

**COURSE DATA****Data Subject**

<b>Code</b>	34312
<b>Name</b>	External internships
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	18.0
<b>Academic year</b>	2019 - 2020

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1207 - Degree in Optics and Optometry	Faculty of Physics	4	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1207 - Degree in Optics and Optometry	18 - External internship in Optics and optometry	External Practice

**Coordination**

<b>Name</b>	<b>Department</b>
ESTEVE TABOADA, JOSE JUAN	280 - Optics and Optometry and Vision Sciences

**SUMMARY**

External Practices of the Optics and Optometry Degree are the practical application of all the knowledge acquired throughout the Degree in all subject-matter. They are in the second quarter of the last year of the Degree to ensure that the student had access to all the necessary knowledge to be able to attend real patients.

The practices begin on the first day of the second quarter and they have an duration of 20 hours per week in a schedule that will be marked according to the number of students enrolled and the availability of the place where the practices are carried out.



The students will attend real patients supervised by professional optometrists. The objective is to achieve dexterity attending optometric patients in all basic aspects: graduation, contact lenses adaptation, binocular vision analysis ... We want to get professionals with a real vision of the problems and their interrelations, so we prepare their future incorporation into the work and develop in a practical way the competences established in the degree.

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

Students must have at least 180 ECTS, and 24 of them must be from the subjects of Optometry or Contactology at the moment of enrollment.

Students who have only two subjects to obtain the Degree (Final Thesis and External Practices are not matters to take account), and these two subjects they have previously been enrolled in any previous year, can request the advance at the Tuition, and they can make them in the first quarter.

The subject requires knowledge of all the optometric matters of the Degree, as

## OUTCOMES

### 1207 - Degree in Optics and Optometry

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- To apply the knowledge acquired in the previous modules in Optical establishments, Clinics and Hospitals and Companies of the sector.
- To carry out clinical activities related to refraction, visual exploration, contact lens fitting, visual training and low vision.



- To apply the techniques of mounting corrections or visual compensation in glasses and possible touch-up of contact lenses.
- To make contact with the commercialization of the products, supply, storage, conservation and information.
- To know and to apply manufacturing techniques for visual aids and optical and optometric instruments.
- To know the different protocols of action depending on the patient.
- To know the indications and procedure for carrying out and interpreting the complementary tests necessary in the vision consultation.
- To carry out the patient care protocol in the optometric clinic / clinic.
- To take a clinical history appropriate to the patient's profile.
- To select and to apply correctly in each case all the skills, abilities and competencies acquired in Optometry.
- To encourage collaboration with other healthcare professionals.
- To communicate and to inform the patient of all acts and tests to be performed and clearly explain the results and their diagnosis.
- To know, to assess and to apply a gender perspective in the scientific and professional field.

## LEARNING OUTCOMES

### Learning outcomes

The student must achieve an adequate level of clinical skill in the application of all the usual procedures developed in the optometric clinic and learned in the theoretical and practical sections in simulated patients in the teaching received at the Optometry and Optometry Degree in the next:

- Know how to defend the optometrist - patient relationship.
- Data collection in the case analysis, determination of the main complaint and inference of the steps to follow later.
- Handling optometric scanning equipment.
- Application of tests used in optometric exploration.
- Analysis of the results obtained in the anamnesis and the exploration.
- Learn to perform the differential diagnosis of the analyzed optometric case.
- How to perform a diagnostic clinical impression with the available data.



- Decision making regarding the optometric problem of the patient.
- How to evaluate if a solution to the main complaint of the patient has been provided.
- Follow-up of the optometric case. Know when to transfer the patient to other professionals.
- Writing reports on the optometric situation of the patient.
- Know how to prepare and participate in a clinical session as a means of assisting in the diagnosis of the case.
- In the case of developing in companies in the optical sector, the student must have acquired the skills taught in the company.

Regarding social and transversal skills:

- Learn to work in an organized way.
- Establish work plans that allow to obtain the desired results in the most direct way.
- Ability to understand and synthesize the problems in order to reach a solution.
- Provide original solutions.
- Develop cooperation skills with other professionals. Rigor when assessing the work done by oneself.
- Encourage the critical spirit and encourage the spirit of overcoming wrong results.
- Awareness of the ethical component and the deontological principles of the exercise of the profession.
- Value and apply the fundamental rights of equality between women and men in the workplace

## DESCRIPTION OF CONTENTS

### 1. CLINICAL TASKS

Anamnesis, refraction, visual exploration, contact lens adaptation, visual training and low vision. Techniques to compensate visual deficiencies with goggles and possible retouching of contact lenses. Application of the different action protocols based on the patient. Carry out a clinical history appropriate to the patient's profile.

### 2. OPTICAL TASKS

Optical projects development. Manufacture of optical elements development. Other aspects related to the activity of the company.



## WORKLOAD

ACTIVITY	Hours	% To be attended
Internship		100
Development of individual work	10,00	0
Preparation of evaluation activities	20,00	0
Preparing lectures	5,00	0
Seguimiento y tutorización de Prácticas externas	270,00	0
<b>TOTAL</b>	<b>305,00</b>	

## TEACHING METHODOLOGY

The methodology that will be applied in this matter will be clinical or technological activities in work hours of a company or clinical entity from Monday to Friday (except other times indicated by the clinical center or Company), and at the second semester of the course until a total of 270 hours. Attendance is mandatory for all practices. In the case of non-attendance, days must be recovered on other dates specified by the clinical entity. There are three different modalities for the development of the External Practices:

- 1.- External Practices that the student will provide in the Optometric Clinic of the "Lluís Alcanyís" Foundation of the University of Valencia. This place was mainly created to offer clinical training to the students of the Degree of Optics and Optometry and of the Master's Degree in Advanced Optometry and Vision Science.
- 2.- Possibility, if it is applicable, of external practices outside of our country in visual attention cooperation centers that are indicated in a timely manner.
- 3.- Proposing, if it is necessary, the development of External Practices project. Its viability will be considered in the CAT of the Degree of Optics and Optometry.

## EVALUATION

The evaluation of external practices will be carried out following the these criteria:

- Attendance to the practices: the attendance will not score for the note, but it will provide a suitable or non-suitable to pass the subject. Not attendance to the whole of the practices will be non-suitable score and therefore, a fail in the subject. In non-suitable case, the student will repeat all the practices in another academic course.





- Assessment of external tutors: this part will mean 30% of the final mark of the subject. It will be calculated based on the valuation of items by each of the external tutors who have been with the student during the period of practices. These items will evaluate the use of the students' practices, aptitudes and attitudes when dealing with a real case, organizational capacity, initiative, responsibility, behavior with patients, interest, interpretation and evaluation of data, punctuality, integration in the work group, order, assimilation of new technologies, etc.
  - Report of the academic tutor of the student at the University: this part will mean 20% of the total grade of the subject. The academic tutor will base his / her note in a personal interview with the student and in the correction of a memory that the student will give to the tutor. This memory will be done following the protocol of the regulations of the external practices of the University of Valencia, adding the development of three clinical cases seen during the practice period. The academic tutor will process the note of external tutors and their own note, which will be reflected in the academic tutor's report.
  - Oral presentation and defense of one of two clinical cases with a Tribunal. On the date indicated in time and form within the period established by the University of Valencia, the student must prepare two clinical cases, in order to defend one of them before the Tribunal. The clinical case will be chosen by the Tribunal randomly. On the indicated date (at the same date of the memory delivery), the student will send the Tribunal a writing copy of the two clinical cases that he/she has prepared for the defense, in order the Tribunal has time to read them before the exhibition. The Tribunal may ask about the case in order to assess the student's knowledge after the oral presentation. They will also assess the written part of the case presented by the student.
- This part will represent the remaining 50% of the total note of the subject. In this part, if the note is less than 5 points, the student will be suspended (although the average with the other parties was greater than 5), and it will be necessary to repeat the oral defense in the next academic call. In this second oral defense, the student must prepare the not exposed clinical case in the first oral presentation and the case presented to the academic tutor in the report. The new Tribunal will choose, the case to be defended randomly. The second oral presentation proceeding will be the same as the first oral presentation.

## REFERENCES

### Basic

- NORMATIVA DE PRÁCTICAS EXTERNAS DE LA UNIVERSITAT DE VALENCIA



## ADDENDUM COVID-19

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

### Modo de evaluación propuesto por situación de alerta sanitaria debida a COVID-19

La Clínica Optométrica de la UV valida la asistencia y el cumplimiento del 50% de las horas totales indicadas en Verifica para poder ser evaluado. Para los/as estudiantes que no alcancen el 50%, la Clínica propondrá trabajos sobre casos clínicos que puedan realizarse online, y en función del porcentaje de horas restantes. Siguiendo la instrucción de la UV, si el/la estudiante ha cursado previamente prácticas externas extracurriculares o tiene experiencia profesional, tras presentar y revisar la documentación justificativa se considera que ha cumplido con el 50% de las horas.

Hasta el momento de la interrupción de las prácticas todos los estudiantes han visto en modo presencial un único caso clínico, y algunos de ellos/as han revisado algún caso clínico adicional de manera online. Y durante el periodo de prácticas presenciales, el contacto frecuente ha sido con los tutores externos.

El confinamiento decretado como consecuencia del estado de alarma complica la ejecución de las defensas ante tribunales, aun siendo éstas en modo online, por las dificultades personales que cada estudiante puede presentar en estos momentos.

En base a esto proponemos que la evaluación se realice mediante:

- **(50%) Tutores externos:** media ponderada entre las diferentes evaluaciones de los tutores externos. Estas evaluaciones califican la consecución de las siguientes competencias: anamnesis, exploración, retinoscopía, cover test, subjetivo, identificación de alteraciones, redacción de informes, manejo y adaptación de lentes de contacto, relación optometrista-paciente y casos clínicos.
- **(50%) Tutor/a académico/a,** que basará su calificación en:

**(10%)** Revisión de contenidos de una memoria de prácticas, siguiendo el modelo propuesto, que deberá ser realizada por el/la estudiante de forma autónoma. Dicha memoria contendrá, además de los contenidos mínimos especificados en el Reglamento de Prácticas Externas de la UV, información relativa al único caso clínico que los/as estudiantes han podido ver durante las prácticas presenciales. Para la revisión de los contenidos de la memoria, el/la tutor/a tendrá en cuenta las siguientes pautas:

- ¿Se ha obtenido suficiente información del paciente?
- ¿Se han realizado todas las pruebas necesarias para valorar el caso clínico?
- ¿Los diagnósticos tentativos que se proponen son acordes a la historia clínica del paciente y a los resultados obtenidos en la exploración realizada?
- ¿Se han observado y discutido posibles inconsistencias en los resultados?
- ¿Se ha realizado una discusión crítica sobre la forma en la que ha sido tratado el caso clínico?



**(40%)** Entrevista realizada con el/la estudiante, de modo online, en la que el/la tutor/a valorará el trabajo realizado. En esta entrevista el/la tutor/a preguntará sobre el caso clínico incluido en la memoria, y valorará los siguientes aspectos acerca de la práctica clínica y de los resultados de aprendizaje que han sido alcanzados:

- Capacidad para comprender y sintetizar los problemas planteados por el paciente.
- Soltura para decidir qué pruebas se deben realizar, y para justificar los motivos por los que se realizaron unas pruebas y no otras.
- Habilidad para analizar los resultados obtenidos en la exploración clínica y tomar decisiones ante el problema optométrico del paciente.
- Capacidad para valorar si se ha aportado solución a la queja principal del paciente, fomentando el espíritu crítico e incentivando el espíritu de superación ante resultados no satisfactorios.
- Conocimiento del componente ético y los principios deontológicos del ejercicio de la profesión, entendiendo cuándo es importante y necesario derivar al paciente a otros profesionales.

Para poder hacer media entre ambas partes será necesario que el/la estudiante haya obtenido al menos un 5/10 en cada una de las partes (evaluación tutores externos y evaluación tutores académicos).