



Information about the subject

Degree: Bachelor of Science Degree in Medicine

Faculty: Faculty of Medicine and Health Sciences

Code: 340503 **Name:** Endocrinology and Nutrition

Credits: 6,00 **ECTS Year:** 5 **Semester:** 2

Module: Human Clinical Training

Subject Matter: Human Pathology **Type:** Compulsory

Field of knowledge: Health Science

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Universidad
**Católica de
Valencia**
San Vicente Mártir

Course guide

Year 2023/2024
340503 - Endocrinology and Nutrition

345B

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Module organization

Human Clinical Training

Subject Matter	ECTS	Subject	ECTS	Year/semester
Human pathology basis	6,00	General Pathology I	3,00	3/1
		General Pathology II: Analysis by Problems	3,00	3/2
Psychology	6,00	Medical Psychology and Psychopathology	6,00	3/2
Human Pathology	102,00	Clinical Allergology and Immunology	3,00	3/2
		Dermatology	6,00	5/1
		Endocrinology and Nutrition	6,00	5/2
		Haematology	3,00	3/2
		Infectious Diseases	3,00	3/2
		Medical Oncology and Radiotherapy	3,00	5/2
		Medicine and Surgery of the Cardiocirculatory System	9,00	4/2
		Medicine and Surgery of the Digestive System	6,00	4/1
		Medicine and Surgery of the Musculoskeletal System	9,00	4/2
		Medicine and Surgery of the Nephro-Urological System	6,00	5/1



Human Pathology

Medicine and Surgery of the Nervous System	9,00	5/2
Medicine and Surgery of the Respiratory System	6,00	3/2
Obstetrics and Gynaecology	9,00	4/2
Ophthalmology	3,00	3/2
Otorhinolaryngology	3,00	4/2
Paediatrics	9,00	5/2
Palliative Medicine	3,00	6/1
Psychiatry	3,00	5/1
Rheumatology	3,00	4/2



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Knowing and understanding the etiopathogeneia and physiopathology of endocrinological diseases
- R2 Acquire theoretical knowledge about clinical manifestations, treatment and prognosis of the most prevalent endocrinological diseases.
- R3 Know how to propose a broad differential diagnosis within endocrinological diseases based on clinical signs obtained through Clinical History.
- R4 Knowing how to request and interpret, critically and efficiently, those complementary tests that will lead to the diagnosis of endocrinological and metabolic diseases
- R5 Know how to recognize those endocrinological manifestations that will lead to the diagnosis of diseases of other devices and / or systems.
- R6 Know the control criteria for metabolic diseases (diabetes, dyslipemia,..) and its therapeutic management
- R7 Clinical history oriented to endocrinological pathology.
- R8 Recognize by physical examination the abnormality of endocrinological pathology.
- R9 Indicate and interpret complementary studies: laboratory tests and imaging techniques most frequently used in endocrinology
- R10 Understanding the process of carrying out differential diagnosis
- R11 To know the main pharmacological and non-pharmacological therapeutic means



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB1	Students have demonstrated to possess and understand knowledge in a study area that starts from the base of the general secondary education, and is usually found at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study				X
CB2	Students know how to apply their knowledge to their job or vocation in a professional way and possess the competences that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study				X
CB3	Students have the ability to collect and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical topics				X
CB4	Students can pass on information, ideas, problems and solutions to both a specialized and non-specialized audience				X
CB5	Students have developed the learning skills needed to undertake further studies with a high degree of autonomy				X
GENERAL		Weighting			
		1	2	3	4
CG4	Developing professional practice with respect to patient autonomy, beliefs and culture				X
CG5	Recognizing the limitations themselves and the need to maintain and update their professional competence, giving special importance to the autonomous learning of new knowledge and techniques and to the motivation for quality				X
CG6	Developing professional practice with respect for other health professionals, acquiring teamwork skills				X



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prognosis and treatment, applying most possible information and clinical safety		X
appropriate therapeutics of the most prevalent diseases, as well as terminally ill patients		X
appropriate preventive measures for each		X
experience in hospital institutions, health institutions, under supervision, as well as patient-centered clinical management and pharmaceutical medicines and other health system	X	
analyze and synthesize relevant information about the patient and understand the content		X
interpret and other medical records in an accessible manner		X
communicate clearly, both orally and in writing, with media workers and other professionals		X
personal communication that enables media workers and other professionals to communicate media and other professionals with		X



CG29	Knowing national and international health organizations and the environments and conditions of different health systems			X	
CG33	Maintaining and using records with patient information for further analysis, preserving data confidentiality				X
CG36	Being able to formulate hypotheses, critically collect and evaluate information for problem solving, following the scientific method				X

SPECIFIC		Weighting			
		1	2	3	4
CE44	Recognizing, diagnosing and guiding the management of the main pathologies of the endocrine system. Nutrition pathology				X

TRANSVERSAL		Weighting			
		1	2	3	4
CT1	Analytical and synthesis capacity				X
CT2	Planification and organization capacity			X	
CT3	Oral and written communication in mother language				X
CT7	Solving problems				X
CT8	Making decisions				X
CT9	Team work				X
CT10	Interdisciplinary team work			X	
CT12	Interpersonal relationship skills				X
CT14	Critical reasoning			X	
CT15	Ethical commitment				X
CT16	Individual learning				X



CT17 New situations' adaptation

X

CT26 Knowing how to value personal action and know your own skills and limitations

X

CT32 Being able to establish and maintain relationships with other professionals and institutions

X

CT33 Knowing how to get relevant information from personal interviews

X

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	0,00%	Open questions
R1, R2, R3	65,00%	Tests
R1, R2, R3	15,00%	Practices
R1, R2, R3	5,00%	Participation in class
R1, R2, R3	15,00%	Practice exam

Observations

MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.



Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Masterclass
- M2 Problems resolution and practical cases
- M3 Virtual simulations
- M4 Content presentations by teacher
- M5 Knowledges and skills explanation
- M7 Oral presentation by student
- M8 Group activities supervised by professor
- M9 Knowledge acquirance through student interaction and activity
- M11 Personalised attention by professor
- M12 Tests to understand the level of knowledge acquirance and skills
- M13 Written work
- M14 Online activity on e-learning
- M15 Personal study
- M16 Information research
- M17 Discussion and solving issues in group



M18	Work in team
M19	Group work for searching, discussion and information research
M21	Supervision of clinical histories
M22	Clinical practices

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theory class M1, M2, M4	R1, R2, R3	40,00	1,60
Seminar and group practices M2	R1, R2, R3	25,00	1,00
Tutoring M11	R1, R2, R3	6,00	0,24
Evaluation M12, M13	R1, R2, R3	4,00	0,16
TOTAL		75,00	3,00

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
No attendance M2, M15, M16, M17, M18	R1, R2, R3	75,00	3,00
TOTAL		75,00	3,00



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Introduction. Hypothalamic-pituitary pathology	<ul style="list-style-type: none">· Introduction to Endocrinology and presentation of the course· Hyperfunctional syndromes of the anterior lobe of the pituitary gland. Acromegaly study· Study of hyperprolactinemia. Other hyperfunctional syndromes Hypopituitarism study· Study of diabetes insipidus and syndrome of inappropriate secretion of ADH.· Pituitary incidentaloma and empty sella turcica. Surgical pathology of the pituitary gland
Thyroid pathology	<ul style="list-style-type: none">· Simple goitre and eutyroid multinodular goitre. Thyroid nodule. Graves Basedow disease· Adenoma and toxic multinodular goitre· Hyperthyroidism· Acute, subacute and chronic thyroiditis· Surgical treatment of benign thyroid· Thyroid cancer<ul style="list-style-type: none">· Classification· Thyroid cancer: Surgical treatment· Monitoring
Parathyroid pathology	<ul style="list-style-type: none">· Hyperparathyroidism. Hypercalcemia and non-parathyroid hypercalcemia· Hypoparathyroidism, Pseudohypoparathyroidism· Surgical treatment of hyperparathyroidism



Suprarenal pathology

- Cushing syndrome
- Acute and chronic suprarenal failure
- Hyper and hypoaldosteronism
- Congenital adrenal hyperplasia. Tumor producing sex hormones. Hirsutism and virilization
- Pheochromocytoma. Incidentalomas.
- Suprarenal gland. Surgical treatment for benign pathology
- Suprarenal carcinoma

Gonadal pathology and pathology of sex hormones

- Hypogonadism
- Gynecomastia, gender identity disorders

Neuroendocrine gastroenteropancreatic tract tumors

- Insulinoma and other hypoglycemia.
- Glucagonoma-Carcinoid tumor. Gastrinoma, VIPoma PPoma, Somatostatinoma
- Surgery of GEP tract tumors

Multiple endocrinopathies

- Multiple Endocrine Neoplasia. MEN syndrome. Surgical treatment.
- Autoimmune multi-gland syndromes

Diabetes

- Concept, classification and clinical diagnosis
- Pathogenesis of type 1 DM and type 2 DM
- Treatment: General measures, diet and exercise
- Treatment of type 1 DM – Insulins
- Treatment of type 2 diabetes - oral agents and insulins
- other drugs
- Acute complications of diabetes mellitus
- Chronic Complications (I)
- Chronic complications (II)
- Chronic complications (III) Surgical treatment of diabetic foot

Dyslipidemia

- Clinical diagnosis of dyslipidemias
- Treatment of dyslipidemia. Prevention of cardiovascular risk.



Nutrition

- Obesity: Classification and medical treatment.
- Bariatric surgery for obesity
- Metabolic syndrome
- Basis of clinical nutrition. Requirements and assessment

Nutrition

- Malnutrition in and outside of the hospital
- Nutritional bases of anorexia nervosa and bulimia
- Artificial nutrition: enteral and parenteral
- Diet therapy in digestive diseases, metabolic, renal, wasting diseases. Artificial nutrition at home



Temporary organization of learning:

Block of content	Number of sessions	Hours
Introduction. Hypothalamic-pituitary pathology	5,00	10,00
Thyroid pathology	4,00	8,00
Parathyroid pathology	3,00	6,00
Suprarenal pathology	4,00	8,00
Gonadal pathology and pathology of sex hormones	3,50	7,00
Neuroendocrine gastroenteropancreatic tract tumors	3,00	6,00
Multiple endocrinopathies	3,00	6,00
Diabetes	5,00	10,00
Dyslipidemia	3,00	6,00
Nutrition	4,00	8,00

References

- 1- Harrison. Principios de medicina interna- 2- Williams. Tratado de Endocrinología Henry M. Kronenberg MD. (Elsevier Saunders)
- 3- Luis Felipe Pallardo. Endocrinología clínica Ed Diaz de Santos
- 4-Uptodate. En: www.uptodate.com (actualizado cada 4 meses).
- 5- Endotext on line: En: www.endotext.org/ (acceso libre)
- 6- Manual de Nutrición Clínica y Dietética. Editor Gabriel Oliveira Fuster. Editorial Díaz Santos.
- 7- Manual SEEN Endocrinología y Nutrición. Web: seen.es



Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

☐ Kaltura



Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒ Microsoft Teams

☐ Kaltura

Explanation about the practical sessions:

By TEAMS



2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System:

If is necessary an oral exam could be performed