

Odesa National Medical University
Internal Medicine #2 Department

Syllabus of the course
Hepato-biliary homeokinesis in the practice of internal medicine

Credit hours	1,5 credits / 45 hours
Semester, year	XI–XII 6
Days, time, place	Monday – Friday 4 - 6 acad. hours, from 08.30 to 13.30 Center of Reconstructive and Restorative Medicine (University clinic) ONMedU, Department of Internal Diseases
Tutors	The Head of the Department: Shtanko Vasyl Andriyovych, PhD in Medicine, Associate professor. Associate professors of the Department: Khyzhnyak Olena Volodymirivna, PhD in Medicine; Kholopov Leonid Semenovich, PhD in Medicine; Iablonska Victoriia Borysivna, PhD in Medicine.
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Working place	Center of Reconstructive and Restorative Medicine (University clinic) ONMedU, 4-th floor: Department of Internal Diseases: rooms №№ 24a-b, 25, 30, 31, 35a, 35b (methodical); lecture room; Ground floor – Associate professor’s room; 1-st floor: 3 study rooms and 1 room for practical skills mastering.
Consultation	<i>Face-to-face:</i> every Thursday from 14.00 to 17.00, Saturday from 09.00 to 14.00. <i>On-line:</i> every Thursday from 16.00 to 18.00 (the tutor of the group determines the time and applicants quantity that can clear academic dept and receive consultation), Saturday from 09.00 to 14.00.

COMMUNICATION

In person in the classrooms and offices of the department, remotely on the Microsoft Teams platform, in some cases with prior notice - in Viber groups.

COURSE ANNOTATION

Subject of study of the discipline

The subject of study of the elective discipline (ED) "Hepato-biliary homeokinesis in the practice of internal medicine" is typical, atypical and concomitant syndromes and nosologies related to any diseases of the human body in the clinic.

Prerequisites and post-requisites of the course (Place of the discipline in the educational programme)

The ED is based on the knowledge of students from the educational programmes "Internal Medicine", "Propedeutics of Internal Medicine", "Propedeutics of Paediatrics", "General Surgery" and basic disciplines (human anatomy and pathomorphology, physiology and pathophysiology, microbiology, virology and immunology and pharmacology).

The acquired knowledge, skills, abilities and competences in GNI will become the basis for deepening knowledge in internal medicine, in particular gastroenterology, and will form the basis for further continuous postgraduate education.

Aim of the course

The aim of the ED is to master and form the elements of professional competencies in the field of internal medicine, in particular in the field of hepatobiliary pathology; improve the skills and competencies acquired in the study of previous disciplines.

Objectives of the discipline

- Improving knowledge, skills and abilities in the diagnosis and management of adult patients with the most common diseases of the hepatobiliary system.
- Improvement of skills in substantiating clinical diagnosis, choosing a plan of laboratory and instrumental studies in the management of adult patients with the most common diseases of the hepatobiliary system with a rational assessment of the hepatobiliary system in any somatic pathology.
- Improvement of knowledge and skills in determining the tactics of managing adult patients with the most common diseases of the hepatobiliary system.

Learning outcomes

As a result of mastering the content of the EPD, the student **should know:**

- Structural and functional properties and features of the hepatobiliary system;
- Nosological forms of liver and biliary tract pathology;
- approaches to the diagnosis and treatment of various diseases of the liver and biliary tract
- Prospects for the development of therapeutic methods/technologies for liver and biliary tract pathology

Be able to:

- to carry out syndromic diagnostics, preceding the diagnostic hypothesis of liver and biliary tract pathology

- assess the impact of liver and biliary tract pathology on other organs and systems, and vice versa
- to carry out differential diagnosis of liver diseases with pathology of other organs and systems
- to be familiar with the groups of drugs prescribed for a particular pathology of the liver and biliary tract.

COURSE DESCRIPTION

Forms of training

The ED "Hepato-biliary homeokinesis in the practice of internal medicine" consists of 1.5 ECTS credits (45 hours). In total - 16 classroom hours and 29 hours for independent work (IW).

Methods of training

Seminar lessons: interview, solving clinical situational problems, training exercises on differential diagnosis of diseases of the hepatobiliary system, clinical analysis of case studies.

Independent work: work with the recommended basic and supplementary literature, with electronic information resources, independent mastering of skills of communication with the patient and his/her relatives (guardians), work with the bank of laboratory and instrumental research results, review of case patients together with the attending physician.

Content of the discipline

Topic 1: Instrumental methods of examination of the liver and biliary tract (ultrasound, CT with contrast, MRI, MRI cholangiography). Possibilities and limitations of morphological diagnosis of biopsy material. Non-invasive analogues of liver biopsy.

Topic 2. Chronic hepatitis B and C, diagnosis and treatment at the present stage. Extrahepatic manifestations of chronic hepatitis B and C virus infection. Coinfection and antagonism of hepatitis B, C, and D viruses in the human body.

Topic 3: Autoimmune diseases of the liver. Cytostatics, systemic and topical steroids. Pleiotropic effects of ursodeoxycholic acid.

Topic 4. Differential diagnosis of jaundice syndrome.

Topic 5. Differential diagnosis of hepatoliver syndrome.

Topic 6. Drug hepatotoxicity. Interdrug interaction.

Topic 7. Non-alcoholic fatty liver disease and steatohepatitis as a hidden factor in the burden of polymorbidity.

Topic 8: Rare liver diseases, cryptogenic hepatitis as a stage of diagnostic search.

Topic 9: Features of perioperative management of patients with concomitant liver cirrhosis. Differential use of hepatoprotectors.

Topic 10. Emergency conditions in the clinic of liver and biliary tract pathology.

Topic 11. Psychological characteristics of patients with liver and biliary tract diseases. Features of a diagnostic interview with a "hepatobiliary" patient.

Topic 12: Problematic issues of liver regeneration: theory, practice, prospects.
Credit.

List of recommended literature:

- basic

1. Денесюк В.І., Денесюк О.В. Внутрішня медицина. Підручник для студентів закладів вищої освіти III-IV рівня акредитації та лікарів післядипломної освіти на основі рекомендацій доказової медицини / За ред. В.М.Коваленка. Укл.: Н.М.Шуба, О.Г.Несукай, О.П.Борткевич. – 3-тє вид., переробл. і доповн.. – К.: МОРІОН, 2019. – 960 с. + 8 с.кол.вкл.
2. Гастроентерологія. Підручник: У 2 Т. - Т.2 / за ред. проф Н.В. Харченко, О.Я. Бабака. - Кіровоград: Поліум, 2017. - 432 с.
3. Медицина невідкладних станів. Екстрена (швидка) медична допомога: національний підручник для лікарів-слухачів післядипломної освіти, лікарів-інтернів і студентів вищих медичних навчальних закладів IV рівня акредитації / І. С. Зозуля [та ін.]; за ред. І.С. Зозулі. - 3-є вид., переробл. і допов. - Київ : Медицина, 2017. - 958 с. : іл, табл.
4. Михайловська Н. С. Алгоритм діяльності сімейного лікаря при основних захворюваннях шлунково-кишкового тракту : навч.-метод. посіб. для студентів VI курсу медичного факультету спеціальності «Лікувальна справа», «Педіатрія» за програмою навчальної дисципліни «Загальна практика – сімейна медицина» / Н. С. Михайловська, О.О. Лісова. – Запоріжжя: ЗДМУ, 2019. – 179 с.

- additional:

1. Екстрена та невідкладна медична допомога: навчальний посібник / Бодулев О.Ю., Могильник А.І. та ін.; заг. ред.: Шкурупія Д.А.–2-ге вид.–Вінниця:Нова книга,2018.–240 с.–іл., табл.
2. Клінічне тлумачення і діагностичне значення лабораторних показників у клініці внутрішньої медицини: Навчальний посібник / І.П. Катеренчук. - Полтава, 2015. - 270 с.
3. Уніфікований клінічний протокол первинної, вторинної (спеціалізованої) медичної допомоги «Алкогольний гепатит». - Режим доступу: http://old.moz.gov.ua/docfiles/dod_ukp_dn_20140616_1.pdf 9. 4.
4. Уніфікований клінічний протокол первинної, вторинної (спеціалізованої) третинної (високоспеціалізованої) медичної допомоги «Цироз печінки та його ускладнення». - Режим доступу: https://ukrgastro.com.ua/wp-content/uploads/2017/10/2016_.pdf
5. Холодкова О.Л., Перепелюк М.М., Ромак О.І. Цироз печінки – коли змінити антифіброзну парадигму на ангиогенну? // Одеський медичний журнал, 2017, №6 (164) - С. 68-72.

6. Evidence-based gastroenterology and hepatology, 4th edition / J.W.D. McDonald, B.G. Feagan, R. Jalan, P.J. Kahrilas. - Wiley-Blackwell, 2019. - 816 p.
7. European Union HCV Collaborators. Hepatitis C virus prevalence and level of intervention required to achieve the WHO targets for elimination in the European Union by 2030: a modelling study. *Lancet Gastroenterol Hepatol* 2017;2:325–336.
8. Functional gastroenterology: assessing and addressing the causes of functional gastrointestinal disorders, 2nd edition / S. Sandberg-Lewis. – Steven Sandberg-Lewis, 2017. – 320 p.

Information resources

1. State Expert Centre of the Ministry of Health of Ukraine
<http://www.dec.gov.ua/index.php/ua/>
2. National Scientific Medical Library of Ukraine <http://library.gov.ua/>
3. Vernadsky National Library of Ukraine <http://www.nbu.gov.ua/>
4. Resource on drug interactions <http://medicine.iupui.edu/flockart/>

Information support:

Electronic library of ONMedU: links to attached methodological developments of lectures and software, methodological recommendations.

ONMedU repository: scientific journals, dissertation abstracts

ASSESSMENT

Current control: oral questioning, assessment of communication skills, solving situational clinical problems, assessment of activity in the classroom.

Final control: credit for assessing the completeness of the discipline programme with an additional oral examination.

Assessment of current learning activities in a seminar class:

1. Assessment of theoretical knowledge on the topic of the lesson: methods: survey, evaluation of activity in the classroom maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.
2. Evaluation of solving clinical situational tasks:
Assessment methods: a) completeness and correctness of appointment and interpretation of laboratory and instrumental studies, c) compliance with the algorithm of differential diagnosis, d) justification of clinical diagnosis, e) drawing up a plan of emergency care plan in accordance with modern standards; maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.
The grade for one seminar session is the arithmetic mean of all components and can only have an integer value (5, 4, 3, 2), which is rounded by the statistical method.

Criteria for current assessment during the seminar class

Grade	Assessment criteria
Excellent "5"	The applicant is fluent in the material, takes an active part in the discussion and solution of a situational clinical problem, confidently demonstrates practical skills in interpreting clinical, laboratory and instrumental research data, expresses his/her opinion on the topic of the class, demonstrates clinical thinking.
Good "4"	The applicant has a good understanding of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills in interpreting clinical, laboratory and instrumental research data with some errors, expresses his/her opinion on the topic of the class, demonstrates clinical thinking.
Satisfactory "3"	The applicant has insufficient knowledge of the material, is uncertain about participating in the discussion and solving a situational clinical problem, demonstrates practical skills in interpreting clinical, laboratory and instrumental research data with significant errors.
Unsatisfactory "2"	The applicant does not know the material, does not participate in the discussion and solution of a situational clinical problem, does not demonstrate practical skills in interpreting data from clinical, laboratory and instrumental studies.

Assessment of learning outcomes during the credit test

Credit is assigned to an applicant who has completed all the tasks of the work programme of the discipline, actively participated in seminars and has a current average grade of at least 3.0 and has no academic debt.

Independent work (IW) of applicants

It includes work in the departments of the clinical base of the departments, in particular in the intensive care units of the Department of Internal Medicine and Neurology, and the Department of Anaesthesiology and Intensive Care, in the offices of the functional diagnostic department (electro- and echocardiographic diagnostics), clinical laboratory, computer diagnostic methods, interpretation of laboratory and instrumental research methods; mastering practical skills with the help of phantoms, in particular, practicing skills using Cardiorespiratory Patient Simulator.

COURSE POLICIES

Policy on deadlines and retakes:

- Unexcused absences will be made up as scheduled by the instructor on duty.
- Excused absences are made up on an individual schedule with the permission of

the dean.

Policy on academic integrity.

It is obligatory to observe academic integrity by applicants, namely

- independent performance of all types of work, tasks, forms of control provided by the work program of this discipline;
- references to sources of information in case of using ideas, developments, statements, information;
- compliance with copyright and related rights legislation;
- providing reliable information about the results of their own educational (scientific) activities, used research methods and sources of information.

Unacceptable in educational activities for participants in the educational process are:

- the use of family or official ties to obtain a positive or higher grade during any form of control of learning outcomes or advantages in scientific work;
- use of prohibited auxiliary materials or technical means (cribs, notes, micro- headphones, smartphones, tablets, etc.) during control measures;
- passing the procedures of control of learning outcomes by fictitious persons

For violation of academic integrity, applicants may be held academically liable:

- lowering the results of the assessment of control work, assessment in the classroom, test, etc;
- repeated passing of assessment (control work, test, etc.);
- appointment of additional control measures (additional individual tasks, tests, tests, etc.);
- conducting an additional check of other works of the offender's authorship.

Policies for attendance and being late

Attendance of classroom classes (practical lessons, lectures) is a mandatory component for assessing the completeness of the discipline. For objective reasons (for example, illness, epidemic circumstances, international internships), training can take place remotely in agreement with the head of the department, dean. The completed tasks according to the thematic plan should be presented in consultation with the teacher.

Uniform: medical gown that completely covers the outerwear, or medical pajamas, cap, mask, changeable shoes.

Equipment: notebook, pen, phonendoscope.

Health status: applicants with acute infectious diseases, including respiratory diseases, are not allowed to attend the class.

All tasks provided by the program must be completed on time in accordance with the schedule.

An applicant who is late is considered to have missed the lesson for an unexcused reason, on the topic of the lesson is evaluated in additional hours of working off academic debt, while having the right to attend the lesson.

Mobile devices

Usage of telephones and computers without teacher's permission is a violation of discipline. In this case applicant does not receive a mark for the lesson and is obliged rework such a lesson. Mobile devices may be used during online testing only.

Behaviour in auditorium

The course involves teamwork (academic group, department staff, staff of the clinical base of the department). All communication environments are friendly, creative, open to constructive criticism.

The behaviour of applicants and teachers in the classrooms should be working and calm, strictly comply with the rules established by the Regulations on Academic Integrity and Ethics of Academic Relations in Odesa National Medical University, in accordance with the Code of Academic Ethics and Relations of the University Community of Odesa National Medical University, the Regulations on the Prevention and Detection of Academic Plagiarism in the Research and Educational Work of Higher Education Applicants, Researchers and Teachers of Odesa National Medical University.