



DISCIPLINE SHEET

1. Data about the programme

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY
1.2.	FACULTY OF MEDICINE
1.3.	DEPARTMENT 8 Radiologie, Oncologie, Hematologie
1.4.	DISCIPLINE MCS-HEMATOLOGIE (CLINICA SI DE LABORATOR) SPITALUL UNIVERSITAR DE URGENTA BUCURESTI
1.5.	DOMAIN OF STUDY: HEALTH – Sectorally regulated within the European Union
1.6.	CYCLE OF STUDIES: LICENCE
1.7.	PROGRAMME OF STUDY: MEDICINE– ENGLISH MODULE

2. Data about discipline

2.1.	Name of the discipline in the educational plan: HEMATOPOIETIC STEM CELL TRANSPLANTATION AND CELL THERAPIES				
2.2.	Discipline code:				
2.3.	Discipline type: (FD/SD/CD): CD				
2.4.	Discipline regimen (MD/OPD): OPD				
2.5.	The holder of the course activities: PROF. UNIV. DR. HORIA BUMBEA (56 ani, vechime activitate didactică – 24 ani); SEF LUCR. DR. CIUFU CRISTINA MARIA (50 ani, vechime activitate didactică – 18 ani); SEF LUCRARI DR CRISTINA ELENA MARINESCU (50 ani, vechime activitate didactica 18 ani)				
2.6.	The holder of the seminar activities: ASIST UNIV. DR. DAN SEBASTIAN SOARE (36 ani, vechime activitate didactică – 7 ani) ASIST. UNIV. DR. DELIA SOARE (32 ani, vechime activitate didactică – 1 an); ASIST UNIV. DR. DANIELA DIACONESCU (33 ani, vechime activitate didactică – 2 ani)				
2.7. Year of study	VI	2.8. Semester	I or II	2.9. Type of evaluation (E/C)	E

3. Total estimated time (hours/semester of didactic activity) an self preparation/study

3.1. Nr hours/ week	2 hours	From which:	3.2. lecture	1,5 hours	3.3 seminar/laborator	0,5 hours/ week
3.4. Total number of hours from curriculum	14 hours	From which:	3.5. lecture	10 hours	3.6. seminar/laborator	4
Evaluation (nr. hours):						
II. Self preparation / study						
Time allocation						46 hours
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						
Preparation for presentations or checks, preparation for the final examination						

Examinations		
Other activities		
3.7. Total hours individual study		46
3.8. Total hours per semester (3.4+3.7.)		60
3.9. Number of credit points		2 credits

4. Prerequisites (where applicable)

4.1. of curriculum	Anatomie, Biochimie, Fiziologie, Fiziopatologie, Imunologie, Genetica, Farmacologie, Semiologie Medicală
4.2. of competencies	-

5. Conditions (where applicable)

5.1. to conduct the lecture	PowerPoint presentations, use of multimedia systems, and projector
5.2. to conduct the seminar / laboratory	Equipped with the necessary apparatus for conducting practical activities

6. Learning outcomes

Knowledge	Skills	Responsibility and autonomy
Description of concepts, theories, and fundamental notions regarding the production of diseases, signs and symptoms characteristic of each condition useful for guiding clinical diagnosis in hematology Description of the mechanisms of action of drugs, indications, contraindications and adverse effects of therapeutic resources used in medical practice, as well as knowledge of resuscitation maneuvers in first aid / emergency conditions in hematology	The 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 a hematological patient Diagnostic algorithm Interpretation of results Establishing a hematological diagnosis, on clinical and paraclinical bases Correct treatment of anemias / of treatment in malignant hematological diseases	It has the ability to suspect a diagnosis He has knowledge about therapies/ molecules, the latest procedures, the concept of stem cell transplantation and cell therapies It can establish a prognosis depending on the pathology particularity the case. He has knowledge regarding mitigation and insurance Measures of patients' quality of life. Know the indications for hematopoietic stem cell transplantation, the types of transplant, the main post-transplant complications, evaluation of a posttransplant patient Know the indications of cellular therapies, the types of cellular therapies, the main complications, the evaluation of a patient after administration cell therapies

7. Course objectives (aligned with the learning outcomes)

7.1. General objective	Familiarization of the student with the specific pathology of the hematological patient with an indication for hematopoietic stem cell
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	transplantation and cellular therapies (clinical aspect, paraclinical and interdisciplinary approach, principles of treatment, particularities of the care of the hematological patient)
7.2. Specific objectives	At the end of the internship, the student must be able to: - examine the patient with hematological disease with the possible indication of transplantation or cell therapy - draw up an algorithm for evaluating the indication of transplantation / cellular therapy - know the management of patients with hematological diseases with hematopoietic stem cell transplantation or cell therapy

8. Contents

8.1. Lecture	Teaching methods	Observations
The biological properties of the hematopoietic stem cell Immunogenetics in allogeneic stem cell transplantation The choice of the donor according to the HLA typing and the source of stem cells. The principles of conditioning Transfusion support in patients with stem cell transplantation Supportive therapy in stem cell transplantation	Direct exposure electronic support (Power Point presentation)	2 h
Early post-transplant complications Posttransplantation infectious complications Late complications in post-transplant patients	Direct exposure electronic support (Power Point presentation)	2 h
Reconstitution of immunity after allotransplantation of stem cells Molecular monitoring after transplantation (BMR and Chimerism) Posttransplant immunotherapy of stem cells	Direct exposure electronic support (Power Point presentation)	2 h
General indications in the current practice of auto- and allo-transplantation. Stem cells in regenerative medicine	Direct exposure electronic support (Power Point presentation)	2 h
Cell therapies in hematology. Indications, mechanisms of action, complications, supportive treatment	Direct exposure electronic support (Power Point presentation)	2 h
8.2. Seminar / lab	Teaching methods	Comments
Direct exposure of clinical cases / patients with hematological diseases admitted to the Departments of Hematology and the Bone Marrow Transplantation department Clinical Cases.	Direct exposure electronic support (Power Point presentation). Interactive teaching.	4 h
Recent Bibliography Hematologie Clinică, Anca Roxana Lupu, Ana Maria Vladareanu, Daniel Coriu, Editura UMF Carol Davila, Sept 2017 A beginner's guide to blood cells / Barbara J. Bain. – 2nd ed. Practical Haematology; Dacie and Lewis; Eleventh Edition, 2012 HEMATOLOGY, Basic Principles and Practice; Hoffman et al, 7th Edition (2018) The EBMT Handbook, Hematopoietic Stem Cell Transplantation and Cellular Therapies, 2019 Indications for haematopoietic stem cell transplantation for haematological diseases, solid tumours and immune disorders: current practice in Europe, Duarte et al, Bone Marrow Transplantation, 2019		

9. Evaluation

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage in the final grade
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9.4. Lecture	Knowledge of the theoretical notions of the subject	Theoretical exam	100%
9.5. Seminary/ practical activity	Activity during the clinical internship - immunophenotyping indication	Presence registry, case analysis	
9.5.1. Individual project (if applicable)			
9.6. Minimum performance standard			
Minimum 50% in each component of the assessment			

Date of completion:

10 Septembrie 2025

Signature of the course holder

Prof. Univ. Dr. Horia Bumbea

Signature of the laboratory holder

As in Staff Establishment

**Date of approval by the
Department Council**

**Signature of the Department
Director**

Prof. Univ. Dr. Daniel Coriu