COURSE DATA

DATA SUBJECT

Code: 34305
Name: Contactology practicum
Cycle: Undergraduate Studies
ECTS Credits: 7.5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1207 - Degree in Optics and Optometry	Facultat de Física	3	Annual

SUBJECT-MATTER

Degree	Subject-matter	Character
1207 - Degree in Optics and Optometry	Contactology	COMPULSORY

COORDINATION

LOPEZ ALEMANY ANTONIO

SUMMARY

The course Contactology Practicals aims for students to carry out, step by step, the process of fitting soft and rigid contact lenses to simulated patients (classmates) with spherical and astigmatic ametropias. The goal is for them to know how to make decisions at each step to achieve a proper and safe adaptation.

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 completed or be currently enrolled in Contactology. It is advisable that they possess the knowledge provided in Optometry I and II (both theoretical and practical), Ophthalmic Optics, Human and Ocular Anatomy, Human and Ocular Physiology, Ocular Biology, and Optical Materials.

COMPETENCES / LEARNING OUTCOMES

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To adapt contact lenses and ocular prostheses to improve vision and the external appearance of the eye.

To apply the clinical procedures associated with the adaptation of contact lenses to different refractive and ocular dysfunctions.

To detect, to assess and to solve anomalies associated with the wearing of contact lenses.

To know and to use clinical and instrumental protocols in the exploration associated with the adaptation of contact lenses.

To know the geometry and physicochemical properties of the contact lens and to associate them with the ocular and refractive characteristics.

To know the maintenance, diagnosis and treatment solutions and to associate them with the lenticular and ocular characteristics.

To know the properties of the types of contact lenses and ocular prostheses.

DESCRIPTION OF CONTENTS

1. Introduction. Hygienic standards. Slit lamp

It will be explained how the practical sessions will be conducted. Instructions and practice will be provided on how to prevent biological or inert contamination of contact lenses during handling. Students will be introduced to the operation of the slit lamp or ocular biomicroscope by learning its components and how to use its illumination, filters, image magnification, and the orientation of its observation and illumination elements.

2. Preliminary examination for contact lens fitting.

Completion of all pre-fitting phases, including recording patient information, anamnesis, examination, parameter measurement, etc., and determining whether contact lens fitting is feasible and, if so, which lenses should be considered the first choice for each specific case.

3. Contact lens handling and control of their parameters and condition.

How to handle lenses for insertion and removal from the ocular surface. How to clean, disinfect, and condition these lenses for safe use. How to assess the parameters and cleanliness status of contact lenses.

4. Soft contact lens fitting.

Based on the data obtained in Practice 2, the student will select the soft hydrogel lens deemed appropriate for the case according to criteria explained in the Contactology course. They will then assess whether the lens is suitable; if not, they will replace it with another lens having appropriate parameters based on their observations.

5. Rigid contact lens fitting.

Based on the data obtained in Practice 2, the student will select the rigid lens deemed appropriate for the case according to criteria explained in the Contactology course. They will then assess whether the lens is suitable; if not, they will replace it with another lens having appropriate parameters based on their observations.

6. Soft toric contact lens fitting.

Based on the data obtained in Practice 2, the student will select the toric soft lens with a stabilization system deemed appropriate for the case according to criteria explained in the Contactology course. They will then assess whether the lens is suitable by observing the stabilization system indicator; if not, they will replace it with another lens having appropriate parameters based on their observations.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Other activities	75,00
Total hours	**75,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	10,00
Individual or group project	78,00
Independent study and work	18,50
Preparation of lessons	6,00
Preparation for assessment activities	0,00

Resolution of case studies	0,00
Total hours	**112,50**

TEACHING METHODOLOGY

This course is predominantly practical. Students will fit various materials and designs of contact lenses using their classmates as patients, whom they will have previously examined to determine suitability for contact lenses and, if appropriate, which lens design is most suitable. Subgroups of four students will be formed so that each student fits soft and rigid spherical lenses and the selected toric soft lenses on their three peers. Students will have the necessary diagnostic instruments, the contact lenses for each practical session, and the supplies for their care and maintenance.

EVALUATION

Students cannot pass the course if they miss more than 4 justified sessions out of the total 13 that comprise the course.
The assessment consists of several components, weighted as follows for the final grade:

- 10 % based on evaluation of the practical journal.
- 30 % based on a practical¿aspects exam.
- 60 % based on the practical exam in which students demonstrate their practical knowledge and skills.

After completing these components, to pass the course students must achieve a total of at least 5 points, provided they score at least 3 out of the possible 6 points on the practical exam, or higher relative to the maximum of 10.
For the second exam session, the grades for the practical journal evaluation and the practical¿ aspects exam are retained, and students must retake the practical exam if necessary.

REFERENCES

Basic references:

- López Alemany A., Serés Revés C., Durban Fornieles J.J., Company Vidal J.L. *Lentes de contacto: teoría y práctica.* Editorial Ulleye - 2019 - ISBN 978-84-949495-6-2

- González-Cavada Benavides J. *Atlas de lámpara de hendidura y lentes de contacto.* Grupo ICM de Comunicación - 2015 - ISBN 978-84-939656-8-6

- López Alemany A. (ed.) *Superficie ocular y biomateriales: lentes de contacto.* Editorial Ulleye - 2011 - ISBN 978-84-937878-3-7