

**Medicine and Surgery III**

Code: 103607  
ECTS Credits: 13

Degree	Type	Year	Semester
2502442 Medicine	OB	4	0

**Contact**

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**Use of Languages**

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: No  
Some groups entirely in Spanish: No

**Teachers**

Carlos Guarner Aguilar  
Javier Serra Aracil  
Víctor Vargas Blasco  
Ramón Miralles Basseda  
Eduardo María Targarona Soler  
Javier Calvet Calvo  
María Isabel Troya Saborido  
David Pares Martinez  
Olga Herminia Torres Bonafonte

**Prerequisites**

Students taking this subject must to have basic knowledge of general pathophysiology, digestive, urinary system and the anatomo-physiological bases of the organism to understand the process of aging. It is also essential to have knowledge of human anatomy, genetics, molecular biology, pharmacology. Sufficient knowledge about the psychological basis of health status and disease is recommended. as well as an adequate level of knowledge in interpersonal communication and professional behavior

**Objectives and Contextualisation**

**Digestive system**

The fundamental purpose is to study of the sick person of pathologies of the digestive system: knowing and achieve the general competences for assistance in the main surgical and medical diseases of the digestive system in the aspects of physiopathological mechanisms, forms of clinical presentation, differential diagnosis, complementary explorations and therapeutic options.

**Nephro-urology**

The fundamental purpose is to study of nephro-urological pathologies and supposes, therefore, the knowledge of the general and basic aspects of these diseases. The subject provides a global vision and systematized of the patient. It also covers idiopathic renal diseases, as well as systemic pathology that affect the kidney, to make known the repercussion that causes renal pathology on the rest of the organism.

## Geriatrics

The fundamental purpose is to study of the sick elderly person, emphasizing those aspects differentials that appear especially in very advanced stages of life, which includes knowledge of physiological changes that occur in this stage: concept of fragility, main geriatric syndromes, impact of surgery in the elderly and convalescence, more prevalent diseases and health organization

## Competences

- Demonstrate understanding of the manifestations of the illness in the structure and function of the human body.
- Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- Establish a diagnostic approach and a well thought-out strategy for action, taking account of the results of the anamnesis and the physical examination, and the results of the appropriate complementary tests carried out subsequently.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Give the patient and/or accompanying persons the relevant information about the disease process, its bases and consequences, including bad news, in an appropriate way.
- Indicate the basic diagnosis techniques and procedures and analyse and interpret the results so as to better pinpoint the nature of the problems.
- Indicate the most suitable treatment for the most prevalent acute and chronic processes, and for the terminally ill.
- Obtain and prepare a patient record that contains all important information and is structured and patient-centred, taking into account all age and gender groups and cultural, social and ethnic factors.
- Perform a general and a system-by-system physical examination appropriate to the patient's age and sex, in complete and systematic way, and a mental evaluation.

## Learning Outcomes

1. Assess modifications to clinical parameters in the different age groups.
2. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
3. Describe the effects on all organs and systems of diseases of the blood, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the genitourinary system, infectious pathologies and diseases of the elderly.
4. Describe the main pathological situations of the musculoskeletal system, the blood, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the genitourinary system, infectious pathologies and diseases of the elderly.
5. Design the treatment for the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
6. Explain the mechanisms by which illness affects the structure and function of the human body.
7. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
8. Give patients the maximum possible information about their health, diagnostic steps, complementary examinations and treatments in an appropriate way.
9. Identify tumour diseases, and the diagnosis and management of these.
10. Indicate the complementary examinations for diagnosing the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.

11. Perform a suitable physical examination for the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
12. State the most probable diagnosis for the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.
13. Write a report giving guidance on diagnosing the main infectious diseases, diseases of the blood, of the elderly, and of the hematopoietic system, the cardiovascular system, the digestive system, the respiratory system, the endocrine system, the nervous system, the renal and genitourinary system, the retroperitoneal system and the musculoskeletal system.

## Content

### A. Digestive system B.

#### *Theory (55 h)*

- 1) Oral and maxillofacial pathology: most relevant diseases of the oral cavity
- 2) Malignant and benign tumors of the lip, mouth and tongue
- 3) Esophagitis, gastro-esophageal reflux and esophageal motor disorders
- 4) Esophageal tumors
- 5) Gastritis, H. pylori infection and gastroduodenal ulcer
- 6) Benign esophageal surgical pathology. Surgical complications of peptic ulcer
- 7) Gastric tumors
- 8) Dyspepsia and irritable bowel syndrome
- 9) Gastrointestinal motor pathology and constipation
- 10) Intestinal malabsorption syndrome
- 11) Inflammatory bowel disease
- 12) Peritonitis. Acute appendicitis
- 13) Intestinal occlusion
- 14) Intestinal ischemia
- 15) Diverticular disease of the colon
- 16) Intestinal polyposis. Tumors of the small intestine. Colon cancer I
- 17) Colon and rectal cancer II
- 18) Benign anorectal pathology
- 19) Pathology of the abdominal wall
- 20) Abdominal injuries
- 21) Acute hepatitis and fulminant hepatic failure

- 22) Chronic hepatitis: viral and autoimmune
- 23) Liver diseases due to drugs and toxic substances. Alcoholic liver disease
- 24) Liver cirrhosis. Ascitis. Spontaneous bacterial peritonitis. Hepatorenal syndrome
- 25) Portal hypertension. Bleeding from varicose veins Hepatic encephalopathy
- 26) Non-alcoholic fatty liver and metabolic liver diseases: Wilson and Hemochromatosis
- 27) Hyperbilirubinemia, hereditary and acquired cholestasis: primary biliary cirrhosis, sclerosing cholangitis
- 28) Benign and malignant hepatic tumors. Hepatocarcinoma, cholangiocarcinoma
- 29) Liver surgery
- 30) Vascular and cystic diseases of the liver. Liver abscess. Liver and pregnancy
- 31) Cholelithiasis and acute cholecystitis
- 32) Pathology of the main bile duct. Gallbladder and bile duct neoplasm
- 33) Acute pancreatitis and chronic pancreatitis
- 34) Pancreatic cancer and other exocrine tumors
- 35) Digestive transplants

*Specialized seminars (10 h)*

- 1) Dysphagia and pyrosis - Digestive functional examinations
- 2) Diarrhea/inflammatory bowel disease/malabsorption
- 3) Digestive hemorrhage
- 4) Clinical cases of digestive surgical pathology. Acute abdomen
- 5) Clinical cases of digestive surgical pathology. Proctology
- 6) Oncological digestive surgery
- 7) Acute and chronic hepatitis
- 8) Complications cirrhosis
- 9) Obstructive jaundice
- 10) Hepatic space occupying lesions

**B. Nephro-urology**

*Theory (28 h)*

- 1. Obstructive uropathy
- 2. Hematuria
- 3. Symptoms of the lower urinary tract
- 4. Benign prostatic hyperplasia
- 5. Prostate cancer

6. Renal masses
7. Urothelial tumors
8. Urological traumatism
9. Urinary lithiasis
10. Benign scrotal pathology
11. Testicular tumors
12. Bladder functional pathology
13. Pathology of the penis
14. Erectile dysfunction
15. Male infertility
16. Chronic kidney disease I
17. Chronic kidney disease II
18. Acute renal failure
19. Substitute treatments in kidney failure
20. Glomerulonephritis I
21. Glomerulonephritis II
22. Vascular nephropathies
23. Interstitial nephropathies I
24. Interstitial nephropathies II
25. Nephropathies secondary to systemic diseases
26. Diabetic nephropathy
27. Other secondary nephropathies
28. Genetic and hereditary diseases

*Specialized seminars (8 h)*

1. Patient with nephritic colic
2. Patient with acute scrotum
3. Patient with obstructive uropathy
4. Patient with hematuria
5. Glomerular diseases
6. Management of chronic kidney disease. Clinical cases
7. Vascular and vascular pathology. Clinical cases. Practical attitude

8. Kidney transplant. Medical management and immunotherapy. Clinical cases

## C. Geriatrics

### *Theory 20 h*

1. Epidemiology of aging. Theories of aging
2. Physiological changes in aging
3. Surgical aspects of the elderly patient I
4. Surgical aspects of the elderly patient II
5. Presentation of diseases in the elderly
6. Fragility, comorbidity and disability. Importance of geriatric prevention
7. Comprehensive Geriatric Evaluation
8. Geriatric Syndromes I
9. Geriatric Syndromes II
10. Drugs in geriatrics
11. Dementias
12. Senile osteoporosis
13. Importance of geriatric prevention
14. Vascular diseases. Clinical atherosclerosis
15. Infections in the elderly
16. Other medical processes prevalent in geriatrics I
17. Other medical processes prevalent in geriatrics II
18. Ethical aspects of medical care in the elderly. Surgical treatment in the elderly
19. Sensory deficits in the elderly
20. Organization of geriatric care

### *Specialized seminars 6 h*

1. Comprehensive geriatric evaluation
2. Screening for cancer in the elderly
3. Clinical research in geriatrics

D. Clinical care practices (40 hours: 20 hours of the Dept. of Medicine, 20 hours of the Dept. of Surgery)

Clinical care practices in medical and surgical field in hospitalization rooms, outpatient basis , operating room, emergency and cabinets.

## **Methodology**

Typology	Hours	ECTSs
Theory lecture	83	3,32
Specialized seminars	24	0,96
Clinical care practices	40	1,6
Autonomous	161,7	6,47

In the current exceptional circumstances, at the discretion of the teachers and also depending on the resources available and the public health situation, some of the theoretical classes, practicals and seminars organized by the Teaching Units may be taught either in person or virtually.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Clinical care practices	40	1.6	2, 3, 4, 5, 11, 6, 12, 7, 9, 10, 8, 13, 1
Specialized seminars	24	0.96	2, 3, 4, 5, 11, 6, 12, 7, 9, 10, 8, 13, 1
Theory lecture	83	3.32	2, 3, 4, 5, 11, 6, 12, 7, 9, 10, 8, 13, 1
Type: Autonomous			
Self-study/Reading articles/Reports of interest	161.7	6.47	

## Assessment

Assesment activity	Weight
Clinical practice	30%
:Open and descriptive records and / or closed records; Narrative records. Seminars and / or problems and / or clinical cases: Evaluation written through objective tests	
Theory	70%

Written evaluation through objective tests: selection items;  
trial tests (extended questions / restricted questions).  
Evaluation oral

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## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Open and descriptive records and / or closed records; Narrative records. Seminars and / or problems and / or clinical cases: Evaluation written through objective tests	30%	6.3	0.25	2, 3, 4, 5, 11, 6, 12, 7, 9, 10, 8, 13, 1
Written evaluation through objective tests: selection items; trial tests (extended questions / restricted questions). Evaluation oral	70%	10	0.4	2, 3, 4, 5, 11, 6, 12, 7, 9, 10, 8, 13, 1

## Bibliography

Bibliography can be consulted in the specific programs posted in the web of hospital unit / or in the Virtual Campus.

## Software

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