SUBJECT OUTLINE

1. Programme of study description

1.1.	**THE "CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY**
1.2.	**THE FACULTY OF MEDICINE / THE CLINICAL DEPARTMENT 8 Radiology, Oncology, Hematology**
1.3.	**DISCIPLINE - HEMATOLOGY**
1.4.	**DOMAIN OF STUDY: Healthcare – regulated sector within the EU**
1.5.	**CYCLE OF STUDIES: BACHELOR'S DEGREE**
1.6.	**PROGRAMME OF STUDY: MEDICINE** – ENGLISH TEACHING MODULE

2. Subject description

2.1.	**Name of the subject/compulsory subject/elective subject within the discipline: HEMATOLOGY**						
2.2.	**Location of the discipline:**						
2.3.	**Course tenured coordinator:**						
2.4.	**Practicals/clinical rotations tenured coordinator:**						
2.5. Year of study	**VI – english teaching module**	**2.6. Semester**	XI or XII	**2.7. Type of assessment**	Written and practical examination	**2.8. Subject classification**	Mandatory

3. Total estimated time (hours/semester of didactic activity) – teaching module

Number of hours per week	25 hours	**Out of which: course**	10 hours	**Clinical rotation**	**15** hours
Total number of hours from curriculum	65 hours	**Out of which: course**	26 hours	**Clinical rotation**	39 hours
Distribution of allotted time	3 Weeks	**Out of which lectures**	2 hours / day		**3** hours /day
Study from textbooks, courses, bibliography, and student notes					
Additional library study, study on specialized online platforms and field study					
Preparing seminars / laboratories, assignments, reports, portfolios and essays					
Tutoring					
Examinations					
Other activities					
Total hours of individual study					
Number of credit points					4

4. Prerequisites (where applicable)

4.1. of curriculum	Anatomy, Biochemistry, Physiology, Genetics, Pharmacology, Medical Semiology	
4.2. of competencies	Anamnesis and physical examination of patient	

5. Requirements (where applicable)

5.1. for delivering the course	Classroom, Video Projector, Laptop / PC	
5.2. for delivering the clinical rotation	Departments of Clinical Hematology / laboratories	

6. Acquired specific competencies

Professional competencies (expressed through knowledge and skills)	- Description of the concepts, theories, and fundamental data regarding the occurrence of diseases, signs and symptoms characteristic of each disease useful for the orientation of the clinical diagnosis in hematology - Description of the mechanisms of action of drugs, indications, contraindications and adverse effects of the therapeutic resources used in medical practice as well as knowledge of resuscitation maneuvers in first aid / emergency situations in hematology - Correct assessment of the risk of illness or the context of the occurrence of an individual / collective illness, followed by the choice and application of appropriate prophylaxis measures. - Clinical examination of haematological patient - Diagnostic algorithm in anemic / hemorrhagic / thrombotic syndromes - Interpretation results - Establishment of a hematological diagnosis, on clinical and paraclinical basis - Correct treatment of anemia / treatment principles in malignant haematological diseases	
Transversal competencies (of role, of professional and personal development)	• Identification of the roles and responsibilities in a multidisciplinary team; application of an effective relationship and work techniques within the team and in relation to the patient. • Effective use of information sources, assistive communication and training resources (Internet portals, specialized software applications, databases, on-line courses, etc.) both in Romanian and in an international language • Ability to communicate with the patient with malignancy and with his / her relatives. • Patient approach with terminal illness. • Forming critical spirit, empathy, professional deontology and assuming responsibility	

7. Subject learning objectives (based on the scale of acquired specific competencies)

7.1. General learning objective	
7.2. Specific learning objectives	

8. Content

8.1. Course	**Teaching methods**	**Observations**
1. Hematopoiesis, Anemias: general considerations and classification.	Direct exposure electronic media (PowerPoint presentation)	2 hours
2. Macrocytic Anemias	Direct exposure electronic media (PowerPoint presentation)	2 hours
3. Microcytic Anemias	Direct exposure electronic media (PowerPoint presentation)	2 hours
4. Hemolytic Anemias	Direct exposure electronic media (PowerPoint presentation)	2 hours
5. Acute Leukemias (1)	Direct exposure electronic media (PowerPoint presentation)	2 hours
6. Acute Leukemias (2) Chronic Lymphoproliferative Syndromes .	Direct exposure electronic media (PowerPoint presentation)	2 hours
7. Monoclonal Gammopathies	Direct exposure electronic media (PowerPoint presentation)	2 hours

8. Non- Hodgkin Lymphomas	Direct exposure electronic media (PowerPoint presentation)	2 hours
9. Hodgkin Lymphomas; Chronic myeloid leukemia	Direct exposure electronic media (PowerPoint presentation)	2 hours
10. Myeloproliferative neoplasm	Direct exposure electronic media (PowerPoint presentation)	2 hours
11. Hemostasis: Physiology and Lab tests	Direct exposure electronic media (PowerPoint presentation)	2 hours
12. Pathology of Haemostasis (1)	Direct exposure electronic media (PowerPoint presentation)	2 hours
13. Pathology of Haemostasis (2)	Direct exposure electronic media (PowerPoint presentation)	2 hours

8.2. Clinical rotation	**Teaching methods**	**Observations**
Direct presentation of clinical cases / haematological patients from Hematology Departments	Direct interaction with the patient / medical history / Clinical examination of patient / Laboratory evaluation / Blood disease recognition based on specific investigations.	31 hours
Presentation and interpretation of normal and pathological blood count analysis (types of diseases)	Discussing at the patient's bed	2 hours
Normal and pathological haemostasis analysis: interpretation	Case presentations, the practical implications of these laboratory analyzes	3 hours
Presentation of modern instruments in hematological diseases: cytogenetics / FISH, flow cytometry, molecular biology	Case presentations, the practical implications of these laboratory analyzes	3 hours
Direct presentation of clinical cases / haematological patients from Hematology Departments	Direct interaction with the patient / medical history / Clinical examination of patient / Laboratory evaluation / Blood disease recognition based on specific investigations.	31 hours

Bibliography for course and clinical rotation

Department manual: Hematologie Clinică, Anca Roxana Lupu, Ana Maria Vladareanu, Daniel Coriu, Editura UMF Carol Davila, Sept 2017
Compendiu de Specialitati Medico- Chirurgicale (pentru rezidentiat), sub redactia Victor Stoica, Viorel Scripcaru, Editura Medicala, 2016
A beginner's guide to blood cells / Barbara J. Bain. – 2nd ed.
Practical Haematology; Dacie and Lewis; Eleventh Edition, 2012
Essential Haematology; Victor Hoffbrand , Paul Moss , John Pettit, 7th Edition (2016)

9. Corroboration of the subject content with the expectations of the representatives of the epistemic community, professional associations, and major employers in the field of the programme of study

Appropriate training at the end of the hematology internship provides the premises for admission to the residency program and the conduct of a successful medical activity.

10. Assessment

Type of activity	**Assessment criteria**	**Assessment methods**	**Assessment weighting within the final grade**
Course	Knowledge of theoretical notions in hematology	Written exam	60%
Clinical rotation	Activity during clinical practice	daily attendance at the internship / discussion	10%

		with the assistant professor	
	- Diagnostic orientation for patients with haematological disease (anamnesis, clinical examination, investigation plan); diagnosis formulation; treatment principles for emergency presentation or routine presentation. - interpreting an blood counts bulletin	Practical examination with the assistant professor	30%

Minimum performance standard
Minimum 50% for each evaluation component

Date of filing
08 Sept 2022

Signature of the course tenured coordinator

Signature of the seminar tenured coordinator

Date of approval in the Council of the Department:
08 Sept 2022

Signature of the Head of the Department