Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
IMMUNOLOGY	**BBM523**	1./2. Semester	3	0	0	5
Prerequisites	None					
Course Language	Turkish					
Course Type	Elective					
Teaching Methods	Lecture, question- answer, demonstration, practice-exercise					
Instructor(s)						
Course Objective	Innovations and recent improvements in the field of fundamental immunology, molecular immunology					
Course Learning Outcomes	1- Follow the current changes and developments in the field of medicine 2- Understanding that the idea of a project can be transformed into an application that can change the world of medicine 3- Having general information about important medical discoveries					
References	1- Basic & Applied Concepts of Immunohematology Kathy Blaney Paula Howard, 9780323074551					

WEEKLY COURSE TOPICS

Weeks	DISCUSSION TOPICS TO BE PROCESSED
1.	Immune system cells
2.	Clinical-laboratory tests used in immunology, principles, evaluation and clinical apply
3.	Lymphoid organs, immune response and other elements involved in this response
4.	HLA system and functions
5.	HLA system and functions
6.	Immune mediators, functions, signaling mechanisms
7.	Immune mediators, functions, signaling mechanisms
8.	**Midterm exam**
9.	Innovations and recent developments in the field of fundamental immunology
10.	Innovations and recent developments in the field of fundamental immunology
11.	Role of immune system in tumor formation and development
12.	Principles of tests used in immunology laboratories
13.	Principles of tests used in immunology laboratories
14.	Immun mediators
15.	**Final Exam**

ECTS / WORK LOAD TABLE

Activities	**Number**	**Duration**	**Total Work Load**
Course	14	3	42
Laboratory			
Practice			
Field Study			
Outclass course work hours (Self working / Teamwork / Preliminary work)	16	3	48
Presentations (Video preparation / Poster preparation / Oral presentation / Focus group discussion / Applying questionnaire/ Observation and report writing)			
Seminars	1	8	8
Project			
Case study			
Role playing, dramatization			
Preparing and criticizing article			
Semester midterm exams	2	10	20
Semester final exams	1	7	7
Total Work Load (hour) / 25(s)	125/25=5		
ECTS	**5**		

EVALUATION SYSTEM

Midterm Studies	**Number**	**Contribution**
Midterm exam	1	%25
Quiz		
Laboratory		
Practice		
Field Study		
Specific practical training (If exists)		
Homework assignment		
Presentation and seminar	1	%25
Projects		
Other evaluation methods		
Total of Midterm Studies		%50
Final Studies		
Final	1	%50
Homework assignment		
Practice		
Laboratory		
Total of Final Studies		%50
Contribution of midterm studies to course grade		%50
Contribution of final studies to course grade		%50
Total Grade		100

RELATIONSHIPS BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Program Qualifications		**Learning Outcomes**		
		LO1	**LO2**	**LO3**
1.	Based on undergraduate level qualifications, it has up-to-date knowledge in the field of Biological and Biomedical Sciences and develops and deepens them.	**4**	**3**	**3**
2.	Have knowledge about information technologies, technical equipment and the devices and instruments that are specific to the field in the field of Biomedical Sciences.	**3**	**3**	**4**
3.	To integrate the information in the field of Biological and Biomedical Sciences with information from different disciplines and to create new information, interpret and analyze by using different research methods and propose solutions.	**5**	**4**	**3**
4.	He writes the report of his research.	**3**	**2**	**3**
5.	Can plan and apply an experimental research	**3**	**4**	**3**
6.	In the field of Biological and Biomedical Sciences, can offers solutions, solves the problems, evaluates the results obtained and applies when necessary.	**3**	**3**	**3**
7.	Makes scientific clinical and / or descriptive research / presentation / publication on priority topics related to Biological and Biomedical Sciences and public health.	**3**	**3**	**2**
8.	Evaluates the knowledge related to Biological and Biomedical Sciences with a critical approach.	**5**	**4**	**4**
9.	Applies the principles of professional development and lifelong learning in the field of Biological and Biomedical Sciences.	**4**	**4**	**3**
10.	Students will be able to discuss and share their knowledge in the field of Biological and Biomedical Sciences in their written, oral and visual form in a systematic manner with current and other groups.	**2**	**3**	**5**
11.	Examines the social relations in the professional environment and the norms that direct these relations from a critical point of view and makes necessary to develop them.	**5**	**4**	**3**
12.	Observes and teaches the social, scientific and ethical values in the stages of data collection, recording, interpretation and announcement in the field of Biological and Biomedical Sciences.	**3**	**3**	**3**

13.	Evaluates the current developments in the field of Biological and Biomedical Sciences in line with national values and realities of the country, including children and families, which are the basic unit of society.	**5**	**4**	**5**
14.	Knows the importance of ethical principles and rules for the individual and society, behaves ethically.	**4**	**4**	**3**
15.	Develops strategy, policy and implementation plans in the field of Biological and Biomedical Sciences and evaluates the obtained results within the framework of quality processes.	**4**	**2**	**3**

Contribution to the level of proficiency: 1: Low **2:** Low/Moderate **3:** Moderate **4:** High **5:** Excellent