

Faculty of Medicine in Rijeka

Curriculum 2024/2025

For course

Helicobacter Pylori infection

Study program:	Medical Studies in English (R) (elective) University integrated undergraduate and graduate study
Department:	Department of Internal Medicine
Course coordinator:	prof. dr. sc. Štimac Davor, dr. med.
Year of study:	4
ECTS:	1.5
Incentive ECTS:	0 (0.00%)
Foreign language:	Possibility of teaching in a foreign language

Course information:

Course *Helicobacter pylori* infection is an elective course in the fourth year of integrated pedagogical and graduate university study Medicine consists of a total of 30 hours of teaching (1.5 ECTS), which refers to 10 hours of lectures and 20 hours of seminars. The course is performed in the premises of the Department of Gastroenterology, The Clinic for Internal Medicine of the Clinical Hospital Center Rijeka.

The aim of the course includes education on the importance of *Helicobacter pylori* infection in today's gastroenterology and internal medicine. The aim is to educate students about the history of discovery of *helicobacter pylori* bacteria and its association with gastrointestinal and other diseases, to acquire knowledge about pathophysiological processes within the *H.pylori* infection, to present different diagnostic modalities of detection of *H.pylori* infection, and to introduce students to modern approaches and guidelines for the treatment of it. Furthermore, students are trying to present the view and attitude of today's modern gastroenterology towards *H.pylora* and the importance that this infection has in the global health and economic aspect.

Teaching is based on lectures and seminars organized over three days. Seminars are accompanied by active discussion of students and encouraging teachers to think critically and look at the issues presented in seminars and lectures. At the end of class, students take the final written exam. By performing all teaching activities and taking the final exam, the student earns 1.5 ECTS credits.

List of assigned reading:

Vrhovac B, Jakšić B, Reiner Ž, Vucelić B, Internal medicine. Ljevak Publishing House, Zagreb 2008.

List of optional reading:

1. Loscalzo J, Fauci AS, Kasper DL, Hauser SL, Longo DL, Jameson JL, Loscalzo J, Harrison's Principles of Internal Medicine, 21st edition. McGraw-Hill Professional, 2008.
2. Feldman M, Friedman LS, Brandt LJ, Sleisenger and Fordtran's Gastrointestinal and Liver Disease. 11th edition. Saunders, 2021.
3. UpTo date – *Helicobacter pylori* <https://www.uptodate.com/contents/search>
4. Clinical key – *Helicobacter pylori* <https://www.clinicalkey.com/#!/>

Curriculum:

Lectures list (with titles and explanation):

- L1-2 Introductory lecture**
- L3 - The significance of Helicobacter pylori infection**
- L4 - Proton pump inhibitors in HP + patient therapy**
- L5 - NSAIDs and Hp**
- L6 - Ulcer disease and Hp**
- L7 - Microbiological diagnostics**
- L8 - Pathohistological diagnostic**
- L9 - New options in the treatment of ulcerative disease**
- L10 - Hp and bleeding from the gastrointestinal tract**

Seminars list (with titles and explanation):

- S1 - Epidemiology of Hp in Croatia and the world**
- S2 - Epidemiology of HP infection**
- S3 - Diagnosis of HP infection - invasive tests**
- S4 - Diagnosis of HP infection - non-invasive tests**
- S5-6 Endoscopic diagnostics**
- S7 - Molecular genetics of HP infection**
- S8 - Virulent factors in pathogenesis of infection**
- S9 - Dispepsija i HP**
- S10 - Gastritis and HP**
- S11 - GERD and HP.**
- S12 - Stomach cancer and HP**
- S13 - Stomach lymphoma and H. pylori**
- S14 - Extra gastric manifestations of H. pylori**
- S15 - Hp in Pediatrics**
- S16 - HP infection therapy**
- S17 - Other types of H. pylori in the digestive tract**
- S18 - Vaccine**
- S19-20 Video projections**

Student obligations:

Students are obliged to regularly attend and actively participate in all forms of teaching.

Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

ECTS scoring system:

The evaluation of students is carried out according to the current Ordinance on studies of the University of Rijeka, and according to the Ordinance on student evaluation at the Faculty of Medicine in Rijeka (adopted at the Faculty Council of the Faculty of Medicine in Rijeka).

The work of students will be evaluated and evaluated during the performance of classes, and in the final exam. Out of a total of 100 points, during class the student can score 50 points, and in the final exam 50 points.

Student evaluation is done using ECTS (A-E) and the numerical system (1-5). Evaluation in the ECTS system is carried out by absolute distribution, and according to the graduate evaluation criteria.

From the maximum 50 scoring points that can be achieved during class, the student must collect a minimum of 25 scoring points to take the final exam. Students who collect less than 25 grade points will have the opportunity for one remedial among the exam and, if they meet on this one of the exams, they will be able to take the final exam.

During class, it is evaluated (maximum up to 50 points):

- a) attendance (up to 10 points)
- b) teaching activity (up to 40 points)

attendance (up to 10 points)

The student may miss 20% of the classes solely for health reasons, which he justifies with a doctor's apology. Attendance at lectures and exercises is mandatory. Reimbursement of exercises is possible with prior agreement with the manager.

If the student is justified or unjustifiably absent from more than 20% of classes, the student cannot continue following the course and loses the possibility of taking the final exam. The student collected 0 ECTS credits and was rated F.

Scoring attendance in class (lectures and exercises) will be performed as follows:

% Attendance Rating points

70 – 85 3

86 – 100 5

- b) teaching activities (up to 40 points)

During the classes, the preparedness of students for seminars, active participation in critical discussion after seminars, elaboration of issues presented in seminars, independent work in terms of research of literature data and additional proposals in the concept of teaching are evaluated

Other notes (related to the course) important for students:

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COURSE HOURS 2024/2025

Helicobacter Pylori infection

Lectures (Place and time or group)	Seminars (Place and time or group)
11.11.2024	
L1-2 Introductory lecture: • KBC Rijeka - Internal - Library (14:00 - 15:30) ^[320] ◦ HPI- L4 - Proton pump inhibitors in HP + patient therapy: • P11 - KBC RI (15:30 - 16:15) ^[320] ◦ HPI- L5 - NSAIDs and Hp: • P11 - KBC RI (16:15 - 17:00) ^[320] ◦ HPI- L9 - New options in the treatment of ulcerative disease: • P11 - KBC RI (17:00 - 17:30) ^[320] ◦ HPI- L10 - Hp and bleeding from the gastrointestinal tract: • P11 - KBC RI (17:45 - 18:30) ^[320] ◦ HPI-	S1 - Epidemiology of Hp in Croatia and the world: • P11 - KBC RI (18:30 - 19:15) ^[320] ◦ HPI- S2 - Epidemiology of HP infection: • P11 - KBC RI (19:15 - 20:00) ^[320] ◦ HPI-
prof. dr. sc. Štimac Davor, dr. med. ^[320]	
12.11.2024	
	S3 - Diagnosis of HP infection - invasive tests: • P11 - KBC RI (15:30 - 16:15) ^[320] ◦ HPI- S4 - Diagnosis of HP infection - non-invasive tests: • P11 - KBC RI (16:15 - 17:00) ^[320] ◦ HPI- S5-6 Endoscopic diagnostics: • P11 - KBC RI (17:00 - 18:30) ^[320] ◦ HPI- S7 - Molecular genetics of HP infection: • P11 - KBC RI (18:30 - 19:15) ^[320] ◦ HPI- S8 - Virulent factors in pathogenesis of infection: • P11 - KBC RI (19:15 - 20:00) ^[320] ◦ HPI-
prof. dr. sc. Štimac Davor, dr. med. ^[320]	
13.11.2024	

	S9 - Dispepsija i HP: • P11 - KBC RI (15:30 - 16:15) [320] ◦ HPI- S10 - Gastritis and HP: • P11 - KBC RI (16:15 - 17:00) [320] ◦ HPI- S11 - GERD and HP.: • P11 - KBC RI (17:00 - 17:45) [320] ◦ HPI- S12 - Stomach cancer and HP: • P11 - KBC RI (17:45 - 18:30) [320] ◦ HPI- S13 - Stomach lymphoma and H. pylori: • P11 - KBC RI (18:30 - 19:15) [320] ◦ HPI- S14 - Extra gastric manifestations of H. pylori: • P11 - KBC RI (19:15 - 20:00) [320] ◦ HPI-
prof. dr. sc. Štimac Davor, dr. med. [320]	
14.11.2024	
	S15 - Hp in Pediatrics: • P11 - KBC RI (15:30 - 16:15) [320] ◦ HPI- S16 - HP infection therapy: • P11 - KBC RI (16:15 - 17:00) [320] ◦ HPI- S17 - Other types of H. pylori in the digestive tract: • P11 - KBC RI (17:00 - 17:45) [320] ◦ HPI- S18 - Vaccine: • P11 - KBC RI (17:45 - 18:30) [320] ◦ HPI- S19-20 Video projections: • P11 - KBC RI (18:30 - 20:00) [320] ◦ HPI-
prof. dr. sc. Štimac Davor, dr. med. [320]	
15.11.2024	
L3 - The significance of Helicobacter pylori infection: • P11 - KBC RI (15:30 - 16:15) [320] ◦ HPI- L6 - Ulcer disease and Hp: • P11 - KBC RI (16:15 - 17:00) [320] ◦ HPI- L7 - Microbiological diagnostics: • P11 - KBC RI (17:00 - 17:45) [153] ◦ HPI- L8 - Pathohistological diagnostic: • P11 - KBC RI (17:45 - 18:30) [504] ◦ HPI-	

List of lectures, seminars and practicals:

LECTURES (TOPIC)	Number of hours	Location
L1-2 Introductory lecture	2	KBC Rijeka - Internal - Library
L3 - The significance of Helicobacter pylori infection	1	P11 - KBC RI
L4 - Proton pump inhibitors in HP + patient therapy	1	P11 - KBC RI
L5 - NSAIDs and Hp	1	P11 - KBC RI
L6 - Ulcer disease and Hp	1	P11 - KBC RI
L7 - Microbiological diagnostics	1	P11 - KBC RI
L8 - Pathohistological diagnostic	1	P11 - KBC RI
L9 - New options in the treatment of ulcerative disease	1	P11 - KBC RI
L10 - Hp and bleeding from the gastrointestinal tract	1	P11 - KBC RI

SEMINARS (TOPIC)	Number of hours	Location
S1 - Epidemiology of Hp in Croatia and the world	1	P11 - KBC RI
S2 - Epidemiology of HP infection	1	P11 - KBC RI
S3 - Diagnosis of HP infection - invasive tests	1	P11 - KBC RI
S4 - Diagnosis of HP infection - non-invasive tests	1	P11 - KBC RI
S5-6 Endoscopic diagnostics	2	P11 - KBC RI
S7 - Molecular genetics of HP infection	1	P11 - KBC RI
S8 - Virulent factors in pathogenesis of infection	1	P11 - KBC RI
S9 - Dispepsija i HP	1	P11 - KBC RI
S10 - Gastritis and HP	1	P11 - KBC RI
S11 - GERD and HP.	1	P11 - KBC RI
S12 - Stomach cancer and HP	1	P11 - KBC RI
S13 - Stomach lymphoma and H. pylori	1	P11 - KBC RI
S14 - Extra gastric manifestations of H. pylori	1	P11 - KBC RI
S15 - Hp in Pediatrics	1	P11 - KBC RI
S16 - HP infection therapy	1	P11 - KBC RI
S17 - Other types of H. pylori in the digestive tract	1	P11 - KBC RI
S18 - Vaccine	1	P11 - KBC RI
S19-20 Video projections	2	P11 - KBC RI

EXAM DATES (final exam):