COURSE DATA

Data Subject	
Code	34298
Name	Optometry practicum I
Cycle	Grade
ECTS Credits	6.0
Academic year	2020 - 2021

Study (s)

Degree	Center	Acad. year	Period
1207 - Degree in Optics and Optometry	Faculty of Physics	2	Second term

Subject-matter

Degree	Subject-matter	Character
1207 - Degree in Optics and Optometry	12 - Optometry	Obligatory

Coordination

Name	Department
CERVIÑO EXPOSITO, ALEJANDRO	280 - Optics and Optometry and Vision Sciences

SUMMARY

The Optometry Practice I module consists of the application of the theoretical knowledge on the principles that underlie the different clinical techniques for the determination of refractive error addressed in the previous semester in the Optometry I module.

It is a subject of great importance that allows to obtain skills that will be essential in all Optometry modules to be attended in the following years, as well as in clinical practice.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

It is highly recommended to have attended the Optometry I module before enrolling in the subject Optometry I Practice module, given the necessity of having adquired knowledge in the refractive aspects of Optometry, the characteristics of the ametropic eye, and the basics of the clinical examination of the ametropic eye, in order to understand the fundamentals of the different techniques that are dealt with in the course.
It is also highly recommended a base-knowledge in Physiological Optics

OUTCOMES

1207 - Degree in Optics and Optometry

- To have and to understand the fundamentals of Optometry for its correct clinical and healthcare application.
- 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 develop communication skills, data recording and medical record making.
- To acquire the skills for the interpretation and clinical judgment of the results of visual tests, to establish the most appropriate diagnosis and treatment.
- To acquire skills in the instrumental tests for the evaluation of visual functions and eye health. To know how to take a complete anamnesis.
- Ability to measure, interpret and treat refractive and binocular errors.
- Ability to prescribe, control and monitor optical corrections.
- To know, to apply and to interpret instrumental tests related to visual health problems.
- To know the differences in treatment and refractive diagnosis of the pediatric patient.
- To acquire the ability to examine, to diagnose and to treat visual abnormalities with special emphasis on differential diagnosis.
- 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 and to apply visual screening techniques applied to different populations.

- To know and to apply new technologies in the field of optometric clinic.
- Ability to act as a primary visual care agent.
- To identify and to analyze environmental and occupational risk factors that can cause visual problems.

LEARNING OUTCOMES

Learning outcomes can be summarized as to when the student is capable of:

- Understanding the foundations of Optometry for their proper care and clinical application.
- Compiling and interpreting relevant data for making judgements.
- Developing learning skills neccessary for undertaking studies with a high degree of autonomy. Developing communication, data registration and case history elaboration skills.
- Interpretation and clinical judgement of Visual tests outcomes, to establish the diagnosis and the most appropriate treatment.
- Adquiring the clinical skills necessary for refractive examination
- Knowing different protocols applied to patients with refractive errors.
- Identifying and analyzing occupational and environmental risk factors that can cause visual problems

DESCRIPTION OF CONTENTS

1. Refractive prescreening.

Description and management of the cabinet. Anamnesis. Preliminary testing and evaluation of the VA in terms of the ametropia.

2. OBJECTIVES Optometrist PROCEDURES

Introduction to the retinoscope. Neutralization of spherical ametropia. Recognition and neutralization of astigmatism. Retinoscopy in real eye. Management of Javal and Hemhotlz keratometers.

3. Subjective optometric procedures

Monocular refraction, bichromatic test, test schedule, Jackson cross cylinders, ocular dominance, binocular balance biocular and refraction, refraction in near vision: determination of adding nearby.

WORKLOAD

ACTIVITY	Hours	% To be attended
Other activities	60,00	100
TOTAL	60,00	

TEACHING METHODOLOGY

Practical classes: classes of presential modality in which theoretical concepts will be developed in a practical way of application in the Optometry cabinet. These classes, small groups of 8 students maximum, will be first carried out on simulated patients and then, later in the subject sequence, on real patients

Student work

- Study of theoretical foundations

- Development on work and issues raised in class

- Individual tutorials in the cabinet

- Individual tutorials

EVALUATION

In general, attendance to the practical sessions is absolutely mandatory. The unexcused absence or inappropriate behavior may result in a penalty in the overall rating of the course at the discretion of the tutors. The final mark to pass this subject has to be equal to or greater than 5 point on a 10 points scale.

The module assessments will be made applying the following criteria (over 100 points):

a) Objective refraction (50% of the final grade), consisting of two assessments in which the student must demonstrate his/her ability to perform various clinical procedures dealt with in the module.

a.1) Keratometry assessment (10% of the final grade). The student shall determine and record correctly the keratometry values of a patient within a certain period of time

a.2) Retinoscopy assessment (40% of the final grade). The student shall determine and record accurately the refractive error of an artificial eye, using a retinoscope, within a certain amount of time

b) Subjective refraction (40% of the final grade). The student shall display knowledge of basics and application, as well as being able to carry out, of the different procedures composing this part of the

refractive assessment on a patient, real or simulated.

It is necessary to overcome each of these parts (i.e. get more than half of the maximum score for each) to pass.

c) Continuous assessment (10% of the final grade). During the practical sessions in which the refraction procedures are covered,10% of the final grade is reserved fot the continuous assessment where attendance and compliance with the activities proposed for each practical sessions are considered.

REFERENCES

Basic

- Referencia b1: Montes-Micó R. Optometría: Principios Básicos y Aplicación Clínica. Elsevier. 2011. ISBN: 978-84-8086-822-8
  Referencia b2: Montés-Micó R. Optometría: Aspectos Avanzados y Consideraciones Especiales. Elsevier. 2011. ISBN: 978-84-8086-890-7
  Referencia b3: Furlan W., García J., Muñoz L.: Fundamentos de Optometría. Refracción ocular. (2009)
  Referencia b4: Rosenfield M, Logan N. Optometry. Science, Techniques and Clinical Management. 2nd Edition. Butterworth-Heinemann-Elsevier. 2009
  Referencia b5: Elliott DB. Clinical procedures in Primary Eye Care. Butterworth-Heinemann. 2007
  Referencia b6: Grosvenor T. Primary Care Optometry. Butterworth-Heinemann. 5th edition. 2006

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

In accordance with the new adjustments to the teaching of official UVEG degrees for the start of the second semester of the 2020-21 academic year, and which is included in the resolution of the Rector of the University of Valencia, of January 28, 20201 ,https://links.uv.es/8kXO6vG we add this generic addendum in the Teaching Guides of the second semester subjects:TEACHING

METHODOLOGY:During the month of February 2021, the teaching of theories and seminars-supervised works, go to synchronous videoconference modality given at the time set by the subject and the group.As of March 1, the teaching modality indicated in the Teaching Guide and in the teaching modalities approved in the Academic Degree Commissions of the months of July 2020 and 11 2020, respectively, will be followed, unless the health authorities and Rectorateindicate a new reduction in presence, in this case it would return to the synchronous videoconference mode.