

# SYLLABUS

The academic year when the cycle of instruction is commenced 2019-2025

<b>Module/course name:</b>	Hematology		<b>Module code</b>	LK.3.E.012
<b>Faculty:</b>	Faculty of Medicine MUL			
<b>Major:</b>	Medical			
<b>Specialty:</b>				
<b>Level of study:</b>	I (Bachelor studies) <input type="checkbox"/> II (Master studies) <input type="checkbox"/> Integrated Master studies <b>X</b> Doctoral studies <input type="checkbox"/>			
<b>Mode of study:</b>	full-time <b>X</b>			
<b>Year of study:</b>	I <input type="checkbox"/> II <input type="checkbox"/> III <b>X</b> IV <input type="checkbox"/> V <input type="checkbox"/> VI <input type="checkbox"/>	<b>Semester:</b>	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <b>X</b> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>	
<b>Module/course type:</b>	obligatory <b>X</b> elective <input type="checkbox"/>			
<b>Language of instruction:</b>	Polish <input type="checkbox"/> English <b>X</b>			
<b>Form of education</b>	<b>Hours</b>			
Lecture				
Seminar	<b>10</b>			
Laboratory class	<b>25</b>			
E-learning				
Practical class				
Internship				
Other				
<b>TOTAL</b>	<b>35</b>			
<b>Student's work input</b> (participation in class, preparation, evaluation, etc.)	<b>Student's hourly workload</b>			
1. In class	<b>35</b>			
2. Student's own work including:				
1 Preparation for class	<b>10</b>			
2 Preparation for partials and finals	<b>15</b>			
Summary of the student's workload	<b>60</b>			
<b>ECTS points for module/course</b>	<b>2</b>			

## Educational objectives:

The aim of the hematology course is learning basic issues related to the pathophysiology, diagnosis and treatment of blood disorders- the lymphoproliferative and myeloproliferative diseases, anemias and bleeding disorders. The student should know and be able to recognize the main symptoms of hematological diseases, to interpret laboratory tests and to know the basis of therapy.

**The matrix of learning outcomes for module/ subject with reference to verification methods of the intended educational outcomes and forms of instruction:**

Learning outcome code	A student who has obtained a credit for the module/course has the knowledge/skill to:	Methods of verifying the achievement of the intended learning outcomes:	Form of instruction  * provide the symbol
E.W7	knows and understands the causes, symptoms, diagnostic principles and therapeutic procedures in respect to most common internal diseases in adults and their complications; f/ disorders of the hematopoietic system, including bone marrow aplasia, anemia, granulocytopenia and aglanulocytosis, thrombocytopenia, acute leukemia, myeloproliferative and myelodysplastic-myeloproliferative tumors, myelodysplastic syndromes, tumors from mature B and T lymphocytes, bleeding diathesis, thrombophilia, life threatening conditions in hematology, blood disorders in diseases of other organs, blood donation and blood therapy, bone marrow transplantation;	Exam at the end of course MCQ of internal medicine	Lectures, Seminars,  Practical classes
E.W23	knows the environmental and epidemiological background of most common human cancers;	Exam at the end of course MCQ of internal medicine	Lectures, Seminars,  Practical classes
E.W24	knows basics of early cancer diagnosis and principles of screening programs in oncology;	Exam at the end of course MCQ of internal medicine	Lectures, Seminars,  Practical classes
E.U1	carries out history taking in adult patient	an extended observation by a supervisor/tutor	Practical classes
E.U3	performs complete and organ-system specific physical examination of adult patient;	an extended observation by a supervisor/tutor	Practical classes
E.U7	assesses patient`s general condition, level of consciousness and orientation	an extended observation by a supervisor/tutor	Practical classes
E.U16	develops plan of diagnostic, therapeutic and prophylactic procedures;	an extended observation by a supervisor/tutor	Practical classes
E.U24	interprets laboratory test results and identifies reasons for deflections from normal;	an extended observation by a supervisor/tutor	Practical classes

E.U38	can keep patient`s medical records	extended observation by a supervisor	Practical classes
E.U30	assists in carrying out of the following medical procedures and treatments: a/ transfusion of blood products and blood components,	an extended observation by a supervisor/tutor	Practical classes
G.W11	knows the principles of doctor-patient confidentiality, medical record keeping, criminal, civil and professional responsibility of a physician;	extended observation by a supervisor	Practical classes

#### **EXAMPLES OF METHODS VERIFYING THE ACHIEVEMENT OF THE INTENDED LEARNING OUTCOMES:**

**In terms of knowledge:** Oral exam (*non-standardized, standardized, traditional, problem-based*).

Written exam – the student produces/identifies answers )*essay, report; structured short-answer questions /SSQ/; multiple choice questions /MCQ/; multiple response questions /MRQ/; matching test; true/false test; open cloze test* )

**In terms of skills:** practical exam; Objective Structured Clinical Examination /OSCE/; Mini-CEX (mini – clinical examination); completion of a given assignment; project, presentation.

**In terms of social competences:**

A reflective essay; an extended observation by a supervisor/tutor; 360-degree assessment (feedback from teachers, peers, patients, other co-workers); self-assessment (portfolio included).

**Course content:** (use keywords referring to the content of each class following the intended learning outcomes):

#### **Seminars**

1. Lymphomas.
2. Acute leukemias.
3. Chronic leukemias.
4. Laboratory and clinic diagnostics of haemorrhagic and thrombotic diathesis.
5. Iron deficiency. The megaloblastic anemias.

#### **Laboratory class:**

1. Introduction to hematology –normal hematological values, physical examination in hematology.
2. Lymphomas – the causes, symptoms, diagnostic principles and therapeutic procedures
3. Acute and chronic leukemias- the causes, symptoms, diagnostic principles and therapeutic procedures
4. Myeloproliferative neoplasms - the causes, symptoms, diagnostic principles and therapeutic procedures
5. Anemias - the causes, symptoms, diagnostic principles and therapeutic procedures
6. Bleeding disorders - the causes, symptoms, diagnostic principles and therapeutic procedures
7. Thrombotic complications - the causes, symptoms, diagnostic principles and therapeutic procedures

#### **Obligatory literature:**

1. Kumar & Clark's Clinical Medicine
2. Harrison's Principles of Internal Medicine

#### **Complementary literature:**

The Bethesda Handbook of Clinical Hematology.

Williams Hematology

**Requirements for didactic aids** (e.g. laboratory, multimedia projector, others...)  
multimedial projector, computer, blackboard

**Conditions for obtaining a credit for the subject:**

The presence and the activity during classes. Exam

**The name and address of the department/clinic where the course is taught (module/course); contact details (phone number/ email address):**

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**Signature of the head of the department/clinic**

  
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**Dean's signature**

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**Date of submission:**