**COURSE REQUIREMENTS**

Semmelweis University, Faculty of Medicine Department of Internal Medicine and Oncology
Course name: Internal Medicine – nephrology, gastroenterology Credit: 4 Contact hours: 53 (4-week blocks, 8 times during the semester) lecture: 13x1=13 hours practice (case discussion): 7x1 and 6x2 = 19 hours practice (bedside): 7x3 = 21 hours Type: <u>obligatory</u> / elective
Year: 2021/2022
Subject code: AOKBOK784_1A
Course director: dr. István Takács Title: professor, department head Date and number of habilitation: 2011, 328 (Semmelweis University)
Objective of the course and how it fits in the educational curriculum: The primary objective of the course in internal medicine for fourth-year students, who have been acquired the the basic skills of physical examination, is the symptom-based and patient-oriented education of various segments of internal medicine. Internal medicine I comprises nephrology and gastroenterology (students have already learned endocrinology and metabolic diseases). Students become familiar with the diagnostics and the treatment of the most common disorders of these disciplines.
Location: Department of Internal Medicine and Oncology 1083 Budapest, Korányi S. u. 2/a
Skills obtained by successful completion of the course: Education of internal medicine commences in third year by teaching propedeutics, and finishes in the final year - providing a backbone for medical education. Our major objective throughout this period is the integration of the knowledge provided by preclinical and clinical subjects into our curriculum. By the time of graduation, our students – the future doctors – should have up-to-date theoretical and practical knowledge, as well as an ability to make appropriate interpersonal relationship with patients, relatives and medical personnel that together, provides the basis of independent medical decisions.
Prerequisites of the course: Anatomy, Medical physiology, Microbiology, Pharmacology, Translational medicine, Internal medicine propedeutics
Number of students (minimum, maximum) required to initiate the course One eighth of the students registered at the Neptun system for the fourth year.
Registration to the course: Through the Neptun system

Detailed syllabus:

During a 4-week block practice, students spend 9 days in the department, through 3 weeks. Exams are held on the final week. Students are assigned into groups for the case discussions that are held in rotation, resulting in fewer students learning about a given topic at a time. Bedside practices are also held in small groups.

Within the daily schedule, there are lectures for the entire block of students (36-40 students), and case discussion practices in rotation and bedside practices for small groups of students.

Schedule: Find attached

On the 4th week, on Monday morning, a written test is taken by all students. On the following days (Tuesday/Wednesday/Thursday/ Friday), students continue with a bedside, patient-oriented oral exam.

Nephrology**Lectures:**

1. Glomerular diseases
2. Tubulointerstitial and cystic kidney diseases
3. Electrolyte disorders
4. Renal transplantation
5. Differential diagnostics of renal diseases

Case discussions:

1. A young female patient with acute kidney injury and liver dysfunction (90')
2. Approach to a patient with glomerulonephritis (90')
3. Dialysis treatment (90')
4. Management of a patient with chronic kidney disease (45')
5. Kidney stones, urinary tract infection (45')
6. Hematuria and proteinuria during pregnancy (45')

Gastroenterology**Lectures:**

1. Disorders of the upper gastrointestinal tract, epigastric pain
2. Diagnosis and differential diagnosis of malabsorption and maldigestion
3. Inflammatory bowel diseases
4. Diagnosis and management of disorders associated with diarrhea or constipation
5. Differential diagnosis of gastrointestinal bleeding
6. Diagnosis and management of acute hepatic failure
Differential diagnosis of jaundice

Case discussions:

1. Approach to a patient with an abnormal liver function test. (45')
2. Approach to a patient with acute abdominal pain (90')
3. Management of a patient with a pancreatic disease (45')
4. Management of a patient with an inflammation of the large bowel. (90')
5. Approach to a patient with swallowing difficulty (45')
6. Celiac disease (45')
7. Management of a patient with diabetes mellitus (90')

Subjects (either obligatory or elective) the content of whose may overlap with the current course

Acute abdomen – Surgery
Gastroenteritides – Infectology
Acute kidney injury – Urology, Intensive therapy

Additional assignments to be completed for the course:
None

Required attendance:
According to the rules of the University, students are required to participate on at least 75% of all sessions. This is evaluated through attendance sheets signed by the tutor. Retake of lectures / case discussions is not provided by the Department

Midterm evaluation:
There is no formal midterm evaluation. During case discussions and bedside practices the interaction between students and the tutor provides an opportunity to assess the knowledge of students.

Requirements for obtaining the signature for the course:
Participation on at least 75% of all sessions. At the end of the semester, after the student has taken his/her attendance sheet to the secretariat, the Course Director grants credits to students in the Neptun system.

Exam type: semi-final, written and oral parts
On the first day of the exam week, students take a 60-min written test.
After the test, during the following days, a bedside, patient-oriented oral exam is taken.
In case of a failure during the written test, oral retake exam is provided on the last day of the exam week.

Exam material⁶:

- Written test from the topics covered by lectures, case discussions and bedside practices.
- Bedside, clinical case-based, practice-oriented oral examination.

Examination grades⁷:
Written test and oral exam both provide 50-50 points. Passing the written test requires at least 25 points (50%)
Score-to grade conversion is as follows:
90-100: excellent (5), 80-89: good (4), 70-79: average (3), 60-69 pass (2), <60 fail (1).

Registration to the exam:
Through Neptun system

Repeat exams, failed exams:
According to the general rules of the University

Suggested print, electronic, online material

1. Lynn S. Bickley: Bates' Guide to Physical Examination and History Taking. (Wolters Kluwer, 12th Ed., 2016.)
2. Jameson – Fauci – Kasper – Hauser – Longo – Loscalzo: Harrison's Principles of Internal Medicine. (McGraw-Hill Education, 20th Ed., 2018).
3. Lecture slides provided online after registration (bell.semmelweis.hu/)

Signature of the course director:



Signature of the host institution:
Submission date: 21.07.2021

OKB decision:
Notes of the dean:
Deans' signature:

¹ Csak abban az esetben kell megadni, ha a tárgy az adott nyelven is meghirdetésre kerül.

² Dékáni Hivatal tölti ki, jóváhagyást követően.

³ Az elméleti és gyakorlati oktatást órákra (hetekre) lebontva, sorszámozva külön-külön kell megadni, az előadók és a gyakorlati oktatók nevének feltüntetésével. Mellékletben nem csatolható!

⁴ Pl. terepgyakorlat, kórlapelemzés, felmérés készítése, stb.

⁵ Pl. házi feladat, beszámoló, zárthelyi stb. témaköre és időpontja, pótlásuk és javításuk lehetősége.

⁶ Elméleti vizsga esetén kérjük a tételsor megadását, gyakorlati vizsga esetén a vizsgáztatás témakörét és módját.

⁷ Az elméleti és gyakorlati vizsga beszámításának módja. Az évközi számonkérések eredményeink beszámítási módja.

Detailed course description

Week 1

Monday	Tuesday	Wednesday
8:15-9:00 Lecture: Introduction	8:15-9:00 Case discussion (Groups) 1. Urinary tract infection, kidney stones 2. Chronic kidney disease 3+4. Approach to a patient with abnormal liver function test	8:15-9:00 Case discussion (Groups) 1. Approach to a patient with swallowing difficulty 2. - 3+4 -
9:15-10:00 Case discussion: (Groups) 1. Management of a patient with pancreatic disease 2. Celiac disease 3+4 Hematuria and proteinuria during pregnancy	09:15-11:30 Bedside practice	9:30-11:45 Bedside practice
10:15-11:00 Lecture: Glomerular diseases	11:45-12:30 Lecture: Differential diagnostics of renal diseases	
11:15-12:00 Lecture: Diarrhoea and constipation		

13:00-14:30 Case discussion: (Groups) 1. Inflammation of the large bowel 2. Management of a patient with diabetes mellitus 3+4 Dialysis treatment	13:30-15:00 Case discussion (Groups) 1. Acute kidney injury 2. Glomerular diseases 3+4 Acute abdominal pain	13:00-13:45 Lecture: Inflammatory bowel diseases
		14:00-14:45 Lecture: Differential diagnosis of gastrointestinal bleeding

Week 2

Monday	Tuesday	Wednesday
	8:15-9:00 Case discussion (Groups) 3+4 Urinary tract infection, kidney stones 1. Chronic kidney disease 2. Approach to a patient with abnormal liver function test	8:15-9:00 Case discussion (Groups) 3+4. Approach to a patient with swallowing difficulty 1. - 2. -
9:15-10:00 Case discussion: (Groups) 3+4. Management of a patient with pancreatic disease 1. Celiac disease 2. Hematuria and proteinuria during pregnancy	09:15-11:30 Bedside practice	9:30-11:45 Bedside practice
10:15-11:00 Lecture: Tubulointerstitial and cystic kidney diseases	11:45-12:30 Lecture: Renal transplantation	
11:15-12:00 Lecture: Diagnosis and management of acute hepatic failure		
13:00-14:30 Case discussion: (Groups) 3+4 Inflammation of the large bowel 1. Management of a patient with diabetes mellitus 2. Dialysis treatment	13:30-15:00 Case discussion (Groups) 3+4 Acute kidney injury 1. Glomerular diseases 2. Acute abdominal pain	13:00-13:45 Lecture: Disorders of the upper gastrointestinal tract, epigastric pain
		14:00-14:45 Lecture: Differential diagnosis of jaundice

Week 3

Monday	Tuesday	Wednesday
8:15-9:00 Lecture: Electrolyte disorders	8:15-9:00 Case discussion (Groups) 2. Urinary tract infection, kidney stones 3+4 Chronic kidney disease	8:15-9:00 Case discussion (Groups) 2. Approach to a patient with swallowing difficulty 3+4. - 1. -

	1. Approach to a patient with abnormal liver function test (Folhoffer A)	
9:15-10:00 Case discussion: (Groups) 2. Management of a patient with pancreatic disease 3+4 Celiac disease 1. Hematuria and proteinuria during pregnancy	09:15-11:30 Bedside practice	9:30-11:45 Bedside practice
10:15-12:00 Bedside practice	11:45-12:30 Lecture Differential diagnosis of malabsorption and maldigestion	
Case discussion: (Groups) 2. Inflammation of the large bowel 3+4 Management of a patient with diabetes mellitus 1. Dialysis treatment	13:30-15:00 Case discussion (Groups) 2. Acute kidney injury 3+4 Glomerular diseases 1. Acute abdominal pain	