

Course guide

370027 - OPTOCLI I - Optometry Clinics I

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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: 2025 **ECTS Credits:** 9.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Auge Serra, Montserrat: <https://futur.upc.edu/persones/t/TW9udHNIcnJhdCBBdWfDqQ==>

Others: Montserrat Auge Serra: <https://futur.upc.edu/persones/t/TW9udHNIcnJhdCBBdWfDqQ==>
Cristina Rovira Gay <https://futur.upc.edu/CristinaRoviraGay>

Salut Albà Arbalat: <https://futur.upc.edu/SalutAlbaArbalat>
Marta Alberich Angulo
Maria Ferraz Abad
Enrique Ordiñaga: <https://futur.upc.edu/persones/t/RW5yaXF1ZSBvcnRpw7FhZ2E=>
Sergi Ruiz Megias
Alicia Aleson Carbonell <https://futur.upc.edu/AliciaAlesonCarbonell>

REQUIREMENTS

Have to take Glasses Adaptation
Having enrolled in children's optometry and strabismus
Have registered Geriatric Optometry and low vision
Having enrolled in Applied Contactology
Have passed Curricular Block 1

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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'opotmetrista 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 comprenent 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 els 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 els resultats i el 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.

CG4. Critically reflect on the clinical, scientific, ethical and social issues involved in the professional practice of optometry, understand the scientific foundations of optics and optometry and critically evaluate terminology, clinical trials and research methods related to optics and optometry.

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:

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.

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

CT9. (ENG) Pràctica basada en evidència

TEACHING METHODOLOGY

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

MD5. Reading of didactic material, texts and articles related to the contents of the subject.

MD7. Tutorials

MD8. Resolution of cases with real patients

LEARNING OBJECTIVES OF THE SUBJECT

1. Competence to apply the different optometric care protocols, with the aim of diagnosing and treating refractive defects and alteration of binocular vision in strabismic and non-strabismic patients.
2. Competence to detect signs of alteration of eye health and to adequately recommend, within the deadline and in the appropriate form, referral to the 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 and expectations and to effectively communicate the proposed solution in each case.
10. Knowledge and competence in the application of evidence-based decision-making methods, within the framework of the professional activity of the optician or optometrist.

STUDY LOAD

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

Total learning time: 225 h

CONTENTS

THEORETICAL CONTENTS

Description:

The most relevant visual/ocular conditions to be able to act as visual primary care agents are presented in the form of clinical cases.

Related activities:

- Obligatorio 1: written test
- Obligatorio 2: written test
- Obligatorio 3: Grup work

Full-or-part-time: 62h 30m

Practical classes: 22h 30m

Self study : 40h

Clinical Contents

Description:

11 clinical sessions, of 4 hours, where real patients are treated who come 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 is always supervised by teaching staff from the clinical field.

1 clinical case seminar session.

1 workshop session. Social Activity

Related activities:

- Mandatory 4: continuous evaluation of all cases treated.
- Mandatory 5: preparation of clinical reports for referral to other health professionals.
- Mandatory 6: Presentation of two written and developed cases, + individual presentation of a practical case seen during the clinical sessions. (10%)

Related activities:

Compulsory related activities

Description:

- Mandatory 1: written test on differential diagnosis and treatment of the conditions worked on (15%).
- Mandatory 2: written test on differential diagnosis and treatment of the conditions worked on (20%).
- Mandatory 3: group work (10%). The students are organized into groups and each of the groups must prepare a paper on an eye condition or systemic disease with the most relevant visual implications.
- Mandatory 4: continuous evaluation of all cases treated. The clinical skills of visual examination, reasoning in the diagnosis, treatment and introduction of all the data in the clinical history are evaluated (40%).
- Compulsory 5: preparation of clinical referral reports to other health professionals. The student must submit reports for each patient he/she has seen during the clinical sessions. The student return information for each report he/she has drawn up (5%)
- Mandatory 6: Presentation of 3 written and developed cases, + individual presentation of a practical case seen during the clinical sessions. (10%)

Full-or-part-time: 107h 30m

Laboratory classes: 67h 30m

Self study : 40h

ACTIVITIES

Compulsory Linked Activities

Description:

- Compulsory 1: written test on differential diagnosis and treatment of the conditions studied (15%).
- Compulsory 2: written test on differential diagnosis and treatment of the conditions studied (20%).
- Compulsory 3: group work (10%).

Students are organized into groups and each group must prepare a piece of work on an ocular condition or systemic disease with the most relevant visual implications.

- Compulsory 4: continuous evaluation of all cases treated.

Clinical skills of visual examination, reasoning in diagnosis, treatment and entering all data into the clinical history are evaluated (40%).

It is essential to attend a minimum of 85% of the practical sessions to obtain the grade for the activity.

- Compulsory 5: preparation of clinical reports for referral to other health professionals.

Students must submit reports for each patient they have seen during the clinical sessions.

Students will receive feedback on each report they have prepared (5%).

Failure to complete 2 of the assignments for this activity will be scored as "0".

- Compulsory 6: presentation and individual exposition of a clinical case seen during the clinical sessions. (10%)
- Compulsory 6: Clinical Portfolio: Students must present 3 complete clinical cases.

It is recommended that they be of the following types:

- 1. Case of Binocular Vision Anomalies.
- 2. Case on some pathology that must include the referral report to the corresponding professional.

Full-or-part-time: 60h

Theory classes: 20h

Laboratory classes: 40h

EUROPEAN DIPLOMA IN OPTOMETRY COMPETENCES

Description:

This module contributes to the European Diploma in Optometry competencies indicated in the following link:

https://drive.google.com/drive/folders/1bwmHBsvkrGnY63DfXAnWZB_i0I2pXa-I?usp=drive_link

CLINICAL PORTFOLIO

Description:

During the Degree Studies, each student must have carried out a minimum of 150 clinical cases that must be recorded in the Academic Activity Record (RAC) between the 3rd and 4th year, of which 20 of these cases must be written in clinical case format and with all kinds of details, and will form part of the Clinical Portfolio.

In the Clinical Optometry 1 (OC1) subject, each student must present three primary care cases:

2 of Binocular vision anomalies and 1 of ocular conditions or ocular pathology, which must be accompanied by a referral report to other professionals.

These three cases will form part of the Clinical Portfolio and will be reviewed and controlled by a teaching professor.

Full-or-part-time: 45h

Self study: 45h

GRADING SYSTEM

Continued evaluation.

The grade for the subject is obtained as follows:

- Written test on differential diagnosis and treatment of the conditions worked on (15%)
- Written test on differential diagnosis and treatment of the conditions worked on (20%)
- Group work (10%). The students will be organized into groups and each of the groups will have to carry out a project on an eye condition or systemic disease with more relevant visual implications.
- Continuous evaluation of all cases treated. The clinical skills of visual examination, reasoning in the diagnosis, treatment and the introduction of all the data in the clinical history will be evaluated (40%). It is essential to attend a minimum of 85% of the practical sessions in order to obtain a grade for the activity.
- Elaboration of clinical reports for referral to other health professionals. The students will have to hand in reports on each of the patients they have seen during the clinical sessions. They will receive feedback on each report completed. (5%)
- Presentation of two written and developed cases, and individual presentation of a practical case seen during the clinical sessions. (10%)

The evaluation of transversal skills (4,7,9): These skills will be evaluated with the final mark of the subject.

The evaluation of the competences of the European diploma will be evaluated with the final mark of the subject.

To obtain the final mark of the subject it is necessary to have completed all the mandatory tasks.

There is no reassessment

EXAMINATION RULES.

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

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

If the student considers the decision to be incorrect, he or she can file a complaint with the director or the dean of the educational center and, if the answer does not satisfy him or her, he or she can file an appeal with the rector.

The total or partial reproduction of academic or research works, or their use for any other purpose, must have the explicit authorization of the authors.

It is up to the director or the dean of the educational center to resolve allegations about aspects not included in the regulations."

BIBLIOGRAPHY

Basic:

- Salmon, John F. Kanski, oftalmología clínica: un enfoque sistemático. 9ª ed. Barcelona: Elsevier España, 2021. ISBN 8491138935.
- Rosenbloom, Alfred A. Rosenbloom & Morgan's vision and aging [on line]. St. Louis: Butterworth Heinemann, 2007 [Consultation: 21/03/2023]. Available on: <https://www-sciencedirect-com.recursos.biblioteca.upc.edu/book/9780750673594/rosenbloom-and-morgans-vision-and-aging>. ISBN 9780750673594.
- Scheiman, Mitchell; Wick, Bruce. Clinical management of binocular vision: heterophoric, accommodative, and eye movement disorders [on line]. 5th ed. Philadelphia, PA: Wolters Kluwer Health, 2020 [Consultation: 24/07/2024]. Available on: <https://oce-ovid-com.recursos.biblioteca.upc.edu/book?SerialCode=02148837>. ISBN 9781496399731.
- Richter Ettinger, Ellen; Rouse, Michael W. Clinical decision making in optometry. 1º. Boston: Butterworth-Heinemann, cop. 1997. ISBN 0750695714.