VNIVERSITAT DE VALÈNCIA

Course Guide
34289 Human and ocular physiology

COURSE DATA

Data Subject	
Code	34289
Name	Human and ocular physiology
Cycle	Grade
ECTS Credits	9.0
Academic year	2018 - 2019

Study (s)

Degree	Center	Acad. year	Period
1207 - Degree in Optics and Optometry	Faculty of Physics	1	Second term

Subject-matter

Degree	Subject-matter	Character
1207 - Degree in Optics and Optometry	5 - Physiology	Basic Training

Coordination

Name	Department
PEREDA CERVERA, JAVIER	190 - Physiology
PEREZ GARRIDO, SALVADOR	190 - Physiology
PUERTAS CUESTA, FRANCISCO JAVIER	190 - Physiology

SUMMARY

Physiology is the science that studies the nature of living organisms from a functional aspect, ie the study of the functioning of the various organ systems of living things, their regulation and interaction.
The subject of human physiology is the study eye functioning of organs, organ systems that make up the human body and in particular vision. Operation is studied from the molecular and cellular level to the whole person, the interrelationship between systems and the external environment and regulatory mechanisms and functional integration that enable life and visual function.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

Para cursar esta asignatura es conveniente que los estudiantes hayan cursado previamente durante el bachillerato biología, para conocer los principios básicos de la célula. Unos conocimientos básicos de química también son de utilidad. Es importante que los alumnos refuercen y/o amplíen los conocimientos de la célula y conocimientos básicos del cuerpo humano. Estos y otros conocimientos se imparten en la asignatura de anatomía humana y ocular y de biología ocular que forman parte del primer curso de grado

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

1207 - Degree in Optics and Optometry

- Knowing how to apply the knowledge acquired to professional activity, knowing how to solve problems and develop and defend arguments.
- Being able to gather and interpret relevant data to make judgments.
- Being able to transmit information, ideas, problems and solutions to both a specialized and non-specialized audience.
- Development of learning skills necessary to undertake further studies with a high degree of autonomy.
- To know the cell structure, embryonic development and organogenesis.
- To know the structure of matter, the chemical processes of dissolution and the structure, properties and reactivity of organic compounds.
- To know the physical and chemical properties of the materials used in optics and optometry.
- To acquire the clinical skills necessary for the examination and treatment of patients.
- To know the nature and organization of the different types of clinical care.
- To know the different protocols applied to patients.
- To know the psychosocial aspects of the profession.
- To know the fundamentals and techniques of health education and the main generic health programs to which the optometrist must contribute from their scope of action.
- To think critically about clinical, scientific, ethical and social issues involved in the professional practice of Optometry.

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

To know and understand the behavior of sight and physiological systems at all levels of organization.

To integrate the functions of organs and body systems.

Understanding of the functioning of vision from the eye to the center frame the view integration and the functioning of the human body.

Provide a useful basis and dominate biomedical biomedical vocabulary to allow her students to tackle other subjects of the degree and professional development.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	60,00	100
Tutorials	15,00	100
Laboratory practices	15,00	100
Preparation of evaluation activities	70,00	0
Preparing lectures	28,00	0
Preparation of practical classes and problem	7,00	0
Resolution of online questionnaires	28,00	0
TOTAL	**223,00**	

TEACHING METHODOLOGY

The course will use three types of classes with different methodology:

a) Theoretical and practical classes (4 per week): The methodology used will be the lecture-participatory. It will teach the basic theoretical, with illustrative examples. Special attention to student participation through questions and discussions planned. Multimedia resources will be used as the incorporation of images and videos. Specifically alternative teaching methodology will be used as the debate or large group dynamics.
b) Seminars: We used to enhance learning, eliminate misconceptions, integrate and apply knowledge to specific problems. The methodology will never opt for masterful and clinical cases, small group activities, discussion and resolution of problems and issues.
c) Laboratory: There will be a brief theoretical introduction and proceed to perform using a practical guide each practice. Students will be distributed in pairs and solve issues at the end of practice.
Regarding the non-contact hours, in addition to the preparation of exams, students must fill out online questionnaires that deal with the theoretical, the contents of the seminars and practices. These questionnaires were evaluable.

EVALUATION

Options assessment:

A) Evaluation non-presential
The final grade is obtained by a final exam consists of the general and the specific. This review will evaluate the practices with an approximate weight of 10% of the grade. To pass the course you need to get a 5 and attend more than 70% of practices.

B) face-Continuous Assessment
The course is divided into the general and specific, therefore, be assessed separately and both parties will be averaged for the final grade.

The note of each part is obtained in two parts:

Theoretical evaluation: 80 points for qualifying. Will be done through continuous assessment (24 points) by performing on-line questionnaires and assistance-evaluation of the seminars. The remaining 56 points will be obtained through a written or oral test will be on the program contents and theoretical seminars and will aim to assess the acquisition of knowledge and skills.

Practical assessment: 20 points of qualifying. Be made by evaluating
continuous participation in the labs and conducting on-line questionnaires about the same (14 points). The remaining 6 points will be evaluated together with the theoretical test.

To pass each of the parties must obtain a minimum of 28 points out of 62 in the written test of each part and a minimum of 50 points in total by adding all preceding paragraphs. Failure to reach 32 points in the written test, the maximum score is limited to 60 in the corresponding part of the theory test if the sum exceeds the corresponding sections. Is also needed assistance to more than 70% of practices.

REFERENCES

Basic

- 10.1 Referencias Básicas

Referencia b1: Fisiología Humana. Autor: Stuart Ira Fox. Ed. Interamericana McGraw-Hill.
Referencia b2: Tratado de fisiología Médica. Autor: Guyton y Hall. Ed. Interamericana McGraw-Hill.
Referencia b3: Neurobiología de la visión. Autor: Urtubia Vicario, César. Ed. UPC.
Referencia b4: Anatomía y Fisiología. Autor: Thibodeau y Paton. Ed. Elsevier Mosby.