Universitat Autònoma de Barcelona

2019/2020

Blood Donation

Code: 43316
ECTS Credits: 10

Degree	Type	Year	Semester
4314643 Transfusion Medicine and Advanced Cell Therapies	OB	0	1

Contact

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Use of Languages

Principal working language: english (eng)

Other comments on languages

The working language is English but the use of Spanish is also allowed. The course material will also be in English.

Teachers

Sílvia Sauleda Oliveras

Maria Piron

Arturo Pereira Saavedra

Prerequisites

Level B2 in English or equivalent.

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

- Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
- Design and develop research using appropriate methodologies.
- Design secure strategies in the donation process in accordance with European regulation.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Select, attend to and ensure the loyalty of long-term donors.
- Work in multidisciplinary teams.

Learning Outcomes

1. Classify distinct types of donation and the factors affecting blood-product quality.
2. Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
3. Describe distinct methodologies for the production of blood products.
4. Describe the quality indicators of blood products.
5. Design and develop research using appropriate methodologies.
6. Design donor interviews and physical examinations.
7. Evaluate donor questionnaires.
8. Identify key needs in donor selection and loyalty-assurance.
9. Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
10. Interpret the significance of distinct infectious markers.
11. Understand the fundamental concepts of European regulation on donation and how these apply to daily practice.
12. Work in multidisciplinary teams.

Content

1. Introduction.

2. Promotion of blood donation.

2.1. Voluntary vs. Remunerated donation.

2.2. Participation in volunteer associations for the promotion of donation.

3. Blood donation.

3.1. Donor selection criteria.

3.2. Care and information given to blood donors.

3.3. Blood donation.

4. Analysis of the blood donation.

4.1. Detection of infectious diseases.

4.2. Immunohaematological testing of the blood donation.

5. Blood components for transfusion.

5.1. Primary blood fractioning and conservation of blood products.

5.2. Reduction of pathogens in blood products.

5.3. Risk of bacterial contamination in haemoderivates.

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 send 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			
Discussions in the Virtual Campus	39	1.56	5, 8, 10, 9, 2, 12
Type: Supervised			
Elaboration of projects	21	0.84	7, 5, 10, 8, 9, 2, 12
Virtual cases/Problem solving	21	0.84	7, 5, 10, 8, 9, 2, 12
Type: Autonomous			
Personal study	23	0.92	7, 1, 11, 3, 4, 6, 5, 8, 10, 9, 2, 12
Reading articles/Reports of interest/Videos	23	0.92	7, 1, 11, 3, 4, 6, 5, 8, 10, 9, 2, 12
Test/Scheme	23	0.92	5, 10, 9, 2, 12

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
Algorithm	25%	25	1	3, 5, 10, 9, 2, 12
Blood donation SOP	12,5%	15	0.6	7, 1, 11, 6, 5, 9, 2, 12
Multiple choice test	25%	25	1	4, 5, 9, 2, 12
Open discussion: Donor recruitment	25%	10	0.4	5, 8, 9, 2, 12
Scheme	12,5%	25	1	7, 1, 11, 6, 5, 9, 2, 12

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