

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

Code	34478
Name	Endocrinology and nutrition II
Cycle	Grade
ECTS Credits	4.5
Academic year	2023 - 2024

Study (s)

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

Subject-matter

Degree	Subject-matter	Character
1204 - Degree in Medicine	13 - Human clinical training II	Obligatory

Coordination

Name	Department
CASSINELLO FERNANDEZ, NORBERTO	40 - Surgery
MARTINEZ HERVAS, SERGIO	260 - Medicine

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

OUTCOMES

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.
- Proper organisation and planning of the workload and timing in professional activities.
- Team-working skills and engaging with other people in the same line of work or different.
- 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

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 diabetes.
2. Diagnosis. Clinic, evolution and lesional mechanisms of diabetes.
3. Chronic complications of diabetes I. Macroangiopathy.
4. Chronic complications of diabetes II. Microangiopathy: retinopathy and diabetic renal disease.
5. Chronic complications of diabetes III. Sensory-motor and autonomic neuropathy.
6. Acute complications of diabetes.
7. Treatment of diabetes.
8. Obesity.
9. Obesity surgery.
10. Metabolic surgery.
11. Primary and secondary dyslipidemias I: classification and diagnosis.
12. Primary and secondary dyslipidemias II: treatment and cardiovascular prevention.
13. Diet therapy. Food planning, food patterns and health promotion. Bromatology of nutrients.
14. Evaluation of nutritional status.
15. Diet therapy in digestive pathology: celiac disease, lactose deficiency, malabsorption, inflammatory bowel disease, irritable bowel syndrome, intestinal failure, short bowel syndrome and pancreatic and hepatic pathology.



16. Diet therapy in metabolic pathology: obesity, dyslipidemia, diabetes, anemia, hyperuricemia-gout and calcium-vitamin D.
17. Diet therapy in renal pathology, respiratory pathologies and consumptive diseases: oncological pathology, eating disorders, renal and respiratory pathology.
18. Enteral and parenteral nutrition. Artificial nutrition at home.

2. PRACTICES

SEMINARS AND CLINICAL CASES

1. Diabetes education and insulinization.
2. Non-insulin treatment of diabetes.
3. Technology in diabetes.
4. Hypoglycemia.
5. Diabetic foot.
6. Special situations. Gestational diabetes.
7. Obesity and metabolic surgery.
8. Perioperative management of obesity and metabolic surgery patients.
9. Metabolic syndrome and cardiometabolic risk.
10. Food consumption questionnaire and its clinical application.
11. Body composition evaluation techniques.
12. Malnutrition associated with disease.
13. Dysphagia.
14. Nutrition in neurological 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
TOTAL	112,02	

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.

The gender perspective and the sustainable development goals (SDGs) will be incorporated into teaching, whenever possible.

EVALUATION

The evaluation will be based on the contents received in the theoretical and practical teaching (seminars and case reports), and consulting books (see references).

Theoretical Evaluation: 50% of the final grade.

Shall be affected by written test on the contents of the theoretical program and will have as objective to evaluate the acquisition of knowledge. The exam will be the same for all groups. The test will have 60 questions, 4 possible answers with only one true (successful 1point, white 0 points, wrong -0,333 points). Maximum note 10. The attendance to class will be valued positively.

Practical assessment: 50% of the final grade.

It will include up to 12 clinical cases (related to theoretical knowledge, to the seminars or clinical cases presented) with 3 to 5 questions per case. The exam will be multiple choice. The questions will have 4 possible answers with only one true (correct 1 point, blank 0 points, wrong -0.333 points). Maximum grade 10. Compulsory attendance at least 80% of the practices to be able to take the exam.

Final grade for the course: (Theory + Practice) /2. Approved with 5 or more. The whole course is approved or failed.



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

- Manual de Endocrinología y Nutrición Departament de Medicina y Cirugía. Universitat de Valencia
- Harrison. Principios de Medicina Interna. 20ª edición. México. Mc Graw Hill. 2018.
- Farreras Rozman. Medicina Interna. 19 edición. Elsevier. 2020.
- Sabiston. Tratado de cirugía. Fundamentos biológicos de la práctica quirúrgica moderna. 20th Edition. Courtney Townsend R. Daniel Beauchamp B. Mark Evers Kenneth Mattox. Elsevier, 2017
- Parrilla P y cols. (eds), Cirugía AEC. Manual de la Asociación Española de Cirujanos. 3ª edición; Editorial Médica Panamericana SA; Madrid 2022.
- Recursos-e Salut: ClinicalKey Student. Elsevier (Scopus, ScienceDirect).
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