



## Course guide

# 370033 - OPTOCLI II - Optometry Clinics II

**Last modified:** 22/03/2024

**Unit in charge:** Terrassa School of Optics and Optometry  
**Teaching unit:** 731 - OO - Department of Optics and Optometry.

**Degree:** BACHELOR'S DEGREE IN OPTICS AND OPTOMETRY (Syllabus 2020). (Compulsory subject).

**Academic year:** 2023    **ECTS Credits:** 9.0    **Languages:** Catalan, Spanish

### LECTURER

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### REQUIREMENTS

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To have completed adaptation of glasses  
Having studied children's optometry and strabismus  
Having studied geriatric optometry and low vision  
Having studied Applied Contactology  
Having passed Curricular Block I

## DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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### Specific:

CE14. (ENG) Comprendre els aspectes psicològics en la relació entre l'òptic-optometrista i el pacient. Conèixer el sistema sanitari espanyol i els aspectes bàsics relacionats amb la gestió dels serveis de salut, fonamentalment els que estiguin relacionats amb l'atenció i rehabilitació de la salut. Conèixer i aplicar les tècniques d'educació sanitària i els principals problemes genèrics de salut ocular. Conèixer els principis de salut i malaltia. Capacitat per actuar com agent d'atenció primària visual. Conèixer els fonaments i tècniques d'educació sanitària i els principals programes genèrics de salut als que l'optometrista ha de contribuir des del seu àmbit d'actuació.

CE15. (ENG) Adquirir habilitats de treball en equip com unitat en la que s'estructuren de forma uni o multidisciplinària els professionals i demés personal relacionats amb la salut visual.

CE16. (ENG) Adquirir la capacitat per exercir la professió amb respecte a l'autonomia del pacient, a les seves creences, cultura, determinants genètics, demogràfics i socioeconòmics, aplicant els principis de justícia social i comprnent les implicacions ètiques en un context mundial en transformació.

CE17. Demonstrate knowledge of manifestations of the pathological processes and mechanisms by which the main human diseases are generated. Recognise the types of mechanisms and physiopathological processes that trigger eye diseases. Demonstrate knowledge of the symptoms of visual disorders and recognise the signs associated with them. Recognise alterations that change normal functioning and trigger pathological processes that affect vision. Detect and assess the main ophthalmological disorders to refer patients to an ophthalmologist for examination and treatment. Demonstrate knowledge of manifestations of systemic diseases at the ocular level. Demonstrate knowledge of epidemiological models of the main pathologies.

CE18. Describe and apply the procedures and indications of clinical examination methods and complementary diagnostic techniques. Demonstrate knowledge of current eye surgery techniques and develop the capacity to carry out eye tests, including during pre- and postoperative examinations. Identify and apply new technologies in the field of optometric clinical practice.

CE20. Measure, interpret and treat refractive errors. Describe the sensory and oculomotor mechanisms of binocular vision. Identify the principles of and measure, interpret and treat accommodative and binocular vision anomalies. Demonstrate skills in communication, recording data and writing clinical histories. Demonstrate skills in the interpretation and clinical judgement of results of vision tests, to establish the most suitable diagnosis and treatment. Demonstrate skills in instrumental assessment tests of visual function and eye health. Carry out a complete medical history. Identify, apply and interpret instrumental tests relating to visual health problems. Demonstrate the clinical skills required for the examination and treatment of patients. Examine, diagnose and treat visual anomalies with an emphasis on differential diagnosis. Describe the nature and organisation of types of clinical care. Describe the protocols that are applied to patients.

CE21. (ENG) Dissenyar, aplicar i controlar programes de teràpia visual.

CE24. Identify and apply vision screening techniques to various populations.

CE25. (ENG) Conèixer els aspectes legals i psicosocials de la professió

CE26. (ENG) Pràctiques preprofessionals, amb una avaluació final de competències, i que permeti a l'alumne incorporar els valors professionals i competències dirigits a: aplicar els coneixements adquirits en els mòduls anteriors en establiments d'òptica, clíniques i hospitals, centres de salut, i empreses del sector. Realitzar activitats clíniques relacionades amb la refracció, exploració visual, adaptació de lents de contacte, entrenament visual i baixa visió. Aplicar les tècniques de muntatge de correccions o compensacions visuals en ulleres i possible retoc de lents de contacte. Prendre contacte amb la comercialització dels productes, aprovisionament, emmagatzematge, conservació i informació. Conèixer i aplicar les tècniques de fabricació d'ajudes visuals i instruments òptics i optomètrics. Conèixer els diferents protocols d'actuació en funció del pacient. Conèixer les indicacions i procediment de realització i interpretació de les proves complementàries necessàries en la consulta de visió. Realitzar el protocol d'atenció a pacients a la consulta/clínica optomètrica. Realitzar una història clínica adequada al perfil del pacient. Seleccionar i aplicar correctament en cada cas tots les destreses, habilitats i competències adquirides en optometria. Fomentar la col·laboració amb altres professionals sanitaris. Comunicar i informar al pacient de tots els actes i proves que es realitzaran i explicar clarament el resultat i seu diagnòstic

**Generical:**

CG1. Demonstrate knowledge of, design and apply prevention and maintenance programmes relating to the population's visual health.

CG2. Carry out each stage of visual examinations effectively: medical history, selection and implementation of diagnostic tests, establishment of a prognosis, selection and execution of treatment and, if necessary, preparation of referral reports that establish levels of collaboration with other professionals, to ensure the best possible care for the patient.

CG3. Advise and guide patients and relatives during the entire treatment.

CG5. Give opinions and produce reports and expert reports when necessary.

CG6. Assess and incorporate the technological improvements necessary to properly carry out professional activities.

CG8. Plan and carry out research projects that contribute to the production of knowledge in the field of optometry and disseminate this scientific knowledge via the typical communication channels.

CG9. Expand and update one's professional abilities through continuing education.

CG10. Communicate treatment indications of visual health and their conclusions to the patient, relatives and other professionals involved in the patient's care, adapting to the sociocultural characteristics of each person.

CG11. Locate new information and interpret it in context.

CG12. (ENG) The ability to understand the general structure of optometry and its connection to other specific disciplines and other complementary ones.

CG14. Demonstrate knowledge, skills and abilities in patient healthcare.

CG15. (ENG) Demostrar capacitat per actuar com a agent d'atenció primària visual.

CG16. Participate effectively in both single-discipline and multidisciplinary work groups on projects related to optometry.

CG17. (ENG) Incorporar els principis ètics i legals de la professió a la pràctica professional, respectant l'autonomia del pacient, els seus determinants genètics, demogràfics, culturals i socioeconòmics, integrant els aspectes socials i comunitaris en la presa de decisions, aplicant els principis de justícia social en la pràctica professional, en un context mundial en transformació.

CG18. (ENG) Adquirir la capacitat per a realitzar una gestió clínica centrada en el pacient, el l'economia de la salut i en l'ús eficient dels recursos sanitaris, així com la gestió eficaç de la documentació clínica amb especial atenció a la confidencialitat.

**Transversal:**

CT7. Foreign language. Demonstrate knowledge of a foreign language, preferably English, at an oral and written level that is consistent with graduates' future needs.

CT4. (ENG) Teamwork. The ability to work as a member of an interdisciplinary team, as just another member or in a leadership role, who can contribute to developing projects pragmatically and with a sense of responsibility and make commitments that take into account the resources that are available.

CT9. (ENG) Pràctica basada en evidència

**TEACHING METHODOLOGY**

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MD2 - Active methodologies in the classroom (project-based learning (PBL), case studies, role-playing games, cooperative learning, ...)

MD3 - Practical solving class, with the participation of students, of practical cases and/or exercises related to the contents of the subject

MD5 - Reading teaching material, texts and articles related to the content of the subject

MD7- Tutorials

MD8 - Resolution of cases with real patients in health facilities.



## LEARNING OBJECTIVES OF THE SUBJECT

1. Competence to apply the different optometric care protocols, with the aim of diagnosing and treating refractive defects and binocular vision disorders in strabismic and non-strabismic patients
2. Competence to detect signs of changes in eye health and to recommend appropriately, in a timely manner, referral to an ophthalmologist.
4. Competence to communicate with the patient, attending to their needs and characteristics, with the aim of making a good identification of the reason for consultation, expectations and effectively communicating the solution proposal in each of the cases.
10. Knowledge and competence in the application of evidence-based decision-making methods, within the framework of the professional activity of the optician-optometrist.

## STUDY LOAD

Type	Hours	Percentage
Hours small group	67,5	30.00
Self study	135,0	60.00
Hours medium group	22,5	10.00

Total learning time: 225 h

## CONTENTS

### Theory

#### Description:

Specific current theoretical topics are developed that have implications in the clinical criteria for diagnosis, follow-up and treatment of different optometric and pathological visual dysfunctions, as:

- 1.- Myopia control
- 2.- Pseudomyopia
- 3.- Latent hypermetropia
- 4.- Amblyopia
- 5.- Glaucoma
- 6.- Age-related macular degeneration
- 7.- Diabetic retinopathy

### Clinical Sessions

#### Description:

- Clinical sessions, of 4 hours, where real patients will be attended to from agreements signed by the Faculty of Optics and Optometry of Terrassa (FOOT) with different Municipal Institutes of Social Services (IMSS) and external patients. The work carried out by the students will always be supervised by professors in the clinical field.

#### Specific objectives:

Evaluation, diagnosis, assessment and selection of the most suitable optometric treatment, management of the solution proposed to the patient.  
Assessment, detection and management of patients with eye health disorders

### Seminars

#### Description:

Presentation of clinical cases carried out in the clinical sessions.  
Presentation of bibliographic reviews of optometric subjects.



## ACTIVITIES

### Theory

**Full-or-part-time:** 55h

Theory classes: 20h

Self study: 35h

### Clinical Sessions

**Description:**

Attendance at 14 clinical sessions

Patient management, from reception to follow-up in treatments or subsequent visits, management of information in the patient database and management of clinical reports.

**Full-or-part-time:** 96h

Laboratory classes: 56h

Self study: 40h

### Clinical Seminars

**Description:**

Presentation of clinical cases carried out in the clinical sessions.

These cases must be contrasted by bibliographic references.

**Full-or-part-time:** 44h

Practical classes: 10h

Laboratory classes: 4h

Self study: 30h

### name english

**Description:**

The subject CLINICAL OPTOMETRY II participates in the competences of the European diploma in the areas of:

B8 "Refraction. Knowledge and Practical" in the competences number 3,5,6,7,10 and 11 with a weight of 3,0 ECTS.

B10 "Ocular Motility and Binocular Vision. Knowledge and Practical" in the competences number 1,2,3,4,5 and 6 with a weight of 2,0 ECTS.

B 12B "Investigative Techniques. Knowledge and Practical" in the competences number 1,2,3,4,5 and 6 with a weight of 2,0 ECTS.

B 14B "Refractive Surgery. Knowledge and Practical" in the competences number 1 with a weight of 0.2 ECTS

C 12C "Refractive Surgery. Knowledge and Practical" in the competences number 1,2,3,4,5,6,7,8,9 and 10 with a weight of 0,4 ECTS

C 14C "Refractive surgery. Knowledge" in the competences number 1 with a weight of 0.2 ECTS.

C 24 "Abnormal Ocular Conditions. Knowledge and Practical" in the competences number 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16 and 17 with a weight of 0.2 ECTS

D 25 "Communication. Knowledge and Practical" in the competences number 1,2,3 and 4 with a weight of 0,5 ECTS

D 26 "Professional Conduct. Knowledge and Practical" in the competences number 1,2,3,4 and 5 with a weight of 0,5 ECTS



### Ocular Health Practical

**Description:**

Contact tonometry and indirect ophthalmoscopy practices are performed using different techniques under the supervision of an ophthalmologist.

There are two 2-hour sessions on Wednesdays from 12:00 to 14:00.

These practices are compulsory and do not count towards passing the course.

**Full-or-part-time:** 10h

Self study: 10h

### Practicum Portfolio

**Description:**

During the Degree Studies each student must perform a minimum of 150 patients.

Twenty of these must be written in the form of a clinical case with sufficient detail to demonstrate an adequate level of optometric care. Of these 20 cases:

â□□ 5 primary care optometric reviews that include at least:

â□ª 2 BV anomalies.

â□ª 1 low vision

â□ª 1 pediatric (â□□ 5 abnormal ocular conditions (pathologies): include at least: 3 referrals (referral reports).

â□□ 5 Contact lens cases: include at least: 1 RGP fitting.

â□□ 5 Dispensings (a range of different types of frames and lenses).

In the Clinical Optometry II practicum students will be required to write and submit a minimum of 2 dispensing cases (throughout the first 4 weeks of the course) and a minimum of 2 clinical cases primary care or pathological conditions with visual involvement (at least 1 of them adding the referral format to another specialist).

**Full-or-part-time:** 20h

Theory classes: 20h

## GRADING SYSTEM

Continuous evaluation:

- (1) Clinical management of patients treated. (10%)
- (2) Clinical care: continuous evaluation of all cases attended. (45%)
- (3) Clinical cases: presentation, defense and debate of clinical cases. (25%)
- (4) Seminars: debate of specific topics. (20%)
- (5) Ocular Health Practicals. Mandatory, not scoring.

In the event of suspending the subject, you will have the option to recover it through a reevaluation exam that will be carried out according to the general conditions established for each course by the UPC's Academic Regulations for Undergraduate and Master's Studies (NAGRAMA) and the particulars established by the FOOT with the following conditions:

1. You can only submit to the reevaluation if the overall grade obtained for the subject is equal to or higher than 3
2. Students with the grade Not Presented (NP) cannot take advantage of the reevaluation option.
3. The reevaluation will consist of a written exam (30%) and clinical practice exam (70%)

If the reevaluation exam is passed (with a score equal to or higher than 5) the final grade of the subject will always be 5. Otherwise, the highest grade between the previous evaluation and the reevaluation will be maintained.



## EXAMINATION RULES.

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In the case of partial or total copying in any of the evaluations of the subject, the provisions of the General Academic Regulations of the UPC will be applied:

“Irregular actions that can lead to a significant variation in the grade of one or more students constitute a fraudulent performance of an evaluation act. This action entails the descriptive qualification of suspense and numeric of 0 of the act of evaluation and of the subject, without prejudice to the disciplinary process that may arise as a consequence of the acts carried out.

If the student considers the decision to be incorrect, she can file a complaint through an instance before the director or director or the dean or dean of the educational center and, if the answer does not satisfy her, she can file an appeal before the rector or rector. The total or partial reproduction of academic or research papers, or their use for any other purpose, must have the explicit authorization of the authors.

It corresponds to the director or director or the dean or dean of the teaching center to resolve the allegations on aspects not included in the regulations.

## BIBLIOGRAPHY

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### Basic:

- Optometry and vision science: the journal of the American Academy of Optometry [on line]. Hagerstown, Md.: Lippincott Williams & Wilkins, 1989- [Consultation: 24/02/2023]. Available on: <https://ovidsp-dc1-ovid-com.recursos.biblioteca.upc.edu/ovid-a/ovidweb.cgi?&S=MJFLPKDGGACHAMOKPMJBFOIDDAJAA00&Browse=Toc+Children%7cYES%7cS.sh.22.23.28.29%7c2927%7c50>.
- Clinical and experimental optometry: journal of the Australian Optometrical Association [on line]. Carlton, Victoria: Australian Optometrists Association, 1986- [Consultation: 24/02/2023]. Available on: <https://onlinelibrary-wiley-com.recursos.biblioteca.upc.edu/loi/14440938>.
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