

Academic Year/course: 2024/25

# 26751 - Transfusions in Medicine

# **Syllabus Information**

Academic year: 2024/25

**Subject:** 26751 - Transfusions in Medicine **Faculty / School:** 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

**ECTS**: 4.0 **Year**: 5

Semester: First semester Subject type: Optional

Module:

#### 1. General information

The subject is the student's first contact with a specific therapeutic procedure that is not included in any other compulsory subjects of the degree.

The approach of the subject is to familiarize the student with transfusion therapeutics and to be able to get to know the indications of the different components derived from human blood, as well as the possible risks and side effects.

These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 2030 Agenda.

# 2. Learning results

The student, in order to pass this subject, must demonstrate the following results...

To know the legal regulations governing blood transfusion in the EU and therefore in our country.

To know the basic notions of immunohematology that govern the safety of transfusion therapy with regard to compatibility of blood components.

To be able to establish the indication for transfusion of any of the blood components.

To perform the basic checks of the transfusion process to ensure the maximum safety of a therapeutic procedure frequently used in hospitals.

To be able to detect, treat and report adverse effects and/or transfusion errors produced in the transfusion procedure.

To acquire sufficient knowledge to comply in the most appropriate way with the European standards on Optimal use of blood components.

## 3. Syllabus

- 1. Transfusion Medicine: Concept, objectives and historical background.
- 2. Structure of Transfusion Medicine in Spain:
- 3. Importance of the Blood Bank in transfusion safety:
- 4. Importance of the Transfusion Service in transfusion safety:
- 5. Transfusion clinical process
- 6. Massive transfusion. Transfusion in Neonatology and Haemolytic Disease of the Foetus and New-born.
- 7. Transfusion Alternatives
- 8. Transfusion therapy and alterations of haemostasis
- 9. Hemovigilance.
- 10. Quality Systems in Transfusion Medicine and the concept of Optimal Use.

#### Practical classes:

- 1. Blood and Tissue Bank of Aragon Procedures
- 2. Transfusion Service Procedures (H.C.U. Lozano Blesa)

### 4. Academic activities

Classroom teaching activity (45%) 1.80 ECTS (45 hours), to be distributed as follows:

1. Large group (45%) 0,81 ECTS (20,25hours): 10 theoretical classes

- 2. Small groups (45%) 0.81 ECTS (20.25 hours): 5 Seminars (10 hours) and 2 Practices (10 hours)
- 3. *Evaluation* (10%) 0.18 ECTS (4.5 hours)

Non-face-to-face teaching (55%) 2.20 ECTS (55 hours)

## **DATES AND TIMES OF CLASSES:**

One day a week from 4 - 7 pm.

# 5. Assessment system

The learning results obtained will be assessed by means of a final test consisting of a paper that will deal with one of the topics covered during the term. In addition, an evaluation of the subject should be made (with highlights and points to improve).

The grade will be given from 0 to 10 points, and will represent 70 % of the final grade of the subject.

It will also be necessary to attend the practices to be carried out at the B.S.T.A. (Blood and Tissue Bank of Aragon) and at the Transfusion Service of the Lozano Blesa University Hospital.

Attendance will count for 30% of the final grade of the subject.

The grade will be global. Only those papers not submitted will be kept for extraordinary call.

## 6. Sustainable Development Goals

- 3 Good Health & Well-Being
- 4 Quality Education