

## 26775 - Gastroenterology and Hepatology

### Syllabus Information

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**Academic Year:** 2020/21

**Subject:** 26775 - Gastroenterology and Hepatology

**Faculty / School:** 104 - Facultad de Medicina

**Degree:** 304 - Degree in Medicine

**ECTS:** 9.0

**Year:** 4

**Semester:** Second semester

**Subject Type:** Compulsory

**Module:** ---

## 1.General information

### 1.1.Aims of the course

Expected outcomes for students taking this course:

1. Students will know how to do a complete patient-centered clinical interview and physical examination.
2. Students will be able to reach a diagnosis, perform a differential diagnosis, and establish a diagnosis.
3. They will establish a protocol of action focused on the needs of the patient and the family.

### 1.2.Context and importance of this course in the degree

This course is the basis for the student to be able to establish the diagnosis, prognosis, treatment and prevention measures of major Digestive Disease, as well as the implications of other pathologies on the Digestive System.

### 1.3.Recommendations to take this course

Students are required to have a positive evaluation of Semiology and Fundamentals on Pathophysiology, and Diagnostic and Surgical Therapeutic Procedures.

## 2.Learning goals

### 2.1.Competences

General

- CB1. Students have demonstrated knowledge and understanding in a field of study based on previous studies.
- CB2. Students can apply their knowledge to their professional work. Competences will be demonstrated in the field of study.
- CB3. Students have the ability to gather and interpret relevant data (usually within their field of study).
- CB4. Students deliver appropriate information, ideas, problems and solutions to both specialists and non-specialists.
- CB5. Students have developed learning skills necessary to undertake new studies with a high degree of autonomy.

Specific

- CE44. Students recognize, diagnose and are able to manage the main pathologies of the digestive system.
- CE51. Students recognize, diagnose and manage the main infectious pathologies in the digestive system.

### 2.2.Learning goals

At the end of the semester and in order to obtain a positive evaluation, the student should demonstrate the following skills:

1. The student will be able to make a complete, patient-centered gastroenterological and hepatological anamnesis,
2. The student will be able to make and interpret an digestive system oriented physical examination, .
3. The student will be able to assess changes in the different clinical and laboratory parameters of the gastrointestinal and liver system at different ages of patients
4. The student will be able to guide the diagnosis, differential diagnosis, prognosis and treatment of major digestive diseases.
5. The student will be able to establish an action protocol, focused on the needs of the patient within an appropriate family and social environment consistent with the symptoms and signs of the patient.
6. The student will be able to propose a treatment according to the therapeutic possibilities of the environment.

### 2.3.Importance of learning goals

Gastroenterology and hepatology

The importance of the digestive pathology rely on its high prevalence and potential severity (

The demand for medical care for digestive problems is high both at primary emergency hospital

The student must be familiar with those pathologies will be able to solve at primary care lev

The acquisition of knowledge, skills and competences in this field enables a better management

## 3.Assessment (1st and 2nd call)

### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that it has achieved the learning objectives and outcomes through the following evaluation activities

The evaluation of Gastroenterology and Hepatology, will take place following the guidelines set forth below:

The marks obtained by the student will be expressed as scale of 0 to 10 with a decimal (Article 5 of RD 1125/2003.):

0 to 4.9: Insufficient

5 to 6.9: Approved

7 to 8.9: Notable

9-10: Outstanding

To obtain a positive evaluation will require:

1. To pass independently the theoretical evaluation given in large groups on one side and the part of small groups that includes seminars, workshops and clinical practice on the other, the final score is the result of the sum of both parts.
2. The implementation of practices and the attendance to seminars and workshops will be mandatory and essential to pass the assessment.

Evaluation of large groups teaching activities: (70% of total)

- a) 70 test type questions with 4-5 items with just one valid response (no negative scores)
- b) Questions will be related to the content of programs of lectures, seminars and workshops, as well as clinical practice.
- c) Scores will be maintained for two calls of the course.
- d) Rating shall be made according to the following system:
  - Students should obtain or exceed at least 49 positive questions (70% of all questions of this part).

Evaluation of seminars, workshops and practices: (30% of the total)

- a) Positive evaluation includes attendance (mandatory) to the activity in addition to reach a minimum score of 15 points (50%) from a total of 30.
- b) All activities of this section: seminars, workshops and practices will be evaluated. In order to standardize the assessment by different teachers common evaluation criteria will be established. In addition to the assistance of activities evaluation will include 1 question for each seminar . This test will be taken the same day of tests taken for large groups.

Workshops are based on clinical cases. Evaluation will take into account reaching an appropriated diagnosis, establishing a correct therapeutic proposal and discussed in public in a clear and orderly manner.

These scores will be saved for be two courses.

d) The final scores comes from the sum of the caliificaciones obtained in large and small groups. The minimum score to have a positive evaluation is 70 (equivalent to 5 = approved); the maximum is a score of 100 (equivalent to 10 = Excellent). The remaining intermediate notes will be obtained by applying a formula available to all students on the first day of the course).

Honor scores will be awarded to students who get the highest scores, provided they have a minimum of a 9 in total. If the teacher deems it necessary, specific test for this purpose between these students it would perform.

### Evaluation Dates

<https://medicina.unizar.es/cuarto-curso#horario8>

## 4.Methodology, learning tasks, syllabus and resources

### 4.1.Methodological overview

The learning process designed for this course is based on the following aspects:

It contains 225 hours of teaching (112.50 to 112.50 for Medicine and Surgery respectively), which are divided into:

- On-site teaching (45%): 101.26 hours (50.63 for Medicine and Surgery respectively)
  - Lectures - large groups: Corresponds to lectures on specific topics that are essential for understanding the concepts and GI diseases. Its content will be supported by one or more textbooks or manuals recommended previously and adapted to the level of knowledge of the student.
  - Seminars and Workshops based on clinical cases. Students will have direct participation and will answer to teacher's questions. Students will work alone or together with other students. They will formulate diagnoses based on their previous knowledge or literature search and will provide therapeutic orientations for patients.
  - Clinical Practice: 2-4 cases where students will interpret medical records, will perform clinical interviews and physical examination. They will also analyze actual laboratory and radiological or endoscopic procedures or tests. Either individually or in small groups of 4-5 students, they work on different clinical cases and will establish possible diagnostic and therapeutic guidance and patient care. This task may require the oral presentation of the case to other students in the workshops. A week of this Practice will be developed at the Hospital, if the COVID pandemic permits. If not, an alternative solution will be provided.
  - Tutorials: They consist of personal interviews with teachers for academic guidance, review of one or more topics, etc. Students may take a personal interview with teachers requested by internal mail or contact with the administrative assistance.
  - Examination: It comprises different tests described in other sections for verification of theoretical and practical knowledge and other skills acquired during the course.
- No on-site teaching time (55%): 123.76 hours (61.88 for Medicine and Surgery respectively): Personal Student study based on different sources of information and individual work.
- Dates and Times:
  - Lectures of Gastroenterology and Hepatology will integrate medical and surgical topics and will start at the beginning of the semester and will terminate 1-2 weeks before the calls for examination. They will be given between 8 to 9 or 8 to 10 am each working day.
  - Teaching in small groups will usually start the first week of the semester and will go on consecutively for 12 weeks. Each course will contain 12 groups of students with 25 components each. The overall duration of teaching in small groups is 2.45 hours/day. The seminars last 1-2 hours depending on the content, and workshops between 2-3 hours.

### 4.2.Learning tasks

The course includes the following learning tasks:

Gastroenterology and Hepatology

ON-SITE TEACHING ACTIVITIES: 101,26 hours (50,63 Medicine and 50,63 Surgery)

- A) Lectures: 46 hours, 23 hours of medical topics and 23 hours of surgical topics covering the following integrated program:
- B) Small groups: 45.56 hours.
  - 1. Medical Seminars: 5 hours total (1 hour per seminar)
  - 2. Seminars and workshops of surgery: 12.65 Total hours
  - 3. Integrated Seminars Medicine and Surgery: (4 hours)

- Medical-Surgical Practices and Workshops: 13.80 h (6.90 M and 6.90 S)

Small groups include 4-5 2-4 students who will develop clinical cases (GI tract 1-2, 1-2 liver-biliary tract, pancreas) based on the interpretation of medical records, physical examination, and tests, as well as clinical reports. Either individually or in groups students will establish different clinical cases scenarios with possible diagnostic and therapeutic actions and patient care. This task will be carried out on-site and using tools through the ADD. Hospital practice is also contemplated.

"All students performing clinical activities in which personal or clinical patient history data are handled, are obliged to keep strictly confidential clinical data of patients"

- Workshops Medicine: (5 hours) Report of clinical cases which have been previously worked with the small group, as described in the previous section.
- Groupwork to prepare the presentation: 3 hours
- Presentation: 2 hours

Professors will choose the presentation of cases they deem appropriate. The presentation of the case (at least 1 per group) will be made by one of the students chosen by the teacher at the time of the workshop. All participating students must be prepared to present. The qualification of the work will apply to all members of the small group who worked the clinical case.

- Tutorials. 6.90 h (h 3,45h 3.45 M and C)
- Evaluation: 20.3 h (10.15 h and 10.15 h C M)
- B) Personal student work: 123.76 h (61.88 h Medicine and 61.88 h Surgery)

### 4.3.Syllabus

The course will address the following topics:

A) Lectures: 46 hours, 23 hours of medical topics and 23 hours of surgical topics covering the following integrated program:

- I. PATHOLOGY AND ESOPHAGUS DIAPHRAGM
  - 1. Gastroesophageal reflux disease. Esophageal Cancer (D)
  - 2. Hiatal Hernia and Para esophageal Hernia. Surgical treatment of gastroesophageal reflux disease and its complications.
  - 3. Surgical aspects of tumors of the esophagus

#### ABDOMINAL CAVITY

4. Acute diffuse peritonitis. Local peritonitis Adherence syndrome.
5. Abdominal trauma.
6. Hernias: surgical conditions of the abdominal wall
7. Tumors of the peritoneum

#### GASTRODUODENAL PATHOLOGY

- 8. Functional disorders of the stomach (D)
- 9. H. pylori infection (D) (2h)
- 10. Gastritis and gastrointestinal lesions by NSAIDs (D)
- 11. Surgical aspects of peptic ulcers and their complications. Pathology of the operated stomach.
- 11. Tumors of the stomach (D)
- 12. Surgical aspects of stomach tumors.

#### IV .- SMALL AND LARGE INTESTINE PATHOLOGY

- 14. Diarrhea and malabsorption (D)
- 15. Crohn Disease (D)
- 16. Ulcerative Colitis (D)
- 17. Surgical aspects of inflammatory bowel disease and its complications.
- 18. Intestinal Occlusion (2h)
- 19. Intestinal Ischemia
- 20. Polyposis (D)
- 21. Cancer of the colon and rectum (D) (2h)
- 22. Surgical aspects tumors of the colon and rectum.
- 23. Irritable Bowel Syndrome (D)
- 24. Colonic Diverticular Disease
- 25. Acute Appendicitis. Meckel's diverticulum.
- 26. Basic proctology. Pathology of the pelvic floor

PATHOLOGY OF THE LIVER 26. Acute viral Hepatitis (D)

- 27. Acute Hepatitis (D)
- 28. Chronic Hepatitis (D)
- 29. Steatohepatitis (D)
- 30. Hepatic Cirrhosis (D)
- 31. Tumors of the liver (D)
- 32. Hemochromatosis and Wilson Diseases(D)
- 33. Surgical aspects of liver tumors and Biliary Tree
- 34. Surgical aspects of Portal Hypertension
- 35. Parasitic liver and fibrocystic diseases of the liver. Liver abscesses
- 36. Surgical aspects of Spleen pathology

#### BILIARY TRACT PATHOLOGY AND PANCREAS 34. Chronic Cholestasis (D)

- 37. Chronic colestasis. (D)
- 38. Acute Pancreatitis. (D)
- 39. ChronicPancreatitis. (D).
- 40. Surgical aspects of biliary stones and their complications
- 41. Surgical aspects of Acute and chronic pancreatitis. Surgery of pancreatic pseudocysts
- 42. Surgical aspects of tumors of the exocrine pancreas and periampullary region. (2h)

Small groups: 45.56 hours.

#### 1. Medical Seminars: 5 hours total (1 hour per seminar)

- 1. Indication and interpretation of digestive endoscopic examinations
- 2. Gastrointestinal Bleeding
- 3. Advanced liver disease. It includes aspects of hepatic acute liver failure, chronic and liver transplant
- 4. Interpretation and indication of the main diagnostic and analytical tests of liver pathology
- 5. Constipation and Diarrhea. It includes instruments management of chronic idiopathic constipation and acute diarrhea

#### 2. Seminars and workshops of surgery: 12.65 Total hours

- 1. Oral Surgery: Diseases of the mouth, tongue and salivary glands. 2h
- 2. Caustic esophageal injuries or physical agents. Foreign bodies. Esophageal perforation. It includes medical, endoscopic and surgical aspects. (In collaboration with Medical area) 2h
- 3. Transplantation of digestive organs. It includes liver, pancreas, intestine. (In collaboration with Medical area) 2h
- 4. Proctologic Surgery: Trauma of the rectum and anus. Rectal prolapse. Anal incontinence. Anorectal infections: abscesses and boils. Perianal fistula. Fissure. Hemorrhoids. Pilonidal cyst and fistula. Tumors. 2h
- 5. Abdominal Trauma. Evaluation and management. 2h.

#### 3. Integrated Seminars Medicine and Surgery: (4 hours)

- 1. Motor disorders of the esophagus (2h). It includes medical and surgical aspects
- 2. Diseases of the bile duct (2h)

### 4.4.Course planning and calendar

Scheduled Teaching Sessions: Gastroenterology and Hepatology:

40 lectures of 1 hour in 12 weeks, according to the general organization of the course

One or two seminars and workshops per day weekly for 12 weeks.

123.76 hours of non-presential activities.

Lectures last for 1 hour and integrate both medical and surgical topics starting the first or second week of the semester. Teaching in small groups (seminars, workshops, clinical practice) begin the first week of the semester consecutively for 12 weeks to include the 12 groups of students of 25 components each. Duration of seminars is 1-2 hours and 2-3 for workshops and clinical practice.

Teaching activities will be conducted between 8:00 am and 3:00 pm from Monday to Friday, and will based on:

- Teaching as lectures for large groups
- Seminars
- Workshops
- Hospital Practice
- Tutorials
- Calls for the examination of the academic year will be in June and September

Both large group activities (lectures) and teaching activities in small groups, will be conducted along the 8th semester of the teaching course with the following considerations:

- 1. Master Classes will be a total of 46 one-hour (23 for medicine and 23 for surgery) distributed over 17 weeks.
- 2. Seminars and Workshops comprise a total of 25.30 hours divided equally between medicine and surgery. Hospital clinical practices (a total of 13.80 hours) will consist of actual clinical cases and virtual or digital support scenarios.
- 3. Tutorials will cover a total of 6.90 hours (3.45 h and 3.45 h medical surgery)
- Evaluation: At the end of the teaching activities of this part of course, an assessment of it, that should be overcome will be held the final note. If not exceeded, or want to improve qualification, the student will be called for the June and September 2013. The evaluation will take place in the time slot of 8-15 hours.

The large group activities (lectures) and teaching activities in small groups, will be conducted along with the transverse organizational chart of the Centre.

Key Dates of the course:

The course will start on Monday of the first week of the semester and ends on Friday of the week before the call for examinations.

Lectures integrate both medical and surgical aspects of the diseases, from Monday to Friday, early in the semester and end the week before the call for examinations at the end of the semester. Teaching activities in small groups and clinical practices begin the first week of the semester and go on for 12 weeks to include the 12 groups of students from each course. The daily duration of teaching activities in small groups lasts for 2.45 hours per day.

<https://medicina.unizar.es/cuarto-curso#horario8>

#### **4.5. Bibliography and recommended resources**

[http://biblos.unizar.es/br/br\\_citas.php?codigo=26775&year=2020](http://biblos.unizar.es/br/br_citas.php?codigo=26775&year=2020)