

Degree	Type	Year	Semester
4317563 Transfusion Medicine and Cellular and Tissue Therapies	OB	1	1

Contact

Use of Languages

Name: Sílvia Sauleda Oliveras/Arturo Pereira Saavedra Principal working language: English (Eng)

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Other comments on languages

The primary language used during the course will be English. However, the use of Spanish will also be allowed. The course materials will also be in English.

Teachers

Sílvia Sauleda Oliveras: Studied biology at the University of Barcelona and earned her doctorate in 1999. She has worked in the Hepatology Unit of the Vall d'Hebron University Hospital in Barcelona, where she specialized in hepatitis virus research. Since 2000 she has been the director of the Transfusion Safety Laboratory of the Banc de Sang i Teixits in Catalunya (Spain), where she is responsible for detecting infectious diseases in blood donations. In addition, she is currently developing research projects on hepatitis B and C and emerging infectious diseases transmissible by transfusion.

Arturo Pereira Saavedra: Graduated in 1980 from the University of Barcelona (UB) and earned his doctorate in 1989 (UB). After completing his residency at the Hospital Clínic Barcelona, he specialized in hematology and hemotherapy in 1995. He has developed his entire professional and scientific career as a hematologist in the Hemotherapy and Hemostasis Service and in the Blood Bank at the Hospital Clínic Barcelona, where he has worked in blood donation, clinical apheresis, immunohematology, and blood transfusion. Currently, he is a senior consultant at the Hospital Clínic and an associate professor of medicine at the UB.

Maria Piron: Studied biology and, after completing her doctoral thesis in molecular virology in France, worked as a postdoctoral researcher in the Liver Diseases research group at the Hospital Vall d'Hebron (Barcelona, Spain). She has been working at the BST for 12 years and currently holds the position of assistant doctor at the Transfusion Safety Laboratory of the Banc de Sang i Teixits.

Prerequisites

Level B2 or equivalent in English.

Objectives and Contextualisation

In this module students study the complete process of blood donation: promoting donation, donation procedures (donor selection criteria, apheresis, complete blood donation), laboratory analysis of blood and finally different methods for obtaining blood components for transfusion.

Competences

- Integrate knowledge and confront the complexity of formulating opinions from information that, being incomplete or limited, may include reflections on the social and ethical responsibilities associated with the application of their knowledge and opinions.
- Communicate conclusions and knowledge and final reasoning that support them to a specialized and non-specialized public in a clear and unambiguous way.
- To manage blood, cell, and tissue donations ethically and efficiently.
- Design safe strategies in the donation process and preparation of blood components in accordance with European regulations.
- Integrate scientific and technical knowledge in accordance with a commitment to ethics and the code of conduct.
- Take reasoned decisions based on critical, objective analysis.

Learning Outcomes

1. Identify and describe the variables and main needs for the selection and loyalty of donors.
2. Select and apply the inclusion / exclusion criteria of donors according to country regulations.
3. Analyse and plan promotion and donation actions based on donor's feedback.
4. Design interviews and physical examinations of donors based on scientific and medical consensus criteria.
5. Identify the basic concepts of European regulations on donation and how they are applied in daily practice.
6. Classify different types of donations and the factors that affect the quality of the blood products.
7. Interpret the significance of the various infection markers.
8. Describe the different methods for the preparation of blood products.
9. Describe the quality indicators of blood products.

Content

1. Promotion of blood donation.
2. Blood donation.
3. Blood donation laboratory.
4. Preparation of blood components.

Methodology

The methodology for this course is active and constructive. It does not only contemplate the content but also reading, reflecting and applying knowledge to reasonably close situation to create meaningful learning.

Students will work on real life examples and case studies, reflecting on complex and relatively unstructured situations to find adequate solutions.

Faithful to the proposed methodology, students form the centre of the learning process and generate knowledge by interacting significantly with their peers, with the teaching materials and with the environment. This programme not only teaches training in a virtual environment but also allows them to experience their learning every day.

At the beginning of the unit, the teacher will present a learning plan to the group with specific objectives, learning activities, the necessary resources and recommended deadlines for each activity.

The dates for carrying out the activities are recommended in order to be able to follow the course. The only fixed dates are the beginning and end of each teaching unit. This means that students can do their own planning but they must respect the dates for the beginning and the end of each unit.

Students are recommended to work in a continuous and consistent manner and not allow tasks to accumulate around the deadlines, which may lead to haste, undue time pressure and not allow the students to enjoy their learning or carry out additional reflections. Also the course offers group activities which require synchronisation among the group.

Some of the activities must be sent online to the teacher for assessment and receive feedback of progress. Teachers will return the work with comments and together the students can continue to think and learn. The deadline for each of these activities is the end of the teaching unit. Other activities will consist in discussion and working together in shared spaces.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed	50	2	
Discussions			1, 2, 7,
Type: Supervised	75	3	
Case Studies			2, 3, 7
Elaboration of Essay			2, 3, 7
Type: Autonomous	125	5	
Exam			7
Personal Study			1-9
Reading			1-9

Assessment

The module will be assessed on the following activities:

- 1. Open discussion.** Recruitment of donors. This activity counts for 25% of the final grade for module 1. Students are expected to discuss different strategies for recruiting donors and researching normal practices in their countries of origin.
- 2. The SOP for blood donation.** This activity counts for 12.5% of the final grade for module 1. Students must offer standard operating procedures with stages for the traceability of the donor.
- 3. Scheme.** This activity counts for 12.5% of the final grade for module 1. Students must provide a brief description of the critical stages in this process relating to the quality and safety of the donor and the safety and effectiveness of the blood product.
- 4. Algorithm.** This activity counts for 25% of the final grade for module 1. Students are expected to discuss the available safety strategies with respect to the transmission of infectious diseases according to different scenarios.
- 5. Multiple choice test.** This test counts for 25% of the final grade for module 1. The objective of the test is to see whether students are familiar with the quality control procedures for blood components.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Open Discussion	25 %	50	2	1,2
The SOP for Blood Donation	12,5 %	75	3	3,4,5,6
Scheme	12,5 %	125	5	3,4,5,6
Algorithm	25 %	125	5	7,8
Multiple Choice Test	25 %	125	5	9

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