

**COURSE DATA****Data Subject**

<b>Code</b>	34482
<b>Name</b>	Pathology of the digestive system
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1204 - Degree in Medicine	Faculty of Medicine and Odontology	4	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1204 - Degree in Medicine	14 - Human clinical training III	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
GARCIA-GRANERO XIMENEZ, EDUARDO	40 - Surgery
MINGUEZ PEREZ, MIGUEL	260 - Medicine

**SUMMARY**

The subject *Pathology of the Digestive System* is shared with the Department of Medicine and Surgery, and it is included in the module *Human Clinical Formation*. The general objective of its teaching is the formation of professionals with theoretical and practical knowledge that make the student able to develop an integral, healing, preventing and promoting medicine of health in the area of the digestive pathology.

Due to its attending nature, the processes involved in the pathogenesis of the diseases will be analysed, highlighting the criteria and diagnostic methods used in the study of the natural history of the diseases that affect it and of the indicated treatment to each of these diseases. That is the reason why the knowledge of the main diagnostic techniques and the practical contents, highlighting the medical practice, are of great importance during the learning stage.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

### 1204 - Degree in Medicine

- Obtain and elaborate a clinical history with relevant information.
- Perform a physical examination and a mental health assessment.
- Have the capacity to make an initial diagnosis and establish a reasonable strategy of diagnosis.
- Establish the diagnosis, prognosis and treatment, applying principles based on the best information available and on conditions of clinical safety.
- Indicate the most accurate therapy in acute and chronic processes prevailing, as well as for terminally ill patients.
- Plan and propose appropriate preventive measures for each clinical situation.
- Acquire proper clinical experience in hospitals, health care centres and other health institutions, under supervision, as well as basic knowledge of clinical management focused on the patient and the correct use of tests, medicines and other resources available in the health care system.
- Know how to use the sources of clinical and biomedical information available, and value them critically in order to obtain, organise, interpret and communicate scientific and sanitary information.
- Know how to use IT in clinical, therapeutic and preventive activities, and those of research.
- Understand the importance and the limitations of scientific thinking in the study, prevention and management of diseases.
- Organizar y planificar adecuadamente la carga de trabajo y el tiempo en las actividades profesionales.
- Capacidad para trabajar en equipo y para relacionarse con otras personas del mismo o distinto ámbito profesional.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.
- Working capacity to function in an international context.
- Recognises, diagnoses, and guides the management of the main pathologies affecting the digestive system.



- Knows how to perform a complete anamnesis, focused on the patient and orientated to various pathologies, interpreting its meaning.
- Knows how to evaluate modifications in clinical parameters at different ages.

The knowledge, clinical attitudes and scientific language acquired in this subject will allow the student to recognise and understand the pathology of the digestive system with the aim of being able to diagnose and guide the treatment of the main clinical entities, as well as to communicate with the patient and his/her environment, to understand the process of the disease individually and to perform a proper therapy in the frame of the General Medicine.

Theoretical and practical content will be taught and their learning must have as a result the acquisition of the following competencies:

- Acquisition of the necessary skills to perform a diagnostic judgment and to establish a differential diagnosis regarding the digestive system pathology.
- Knowing the value of the different explorations and complementary diagnostic tests in digestive pathology.
- Knowing the basic management about the treatment of the digestive diseases, according to the best evidence available.
- Evaluation of the patient's seriousness and acquisition of the capacity to structure the information that must be delivered to the patient and family.
- Identification of the complex pathology that has to be delivered to a specialized centre.

## DESCRIPTION OF CONTENTS

### 0. Theoretical teaching

All the theoretical teaching will be uploaded in the Aula Virtual. An active participative methodology will be used with student's questions and explanation by the teacher.

### 1. Pathology related with the acid-gastric secretion.

- Basic notions about the acid-gastric secretion and *Helicobacter pylori*.
  - Disease by gastroesophageal reflux.
  - Peptic ulcer and complications (except upper digestive hemorrhage).
  - Acute injuries of the gastroduodenal mucosa and chronic gastritis.
- Medical treatment of the different esophagogastric pathologies.
- Surgical indications, physiopathological bases of the surgical techniques and consequences, if any, of the surgical treatment.



## **2. Intestinal inflammatory disease.**

- Concept and classification.
- Etiology and pathogenic mechanisms.
- General and specific clinical characteristics of the Crohn's disease of the most prevalent localizations.
- Clinical characteristics of the ulcerous colitis.
- Clinical and anatomical-pathological differences between the Crohn's diseases and the ulcerous colitis.
- Analysis of the main complications between the Crohn's disease and the ulcerous colitis.
- Extradigestive manifestacions in the intestinal inflammatory disease.
- Surgical indications and bases of most frequent surgical techniques in the intestinal inflammatory disease.

Surgical indications and bases of most frequent surgical techniques in the intestinal inflammatory disease.

## **3. Gastroenterological motor and functional disorders.**

- Oropharyngeal dysphagia. Definition. Epidemiology. Pathophysiology. Subgroups. Treatment.
- Esophageal motility disorders. Definition. Chicago classification. Treatment
- Functional dyspepsia. Definition. Epidemiology. Pathophysiology. Subgroups. Treatment.
- Irritable bowel syndrome. Definition. Epidemiology. Pathophysiology. Subgroups. Treatment
- Constipation. Definition. Epidemiology. Pathophysiology. Subgroups. Treatment.

## **4. Cancers of the esophagus-gastro-intestinal tract.**

- General epidemiological aspects.
- Clinical characteristics and diagnosis of the esophageal and gastric cancer.
- Surgical treatment of the esophagogastric cancer.
- Polyps and colorectal cancer I: incidence. Etiology. Pathological anatomy. Screening diagnosis. Clinical staging. Familiar heritage polyposis.
- Colorectal cancer II: diagnostic of cancer in right, left and rectum colon. Diagnosis of obstructed colon cancer. Surgical treatment of elective and urgent colon cancer. Surgical treatment of rectum colon cancer. Multidisciplinary treatment of colorectal cancer according the stage.

## **5. Adult celiac disease.**

- Etiology foundations.
- Clinical expressivity and syndrome diagnosis.
- Diagnostic evaluation.
- Medical treatments.



## 6. Acute abdomen

- Concept and more frequent causes.
  - Generic clinical characteristics and physical exploration data in the acute abdomen.
  - Acute appendicitis and its most frequent complications.
- Ileum concept: etiology of its paralytic and mechanic ways.
- Clinical characteristics and diagnosis of the paralytic ileum.
  - Clinical characteristics and diagnosis of the mechanic ileum.
  - Medical and surgical treatments of the different ways of ileum.

## 7. Pathologies of the abdominal wall.

- Concept and classification of the hernias in the abdominal wall.
- Clinical characteristics and diagnosis of the non-complicated femoral, inguinal and umbilical hernias.
- Hernia complications.
- Treatment of the abdominal hernias (complicated and non-complicated).

## 8. Benign rectoanal pathology.

- Surgical anatomy of the anal-rectal area. Abscesses and anal fistulas. Classification of the abscesses and fistulas. Diagnosis and treatment. Pilonidal cyst.

## 9. Acute and chronic hepatitis.

- Viral hepatitis: transmission and characteristics of the risk population.
- Generic clinical characteristics of the viral acute hepatitis.
- Diagnostic pattern and treatment of the viral hepatitis.
- Preventive policy of the viral hepatitis.
- Concept and classification of the chronic hepatitis.
- General and specific clinical characteristics of the chronic hepatitis.
- Treatment and evolutive control of the chronic hepatitis.

## 10. Toxic hepatopathologies.

- Concept and most prevalent etiologies.
- Effects on the alcoholic intake over the kidney: alcoholic hepatitis, chronic alcoholic hepatopathology and alcohol cirrhosis.
- Treatment of the different ways of alcoholic hepatopathology.



### 11. Hepatic cirrhosis

- Concept, etiologic and histopathological classification.
  - Concept, diagnostic and physiopathology of the chronic hepatic insufficiency and portal hypertension.
  - Hepatorenal syndrome and hepatic encephalopathy: diagnosis and treatment.
- Portal hypertension: derivative and therapeutic clinical manifestations.
- General diagnosis of hepatic cirrhosis, staging and evolutive control.
  - General therapeutic patterns in the hepatic cirrhosis.
  - Hepatocellular carcinoma: classification. Diagnostic with a patient with and without previous hepatopathy. Treatment.
  - Hepatic transplantation: types and indications. Bases of the usual surgery techniques. Control and post-transplantation complications.

### 12. Biliary lithiasis.

- Lithogenesis.
- Cholelithiasis: clinical manifestations and diagnosis.
- Choledolithiasis: clinical manifestations and diagnosis.
- Complications of the biliary lithiasis: cholecystitis and cholangitis.
- Medical treatment of the biliary lithiasis and its complications.
- Surgical treatment of the biliary lithiasis and its complications.

### 13. Acute and chronic pancreatitis.

- Concept, etiology, pathogenic mechanisms and physiopathology of the acute pancreatitis.
- Clinical manifestations and diagnosis of the acute pancreatitis.
- Evolution and prognostic criteria in the acute pancreatitis.
- Treatment of the acute pancreatitis.
- Concept, etiology, pathogenic mechanisms and physiopathology of the chronic pancreatitis.
- Clinical manifestations and diagnosis of the chronic pancreatitis.
- Evolution and therapeutic patterns in the chronic pancreatitis.
- Surgical indications in the acute and chronic pancreatitis.
- Bases of the surgical techniques in the acute and chronic pancreatitis.
- Sequels of the surgical therapeutic in the acute and chronic pancreatitis.

### 14. PRACTICES

#### SEMINAR PRACTICES

1. Etiology and diagnostic and therapeutic management of the obstructive ileum.
2. Acute and chronic liver disease by virus.
3. Diagnostic and therapeutic management of the abdominal traumatism.
4. Liver disease due to fatty deposit
5. Diagnostic and therapeutic management of the acute appendicitis and the complicated diverticular



disease.

6. Medical treatment of the Chronic Inflammatory Bowel Disease.
7. Diagnostic and therapeutic attitude towards proctalgia, lower digestive hemorrhage, fecal incontinence and pelvic floor disorders.
8. Diagnostic and therapeutic management of the pancreas and biliary duct tumours.
9. Upper digestive hemorrhage.
10. Medical treatment of the disease related with acid.
11. Bacterial peritonitis and its complications.
12. Functional/complementary explorations in the digestive system.

**CLINICAL CASES (2 CASES: 1, MEDICAL PART; 1, SURGICAL PART)**

1. Patient with complicated acute pancreatitis.
2. Patient with complicated hernia in the abdominal wall.

**CLINICAL PRACTICES**

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Seminars	26,00	100
Theory classes	26,00	100
Clinical practice	23,01	100
Attendance at events and external activities	2,00	0
Development of group work	11,00	0
Study and independent work	35,00	0
Readings supplementary material	8,00	0
Preparation of practical classes and problem	19,00	0
<b>TOTAL</b>	<b>150,01</b>	

**TEACHING METHODOLOGY**

In the **theoretical lessons**, the teacher will expose, through master class, the most important concepts and contents in a structured way, to obtain the knowledge and skills that the students must acquire. The students' participation will be encouraged. The teaching materials used by the professor will be available, if he considers it appropriate, through the electronic resource Aula Virtual.

Classroom practices: participative **seminars**, made with the material provided by the professor and with the students' active participation in their exposition.



**Clinical practices:** students' clinical practices in sanitary services in the different university hospitals, primary health centres, mental health centres, public health areas, in order to learn how to perform an anamnesis and basic clinical explorations, with a first contact with patients, supervised by the professor.

## EVALUATION

**Theoretical assessment:** represents the 50% of the final mark. It will be made by a written test about the content of the theoretical program and will have as the main goal to assess the acquisition of knowledge. It will be made through 50 multiple-choice questions with only one correct answer and with the following assessment: right, 1 point, non-answered, 0 points; false, -0,333 points.

**Practical assessment:** represents the 40% of the final mark. It will be made by the evaluation of the individual participation in the different activities and with the fulfilment of a test that assesses the acquisition of the skills related with the general and specific competencies. The assessment of the practical program will be made through 40 multiple-choice questions with only one correct answer and with the following assessment: right, 1 point, non-answered, 0 points; false, -0,333 points, that will be about the content exposed in the seminars and clinical cases.

**Continuous evaluation seminars:** represents 10% of the final mark which the student will obtain depending on his/her attendance and the participation in the seminars. For each non-attendance at the seminars, 0.333 points will be subtracted, so that three absences will mean the loss of 10% of the final mark. The attendance control will be carried out by identifying the student and signing in each seminar

The assessment of the theoretical and practical contents will be made the same day by a test consisting on 90 questions (50 theoretical assessment and 40 practical assessment) and the final mark will involve both marks (addition of both assessments and the score obtained from the attendance and participation in seminars). The maximum grade will be 10 and to pass the subject the student needs 5.

In order to access to an advance on the call of this subject, it is a requirement that the student has coursed all his/her practices.

Attendance to practical sessions is mandatory. Unjustified non-attendance to more than 20% of the sessions will make it impossible to pass the course.

## REFERENCES

### Basic

- C. Rozman. Medicina interna. Farreras/Rozman. 18 ed. Madrid. Harcourt. 2016
- Sleisenger and Fordtran's Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management (Gastrointestinal & Liver Disease (Sleisinger/Fordtran)) (English Edition). 10 ed. 2016
- Cascales, P. A. Medicina y cirugía del aparato digestivo. ISBN: 9788491136507
- Editorial ELSEVIER.2020.





## ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

Siguiendo las recomendaciones del Ministerio, la Consellería y el Rectorado de nuestra Universidad, para el período de la "nueva normalidad", la organización de la docencia para el segundo cuatrimestre del curso 2021-22, seguirá un modelo híbrido, donde tanto la docencia teórica como práctica se ajustará a los horarios aprobados por la CAT pero siguiendo un modelo de Presencialidad / No presencialidad en la medida en que las circunstancias sanitarias y la normativa lo permitan y teniendo en cuenta el aforo de las aulas y laboratorios docentes. Se procurará la máxima presencialidad posible y la modalidad no presencial se podrá realizar mediante videoconferencia cuando el número de estudiantes supere el coeficiente de ocupación requerido por las medidas sanitarias. De manera rotatoria y equilibrada los estudiantes que no puedan entrar en las aulas por las limitaciones de aforo asistirán a las clases de manera no presencial mediante la transmisión de las mismas de manera síncrona/asíncrona via "on line".