Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Biochemistry	HEM113	1.Year/1. Semester / Autumn	2	0	0	3
Prerequisites	None					
Language of Instruction	Turkish					
Course Type	Compulsory					
learning and teachingtechniques of the Course	Laboratory Studies, Lecture, Discussion,Question & Answer,Observation, Team/ Group Work, Experiment, Practise,Brain Storming,Other					
Instructor(s)						
Goal	The aim of the course is to deal with the quantitative and qualitative analysis of body fluids such as blood and urine. The changes in the composition of body constituents under pathological conditions are discussed.					
Learning Outcomes	1. The biological elements are introduced 2.Macromolecules are introduced 3.Structure and functions of Carbohydrates, Lipids, Proteins, Nucleic asides and Vitamins are described 4.Normal and abnormal metabolism are explained 5.To be taught taking samples and sending to laboratory 6.Perspective to laboratory results in the pathological cases 7.Nutritional biochemistry 8. To be taught free radicals and antioxsidant systems					
References	1-Martin D.W., Mayes P.A., Rodwell V.W., Harper's Rewiew of Biochemistry. ISBN 0-87041-036-9, Lange Medical publications,1981,Los Altos,California. 2-Yenson M. İnsan Biyokimyası. ISBN 975-486-009-2, Beta basım yayım dağıtım A.Ş.1988,İstanbul, Turkey. 3-Champe P.C., Harvey R.A. Biyokimya, (Çev: Gür E ve Diğerleri) Nobel Tıp kitabevi,1997,Istanbul, Turkey. 4- Aktümsek A, Nurullahoğlu U.Pratik Biyokimya. ISBN 975-543-042-3,Mimoza, 1996,Konya,Turkey. 5- Yöntem M. Pratik Biyokimya. ISBN 975-8201-61-1,Bizim büro basımevi,2003,Ankara,Turkey.					

Course Outline Weekly:

Weeks	Topics
1. Week	Introduction to Biochemistry/ Laboratory rules
2. Week	Metabolism and biochemical reactions
3. Week	Biological elements and biological functions
4. Week	Biochemistry of blood and urine/ Rules in obtaining samples
5. Week	Introduction to macromolecules/ Functions and structures of carbohydrates
6. Week	Lipids and biological functions
7. Week	Proteins and biological functions
8. Week	**I. MIDTERM EXAM**
9. Week	Vitamins and biological functions
10. Week	Nucleic asides and biological functions
11. Week	Hormones and biological functions
12. Week	Nutritional biochemistry
13. Week	Digestive biochemistry,
14. Week	Absorption biochemistry
15. Week	Absorption biochemistry
16.	**FINAL EXAM**

Evaluation System

Mid-Term Studies	Number	Contribution
Midterm exams	1	%50
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
Total Time To Activities For Midterm		%50
Final works		
Final	1	%50
Homework		
Practice		
Laboratory		
Total Time To Activities For Midterm		%50
Contribution Of Midterm Studies On Grades		%50
Contribution Of Final Exam On Grades		%50
Total		100

ECTS (Student WorkLoad Table)

Activities	Number	Duration	Total Work Load
Course Duration (X14)	14	2	28
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	1	14
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	2	10	20
Final Exam Preparation Time	1	13	13
Total Work Load (hour) / 25(s)	75/25=3		
ECTS	3		

The relationship between learning outcomes and the program qualifications of the courses

Program Qualifications	Learning outcomes				
	L.O.1	**L.O.2**	**L.O.3**	**L.O.4**	**L.O.5**
1. Competent and has the capabilities to fulfill their occupational duties.	5			5	5
2. Knows the theories and models that form the basis of Professional practice.					
3. Has the general knowledge required to be both an individual and a member of the occupation.		4			
4. Carries out nursing practice based on the principles and standards.			5		
5. Meets the health-care needs of the individuals, families and the society with a holistic approach.					
6. Makes use of effective communication.					
7. Utilizes information and care technologies in professional practice and research.					
8. Uses scientific principles and techniques in Nursing practice.					
9. Follows the latest advances and communicates with colleagues in a foreign language.					
10. Behaves according with the professional ethics and values.					
11. Takes the related legislation and regulations into account in Nursing practice.					
12. Follows the politics and regulations affecting the Nursing profession.					
13.Uses the learning-teaching and management processes in Nursing practice.					
14.Uses the life-long learning, problem-solving and critical thinking abilities.					
15.With a sense of social responsibility takes part in studies, projects and some other activities with other team members and other disciplines.					
16.Joins in activities that can contribute to professional development.					
17.Sets as a model for colleagues and the society with their professional identity.					
18.Protects the basic values and social rights.					
Contribution to the level of proficiency: 1. Lowest, **2.** Low / Medium, **3.** Average, **4.** High, **5.** Excellent					