

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

<b>Code</b>	34478
<b>Name</b>	Endocrinology and nutrition II
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1204 - Degree in Medicine	Faculty of Medicine and Odontology	5	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1204 - Degree in Medicine	13 - Human clinical training II	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
MARTINEZ HERVAS, SERGIO	260 - Medicine
ORTEGA SERRANO, JOAQUIN	40 - Surgery

**SUMMARY**

The subject of Endocrinology and Nutrition II is a field shared by the Department of Medicine and Surgery, including in the section on Human Clinical Training. We study the pathology related to metabolism disorders, nutrition and diet therapy.

The aims of strategical teaching is training professionals in the field of pathology of metabolism, nutrition and diet therapy, with theoretical and practical knowledge, attitudes and skills that enable the student to develop a holistic medicine, curative, preventive and health promotion in this area (diseases of metabolism and nutrition).

The knowledge, clinical skills and scientific language acquired in this course, will enable the student to recognize and understand the most prevalent diseases of metabolism and nutrition and the dietary recommendations applied to different situations and conditions, to be able to diagnose and guide the treatment of major clinical entities and establish appropriate dietary treatment.



We also enable you to communicate with the patient, understand the disease process and establish an individualized therapeutic approach in the framework of General Medicine.

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 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.
- 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 endocrine system.
- Knows the pathologies of nutrition.
- 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.

## LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

Once the subject is finished, the students must be able to:

1. Make a clinical history focused on the metabolic and nutritional pathology.
2. Have the knowledge and proper clinical skills for the basic exercise of the metabolism, nutrition and diet therapy diseases within the field of the general medicine.
3. Recognise, diagnose and guide the treatment of the main metabolic and nutritional diseases.
4. Interpret the diagnostic tests and the nutritional conditions and nutritional needs.
5. Recognise the pathology that must be sent to a specialized centre.
6. Acquire the ability to keep a critical analysis of the knowledge and publications.

## DESCRIPTION OF CONTENTS

### 1. THEORY

1. Diabetes Mellitus. Concept, classification and epidemiology of the diabetes.
2. Diagnosis. Clinic, evolution and lesion mechanisms of the diabetes.
3. Chronic complication of diabetes I. Microangiopathy and macroangiopathy.
4. Chronic complications of diabetes II. Neuropathy.
5. Acute complications in diabetes.
6. Diabetes treatment.
7. Obesity.
8. Metabolic surgery.
9. Primary and secondary dyslipemias I.
10. Primary and secondary dyslipemias II.
11. Diet therapy. Food planning and health promotion. Nutritional science aspects of the nutrients.
12. Assessment of the nutritional condition.
13. Diet therapy in digestive pathology.
14. Diet therapy in metabolic pathology I.
15. Diet therapy in metabolic pathology II.



16. Diet pathology in renal and respiratory pathologies and consumptive diseases.
17. Enteral and parenteral nutrition. Artificial and home nutrition.

## **2. PRACTICES**

### CLINICAL CASES

1. Syndrome of the insulin resistance and cardiometabolic risk.
2. Diabetic foot.
3. Diabetes and chronic complications.
4. Hypoglycemia.
5. Diet therapy in obesity.
6. Surgical care of the morbid obese.
7. Diet therapy in complication with diabetes.
8. Malnutrition patient.

### SEMINARS

1. Diabetological education and insulinization.
2. Non-insulinic treatment of diabetes.
3. Obesity and metabolic surgery.
4. Acute complications.
5. Special situations. Gestational diabetes.
6. Survey about food consumption and its clinical application.
7. Pre and post surgery diet therapy of the morbid obesity.
8. Nutrition and chronic pathology.

### CLINICAL PRACTICES

17 hours (medicine and surgery) in the Services/units of Endocrinology and Nutrition and of Endocrine or General Surgery.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Seminars	24,00	100
Theory classes	19,00	100
Clinical practice	13,02	100
Attendance at events and external activities	4,00	0
Development of group work	4,00	0
Development of individual work	4,00	0
Study and independent work	7,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	6,00	0
Preparing lectures	8,00	0
Preparation of practical classes and problem	8,00	0
Resolution of case studies	6,00	0
Resolution of online questionnaires	4,00	0
<b>TOTAL</b>	<b>112,02</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.** Seminars: in reduced groups, the professor will set specialised topics in depth, case studies, bibliographical management, current topics... group work will be encouraged as well as the oral presentation. It can be understood as "cooperative learning".

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

**EVALUATION**

The evaluation will be based on the contents received in the theoretical and practical classes (seminars and clinical cases), in the Manual of Endocrinology and Nutrition II (available in the virtual classroom) and in the books recommended reference points (included in the references section in this teaching guide).





**Theoretical assessment:** 50% of the final mark.

It will be made through a written test that will be about the content of the theoretical program and will have as the main objective to assess the acquisition of knowledge. Test with 68 multiple-choice questions (right answers, 1 point; non-answered, 0 points, wrong, -0,333 points). Maximum mark, 10. The attendance to lessons will be positively evaluated. The content of the test will be the same for each group.

**Practical assessment:** 50% of the final mark.

It will be made about 7-10 clinical cases (related with the seminars or presented clinical cases), up to 3 or 5 questions per each case (right answers, 1 point; non-answered, 0 points, wrong, -0,333 points). Maximum mark, 10. 80% of the compulsory attendance to take the exam.

**Final mark of the subject: (Theory + Practice) /2.** Pass with 5 or higher mark. The conjoint of the subject is passed or failed.

#### **Exam rules.**

Total amount of time: 2 hours.

Students must identify themselves at the beginning of the exam with the NPA or DNI.

The professor will announce the end of the exam 10 minutes in advance to allow students to write the answers in the answer sheet.

When the professor announces the end of the exam, any student will be able to keep writing; the exam of those who keep writing will not be corrected and the grade will be "fail".

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.

Students are reminded of the importance of carrying out evaluation surveys on all the teaching staff of the degree subjects.

## **REFERENCES**

### **Basic**

- Libros de Consulta:
  - Manual de Endocrinología y Nutrición II Departament de Medicina i Cirurgia. Universitat de Valencia
  - Harrison. Principios de Medicina Interna. 20ª edición. México. McGraw-Hill. 2019.
  - Ferreras/Rozman. Medicina Interna Volumen II. 19ª edición. Barcelona. Elsevier. 2019.
  - Cirugía AEC. Manual de Cirugía de la Asociación Española de Cirujanos. Parrilla P. et al. Ed. Interamericana. 2012.



- Luján JA, Frutos MD, Parrilla P. Cirugía de la obesidad mórbida. pp 403-416. En CIRUGIA AEC. Manual de la Asociación Española de Cirujanos (2ª edición). Parrilla P, Landa JI (eds). Editorial Médica Panamericana SA, Madrid, 2010.
- Recursos-e Salud: ClinicalKey Student. Elsevier (Scopus, ScienceDirect).  
[uv-es.libguides.com/RecursosSalut/BibliotecaSalut](http://uv-es.libguides.com/RecursosSalut/BibliotecaSalut)

