

26817 - Contactology

Syllabus Information

Academic year: 2024/25

Subject: 26817 - Contactology

Faculty / School: 100 - Facultad de Ciencias

Degree: 297 - Degree in Optics and Optometry

ECTS: 16.0

Year: 3

Semester: Annual

Subject type: Compulsory

Module:

1. General information

The general objective of the Contactology subject is that the student acquires the necessary skills and knowledge to perform the adaptation of contact lenses in a safe and effective way. To do so, the student should know the anatomo-physiology and microbiology of the eye, the clinical and instrumental protocols for contact lens fitting, the properties and geometry of the different types of lenses and the maintenance methods available on the market, as well as the interactions of contact lenses with the ocular surface. Additionally, the student should be able to detect and solve the problems associated with wearing contact lenses.

These approaches and objectives are aligned with the following

2. Learning results

- Handle the different instruments used in the characterization of the ocular surface and fitting of contact lenses and in obtaining the necessary data for ocular evaluation pre/post fitting of contact lenses.
- Know the functional anatomy of the ocular surface and annexes, as well as the physiology of the cornea and tear, and identify anomalies associated with wearing contact lenses or that contraindicate their use.
- Choose the best contact lens, maintenance solution and modality of use depending on the patient, perform the fitting, proper assessment and follow-up, teach the patient how to handle and maintain the contact lens, and solve the different problems associated with the wearing of the contact lens.
- Properly inspect, insert, remove and maintain contact lenses.
- Know how to deal with patients, take a clinical history and present/defend a clinical case.
- Know, detect and advise on the interactions between the use of contact lenses and the use of drugs and alterations in the patient's health.
- Know the different contact lenses and maintenance systems available in the market.

3. Syllabus

1. History and materials for the manufacture of contact lenses.
2. Pre-adaptation studies of contact lenses.
3. Dry eye and contact lens wear.
4. Geometry and corneal topographic analysis maps.
5. Applied corneal anatomy and physiology.
6. CL wear and its consequences on the anterior segment.
7. Design and geometries of different types of CL. Procedures for its adaptation and control.
8. Microbial and acanthamoeba keratitis.
9. Contact lens care systems and solutions.
10. Pharmacology and interaction with contact lenses.

11. Keratoconus and irregular corneas.
12. Nocturnal orthokeratology.
13. Therapeutic and cosmetic lenses.
14. Controversial adaptations and post-surgery.

4. Academic activities

Acquisition of fundamental knowledge of Contactology. (9 ECTS)

- Participative master classes in large groups.
- Tutoring.
- Performance and/or exhibition of individual or small group work.
- Role-based practices for the resolution of typical cases through Moodle.
- Development of contents and exercises through Moodle.

Acquisition of practical knowledge in Contactology (7 ECTS)

- Small group laboratory practice (peer learning).
- Practices in a computer classroom.
- Tutorials
- Case study-based learning.
- Seminars of companies in the sector.
- Performance and/or exhibition of individual and/or teamwork

5. Assessment system

The student must demonstrate that they have achieved the expected learning results by means of the following assessment activities.

In order to pass the subject, it is essential to pass a training test in the slit lamp examination of the anterior ocular segment.

Evaluation of face-to-face students:

Attendance to all practices is mandatory. However, a maximum of 2 practices may be missed if the absences are due to a justified reason.

- Evaluation of the Practical part, by means of different tests (practical exams, practical cases with real patient, etc.), 50% of the final grade.
- Evaluation of the Theoretical part, by means of a multiple-choice exam, 50% of the final grade. An exam will be held in February, so there will be two types of evaluations. Type A grade = 20% February exam + 80% June exam. Type B grade = 100% June exam.
- The average of the grades for the theoretical and practical parts only applies when both are higher than 5.

Global evaluation:

Theoretical-practical exams with weighting in the final grade according to the distribution of credits by areas and by teaching activities of the subject.

6. Sustainable Development Goals

- 3 - Good Health & Well-Being
- 4 - Quality Education
- 12 - Responsible Production and Consumption