MED 2002 - Hematology

Course Name	Code	Semester	Type of course	Theory (hours)	Work in Group (hours)	ECTS
Hematology	MED2002	III	Mandatory	25	46	5

Faculty, the educational program and education level	Medical Faculty, one-cycle Educational Program "Medicine"
Author (s)	Invited personal **Irina Gagua,** MD, Doctor of Medicine Mob:595 76 87 97; e-mail: irigag1@gmail.com Invited personal **Tunc Fisgin** Mob: Email: TUNC.FISGIN@BAHCESEHIR.EDU.TR Professor **Leila Akhvlediani**, "Bau International University, Batumi", Medical Faculty, Department of Basic Scienses. Mob:593537072;T: +995422212535, Fax:+995422212537 Email: Leila.akhvlediani@bauinternational-uni.ge Consultation day -individually
Educatıonal course format	LECTURE WORK İN GROUP CURACY
Educatıonal course volume	**Total:** 150 acad. hours **Contact hours**: 75 h 1. Lecture – 25 h 2. Group work – 46 h 3. Midterm Exam – 2 h 4. Final Exam -2 h **Independent work** – 75 h
Prerequisites	MED1003 - Cell, Tissue and Organ Systems
The purpose (s) of tutorial course/modules	The aim of the course isto study disorders of of bloodborne system's development and structure, pathmorfology and pathphisiology. To inform medical students about basic, practical and systemic midgomebi of treatment of hematological and hematooncological disorders.
Teaching and learning strategy	**Lectures will be conducted** based on the application of verbal explanation method, demonstration-the method of visual presentation of the information. In order to develop the skills of making conclusions supported by the arguments the students, during the **Group work,** will defend and justify their opinions, when dealing with situation analysis, and analyze critically the situation created by their course mate. The students will also carry out the analysis of the clinical cases, interpret, classify, assess the data and make synthesis by means of connecting and confluencing of the components comprising the separate issues. **When working on the project** the student will use the method of working on the book**.** Besides he/she

	has to get familiarized with publications, process the literature, search for the additional material and present the project in slideshow format. During the **Poster preparation**, students work on the unknown material in the limited time and then present it, also evaluate each other.
Assessment criteria	**Maximum score- 100** **Midterm assessment -60** • Attendance on lectures -K= 0.4 score; • Activity on Group work – 10 score: • Project -10 score • Poster preparation -10 score • **Midterm Exam – 20** Is held in the written test form (test consists of 40 multiple-choice questions, each question is rated as 0.5 score). **Group Work are Assessment Based on the Following Criteria** (maximum 10 points) 10 points - Student has been able to present complete and thorough knowledge of the subject, a substantial amount of detailed and relevant information. Demonstrate considerable depth of understanding of the studied main and additional literature. Bring forward a balanced view of the main arguments on the issues. 9 points - Student has been able to bring forward a consistent number of deductions on most of the topics tackled. make very good comments on the different perspectives on most of the issues. Demonstrates knowledge of the main readers. 8 points - Student has been able to bring forward a consistent knowledge, Has properly developed terminology. Demonstrates knowledge of the main readers. 7 points - Student has been able to present some factual information sufficiently linked with the topic. demonstrate a good understanding of the topics selected. make a good attempt to bring forward a balanced view of some arguments on the issues. Terminology is partially developed. 6 points - Student has been able to make some good comments on the different perspectives on some of the issues. Make poor deductions on most of the topics tackled. analyse some causes and results of human interactivity related to the issues. 5 points - Student has been able to demonstrate inconsistent comments on the different perspectives on some of the issues. Terminology is partially developed. Present mediocre level of knowledge. Make poor deductions. 4 points - Student demonstrates general overview of the topics. Terminology is not developed. Information sufficiently linked with the topic. Demonstrate irrelevant understanding of the literature. 3 points – Student demonstrates general/superficial and inconsistent knowledge of the subject. No sufficient knowledge of the literature. 2 points - Student demonstrates general comments, no knowledge of the terminology, no consistency. 1 point – Student demonstrates insufficient answer, not terminology awareness, chronologic manner of the answer, mostly wrong, no knowledge of literature. 0 point: Student demonstrates not even elementary knowledge of the topics. **Presentation / Project/Poster Grading – Maximum 10 grades** 1. Content - 1;

	2. Problem outline - 1; 3. Review of the literature on the issue -1; 4. Research methods relevance with the research goals - 1; 5. Logical argumentation - 1; 6. Deductions accuracy and correlation with the main text - 1; 7. Visual and technical parts of the material - 1; 8. Reliability of the sources - 1; 9. Accuracy of the cited literature - 1; 10. Language and style accuracy- 1. Students will be admitted to the final examination in case of their scores are not less than 51 points through the midterm exam and final examinations. **Final Exam – 40** Is held in the written test form (test consists of 60 multiple-choice close questions, each question is rated as 0.5 score and 10 open questions each question is rated as 1 score). Students have to score equal or more than 70% from final exam maximum score (40X70/100=28 maximum 28 points from the overall 40) to pass the final examination. Credit will be given to the student if he has collected at minimum 51 scores out of 100. The students' assessment has to be done in the following way: **Positive rate:** • (A) Excellent- 91 or more points; • (B) Very Good- 81-90 points; • (C) Good- 71-80 points; • (D) Satisfactory- 61-70 point; • (E) Enough- 51-60 points; **Negative rate**: • (FX) Failure - 41-50 points, which means that a student needs to work more and an independent and considerable further work is required to pass the exam once again to be re-awarded; • (F) Fail - 40 points or less, which means that the student's diligence is not sufficient and student has to learn the subject all over again. Student can pass the additional exam during the same semester. The time interval between the final and the additional exams should be not less than 10 days
The basic literature	1. Griffin Rodgers. Neal Young. **Bethesda Handbook of Clinical Hematology.** Lippincott Williams and Wilkins. Second edition. 2011. 2. Reinhold Munker, Hillard M. Lazarus, Kerry Atkinson. **BMT DATA BOOK**. Cambridge University Press. 2011.
The auxiliary literature	

The tutorial/learning course content (week by week)

week	Topics	Lecture (hour)	Work in group Appl. (hour)
1	Iron Deficiency , Deficiencies of Vitamin B12, and folate, Hemolytic Anemia [1: 1-35 p];	3	3

	Hemolytic Anemia: Thalassemia and Sickle cell Disorders, Porphyrias, Bone marrow Failure Syndromes [1:35-79p];	3	3
	Myelodysplastic Syndromes, The Myeloproliferative Neoplasms, Neutrophil Disorders and Neutropenias[1:80-115 p].	3	3
	Childhood Hematologic Diseases, Acute Myelogeous Leukemia, Acute Lymphoblastic Leukemia [1:116-159 p];	3	3
	Chronic Myelogenous Leukemia, Chronic Lymphocytic leukemia, Hodgkin's Lymphoma [1:160-195 p];	3	3
	Non-Hodgkin's Lymphoma, Multiple Myeloma, Hematopoetic Stem Cell Transplantation [1:196-246p];	3	3
	Midterm Exam		2
2	Thrombocytopenia, Disorders of Hemostasis, Venous Thromboembolism, Anticoagulation [1: 247-315];	3	3
	Blood Transfusion, Hemochromatosis, Interpretation of Standard Hematologic tests [1:316-400];	3	3
	Basic Principles and Clinical Applications of Flow Cytometry, Molecular Diagnostics in Hematology, Interpretation of Functional Genomics [1: 377-437].	1	5
	Projects presentation		6
	Clinical case points		6
	Clinical Case points		5
16-19	**Final Exam**		2

Learning/training Outcomes

Criteria	Competences
Knowledge and understanding	At the of learning course the students will have a deep knowledge about of the structural and morpho-functional damages of hematopoetic system. Hematologic and hemato-oncologic diseases diagnosis and treatment methods
Ability of knowledge application	The student will be able to: - use the appropriate methods to diagnose the hematologic and hemato-oncologic diseases; - acute leukemia management; - chronic leukemia management

Analysis and Synthesis (ability to do the appropriate conclusions)	Student will be able: -make the preliminary and final diagnosis on the base of clinical and diagnostic data analysis; -disease status estimation; -working out the proper tactics of treatment