



## **DISCIPLINE SHEET**

### **1. Study programme**

<b>1.1.</b>	<b>"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST</b>
<b>1.2.</b>	<b>FACULTY OF MEDICINE</b>
<b>1.3.</b>	<b>DEPARTMENT 8: Radiology, Oncology, Hematology</b>
<b>1.4.</b>	<b>DISCIPLINE Hematology Department within the Bucharest Emergency University Hospital</b>
<b>1.5.</b>	<b>STUDY DOMAIN: Health, sectoral regulated within the European Union</b>
<b>1.6.</b>	<b>STUDY LEVEL: I (Bachelor's degree) and II (Master's degree)</b>
<b>1.7.</b>	<b>STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH</b>

### **2. Discipline**

<b>2.1.</b>	<b>Discipline name according to the study curriculum: HEMATO-ONCOLOGIC AND HEMORRHAGIC PATHOLOGY IN THE CURRENT PRACTICE OF THE DENTIST</b>				
<b>2.2.</b>	<b>Discipline code: MD04OP19EN</b>				
<b>2.3.</b>	<b>Discipline type (FD/SD/CD): SD</b>				
<b>2.4.</b>	<b>Discipline optionality (COD/ED/FAD): ED</b>				
<b>2.5.</b>	<b>Lectures tenure: Prof. Univ. Dr. Vladareanu Ana Maria, Lecturer Dr. Mihaela Gaman, Assoc. Prof. Dr. Cristina Mambet</b>				
<b>2.6.</b>	<b>Practical classes / seminar tenure: Teaching Assistant Dr. Iuliana Ignat, Teaching Assistant Dr. Ana Maria Neagu, Teaching Assistant Dr. Daniela Vasile, Teaching Assistant Dr. Andreea Spinu, Teaching Assistant Dr Alina Mititelu, Lecturer Dr. Minodora Onisai</b>				
<b>2.7. Year of study</b>	<b>IV</b>	<b>2.8. Semester</b>	<b>VII</b>	<b>2.9. Evaluation (E/C/V)</b>	<b>C</b>

### **3. Estimated total time (hours/ semester of teaching and training activity /individual study)**

<b>I. University training</b>						
<b>3.1. Number of hours per week</b>	<b>2</b>	<b>from which:</b>	<b>3.2. lecture</b>	<b>1</b>	<b>3.3. practical class/ seminar</b>	<b>1</b>
<b>3.4. Total hours in the study curriculum</b>	<b>28</b>	<b>from which:</b>	<b>3.5. lecture</b>	<b>14</b>	<b>3.6. practical class/ seminar</b>	<b>14</b>
<b>II. Preparation/ individual study</b>						
<b>Time distribution</b>						<b>hours</b>
<b>Study of lecture materials, textbooks, books, study of the minimum recommended bibliography</b>						<b>15</b>
<b>Additional documentation activity in the library, on online platforms</b>						<b>10</b>
<b>Specific preparation activities for projects, practical classes, preparation of assignments, reports</b>						<b>2</b>
<b>Preparation for presentations or evaluations, preparation for the final examination</b>						<b>4</b>
<b>Tutoring activity</b>						<b>1</b>
<b>Other activities</b>						<b>-</b>

<b>3.7. Total hours of individual study</b>	32
<b>3.8. Total hours per semester (3.4.+3.7.)</b>	60
<b>3.9. Number of credits</b>	2

#### 4. Prerequisites (where appropriate)

<b>4.1. curriculum</b>	<ul style="list-style-type: none"> <li>Knowledge of the hematological parameters of a normal blood count ( CBC)</li> <li>Interpretation of abnormalities in a blood count examination.</li> <li>Evaluation and recognition of changes in routine hematological tests that represent hematological emergencies</li> </ul>
<b>4.2. proficiencies</b>	<ul style="list-style-type: none"> <li>Clinical examination of the oral cavity and cervical region in hematological patients.</li> <li>Pre-transplant follow-up and evaluation protocol for hematological patients.</li> <li>Recognition of possible complications in the oropharyngeal area identified during the physical exam of a patient with hematological conditions at onset.</li> <li>Recognition of possible secondary complications from chemotherapy treatment in hematological patients.</li> </ul>

#### 5. Conditions (where appropriate)

<b>5.1. for lecture activity</b>	Lecture hall, video projector, laptop
<b>5.2. for practical class/ seminar activity</b>	Lecture hall, video projector, laptop, organized visit to the Hematology Department of SUUB

#### 6. Learning outcomes\*

<b>Knowledge</b>	<b>Skills</b>	<b>Responsibility and autonomy</b>
<ul style="list-style-type: none"> <li>Explains the pathophysiological mechanisms of the main hemato-oncologic and hemorrhagic conditions that have an impact on dental practice.</li> <li>Describes the oral and systemic clinical manifestations associated with hemato-oncologic diseases and coagulation disorders.</li> <li>Identifies the interdependencies between systemic disease and possible complications during dental treatment, from a multidisciplinary perspective</li> </ul>	<ul style="list-style-type: none"> <li>Applies dental evaluation and management protocols for patients with hemato-oncologic or hemorrhagic diseases.</li> <li>Correctly uses methods to prevent hemorrhagic and infectious risks during dental procedures.</li> <li>Correlates clinical and paraclinical data to formulate patient-specific therapeutic approaches for complex pathologies.</li> </ul>	<ul style="list-style-type: none"> <li>Recognizes the limits of the dentist's competence in managing patients with complex systemic conditions and collaborates with other specialists.</li> <li>Demonstrates responsibility in applying theoretical principles and patient safety measures in dental treatments with hemorrhagic or oncologic risk.</li> <li>Shows autonomy in making routine clinical decisions, while being willing to seek interdisciplinary support when the clinical situation requires.</li> </ul>

## 7. Discipline objectives (correlated with learning outcomes)

<b>7.1. General objective</b>	<p>Familiarizing the student with the complexity of oral manifestations in malignant hematological diseases, and in hematological disorders associated with hemostasis abnormalities</p> <ul style="list-style-type: none"> <li>• Incidence of these conditions in routine practice</li> <li>• General clinical aspects, with a focus on the specific clinical presentation of each hematological pathology in the oral cavity</li> <li>• Paraclinical and interdisciplinary approach</li> <li>• Treatment principles</li> <li>• Particularities in the care of hematological patients</li> </ul>
<b>7.2. Specific objectives</b>	<p>At the end of the internship, the student should be able to:</p> <ul style="list-style-type: none"> <li>• Correctly interpret clinical manifestations and hematological analyses associated with a hematological pathology in the oral cavity.</li> <li>• Know the management algorithm for therapeutic purposes and the preventive measures related to these pathologies that impact oral health.</li> </ul> <p>Recognize the need for an interdisciplinary approach.</p>

## 8. Contents

8.1. Lecture	Teaching methods	Observations
Generalities, classification of benign and malignant hematologic diseases, approach to the hematologic patient. Review of the course syllabus and the regulations regarding the student's professional activity	<b>Teaching project:</b> <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Information analysis</li> <li>• Demonstration</li> <li>• Heuristic conversation</li> <li>• Guided dialogue through interview</li> <li>• Questionnaire-based interview</li> </ul>	N/A
Oral manifestations encountered in patients diagnosed with acute leukemia, chronic leukemia, and chronic myeloproliferative neoplasms – management of oral complications associated with mucositis and secondary thrombocytopenia	<b>Classroom</b> <b>Documentation:</b> <ul style="list-style-type: none"> <li>• PowerPoint presentation</li> <li>• Course materials (printed format)</li> </ul>	N/A
Oral manifestations encountered in patients diagnosed with multiple myeloma and complications associated with bisphosphonate therapy used in onco-hematologic conditions – recognition, risk factors, and management of oral complications	<b>Technical equipment:</b> <ul style="list-style-type: none"> <li>• Broadband Internet connection</li> <li>• Video projector</li> <li>• Projection screen</li> </ul>	N/A
Graft-versus-host disease secondary to allogeneic stem cell transplantation – classification, multidisciplinary	<b>If the course activity cannot take place in a face-to-face format, online platforms will be used asynchronously:</b> <b>Cloud/Online – Practical work support:</b>	N/A

<p>approach, and management of complications of this condition affecting the oral cavity.</p>	<ul style="list-style-type: none"> <li>• Educational platforms: Google G-Suite, Moodle</li> </ul>	
<p>Primary and secondary hemostasis disorders – specific investigations, classification of the main hemorrhagic syndromes; oral manifestations encountered in hemostasis disorders. Oral manifestations associated with Rendu-Osler disease – general aspects, investigations, and multidisciplinary approach</p>		N/A
<p>Oral manifestations associated with hemophilia – general aspects, classification, multidisciplinary approach, and management of the hemophilic patient – particularities in dental practice.</p> <p>Oral manifestations associated with von Willebrand disease – general aspects, classification, investigations, and multidisciplinary management of the patient, with specific considerations in dental practice.</p>		N/A
<p>Anticoagulant therapy – implications in the current clinical practice of the dentist, with particular considerations for hematologic patients undergoing anticoagulant treatment.</p>		N/A

#### Recent bibliography:

1. A beginner's guide to bloodcells / Barbara J. Bain. – 2nd ed.
2. Practical Haematology; Dacie and Lewis; Eleventh Edition, 2012
3. Essential Haematology; Victor Hoffbrand , Paul Moss , John Pettit, 7th Edition (2016)
4. Burkett's Oral Medicine – Michael Glick Shelley & Burkett's Oral Medicine, 13th Edition
5. Color Atlas of Common Oral Diseases – Langlais, Miller, Nield-Gehrig
6. Dental Management of the Medically Compromised Patient – James W. Little Elsevier
7. Practical Hemostasis and Thrombosis – Nigel Key, Michael Makris, David Lillicrap
8. Hemostasis and Thrombosis: Basic Principles and Clinical Practice – R.W. Colman

8.2. Practical classes/ seminar	Teaching methods	Observations
<p>Clinical cases of the main types of anemia (nutritional anemias, hypochromic microcytic anemias, megaloblastic anemias, congenital and</p>	<p><b>Teaching project:</b></p> <ul style="list-style-type: none"> <li>• Lecture</li> <li>• Information analysis</li> <li>• Demonstration</li> </ul>	N/A

<p>acquired hemolytic anemias – spherocytosis / thalassemia, aplastic anemias) – specific features in the oral cavity, particular approaches in dental practice.</p>	<ul style="list-style-type: none"> <li>• Heuristic conversation</li> <li>• Guided dialogue through interview</li> <li>• Questionnaire-based interview</li> </ul>	
<p>Clinical cases – Oral manifestations encountered in patients diagnosed with acute leukemia, with oral complications associated with mucositis.</p>	<p><b>Classroom</b></p> <p><b>Documentation:</b></p> <ul style="list-style-type: none"> <li>• PowerPoint presentation</li> <li>• Course materials (printed format)</li> </ul> <p><b>Technical equipment:</b></p> <ul style="list-style-type: none"> <li>• Broadband Internet connection</li> <li>• Video projector</li> <li>• Projection screen</li> </ul>	<p>N/A</p>
<p>Clinical cases – Oral manifestations associated with classic chronic myeloproliferative neoplasms (chronic myeloid leukemia, polycythemia vera, essential thrombocythemia, primary myelofibrosis) and chronic lymphoproliferative neoplasms.</p>	<p><b>If the course activity cannot take place in a face-to-face format, online platforms will be used asynchronously:</b></p> <p><b>Cloud/Online – Practical work support:</b></p> <ul style="list-style-type: none"> <li>• Educational platforms: Google G-Suite, Moodle</li> </ul>	<p>N/A</p>
<p>Clinical cases – Oral manifestations encountered in patients diagnosed with multiple myeloma and complications associated with bisphosphonate therapy used in onco-hematologic conditions.</p>		<p>N/A</p>
<p>Hemostasis tests – Clinical and practical applicability of tests for evaluating primary and secondary hemostasis.</p>		<p>N/A</p>
<p>Clinical cases – Oral manifestations associated with thrombocytopenias – features in the oral cavity and specific considerations in dental practice.</p>		<p>N/A</p>
<p>Clinical cases – Oral manifestations associated with Rendu-Osler disease, von Willebrand disease, and Hemophilia – features in the oral cavity and specific considerations in dental practice.</p>		<p>N/A</p>
<p><b>Recent bibliography:</b></p> <ol style="list-style-type: none"> <li>1. Hoffbrand's Essential Haematology – A.V. Hoffbrand, P.A.H. Moss, J.E. Pettit Oxford, last available</li> <li>2. Burkett's Oral Medicine – Michael Glick Shelley &amp; Burkett's Oral Medicine, 13th Edition</li> <li>3. Color Atlas of Common Oral Diseases – Langlais, Miller, Nield-Gehrig</li> </ol>		

4. Dental Management of the Medically Compromised Patient – James W. Little, Elsevier
5. Practical Hemostasis and Thrombosis – Nigel Key, Michael Makris, David Lillicrap
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## 9. Assessment

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of final grade
<b>9.4. Lecture</b>	The final assessment focuses on evaluating the knowledge and skills acquired throughout the semester. It aims to assess the ability to answer correctly, analytical and professional reasoning skills, as well as attention to detail.	Colloquium – 5 essay-type questions or according to the course methodology.	60%
<b>9.5. Practical classes/seminar</b>	The final evaluation is focused on assessing the knowledge and skills acquired during the semester. It aims to evaluate the ability to provide correct answers, analytical and professional reasoning skills, as well as attention to detail.	Active participation	40%
<b>9.5.1. Individual project (if any)</b>	N/A	N/A	N/A
<b>Minimum performance standard</b>			
It is necessary for the student to identify situations or potential hematologic pathologies with severe progression, manifesting in the oral cavity, including situations that may endanger the patient's life (e.g., newly diagnosed acute leukemia, severe hemorrhagic manifestations, etc.).			