

Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
<b>BIOSTATISTICS</b>	BİS 551	1./2.st Semester	3	0	0	5
<b>Prerequisites</b>	None					
<b>Course Language</b>	Turkish					
<b>Course Type</b>	Compulsory					
<b>Teaching Methods</b>	Lecture, Question & Answer, Demonstration, Practice					
<b>Instructor(s)</b>	Prof. Vildan Sümbüloğlu					
<b>Course Objective</b>	The aim of this course is at the end of the course; the role of biostatistics methods and principles in health field, basic concepts; planning and conducting of researches, evaluating and interpreting the results, and getting enough biostatistics knowledge and experience.					
<b>Course Learning Outcomes</b>	<p>At the end of this course, the students are;</p> <ol style="list-style-type: none"> <li>1. To able to express the basic concepts of biostatistics,</li> <li>2. To able to calculate descriptive statistics,</li> <li>3. To able to determine the appropriate type of tables and graphs,</li> <li>4. To able to define the concept and methods of sampling,</li> <li>5. To able to determine the appropriate hypothesis test.</li> </ol>					
<b>References</b>	<ol style="list-style-type: none"> <li>1. Sümbüloğlu Kadir ve Sümbüloğlu Vildan. <b>Biyoistatistik</b>. 16. bs., Ankara, Hatiboğlu Yayınevi, 2014.</li> <li>2. Akdağ Beyza ve Sümbüloğlu Kadir. <b>Önemlilik Testleri</b>, 2010, Hatiboğlu Basım ve Yayımlanma San. Tic. Ltd. Şti.</li> <li>3. Özdamar Kazım. <b>SPSS ile Biyoistatistik</b>. Genişletilmiş Beşinci Baskı, 2003, Kaan Kitapevi.</li> <li>4. Alpar Reha. <b>Spor, Sağlık ve Eğitim Bilimlerinden Örneklerle, Uygulamalı İstatistik ve Geçerlik-Güvenirlilik</b>, 2010, Detay Yayıncılık.</li> <li>5. Çelik Yusuf. <b>Nasıl? Biyoistatistik, Bilimsel Araştırma, SPSS</b>, 2011.</li> <li>6. Dişçi Rian. <b>Temel ve Klinik Biyoistatistik</b>, Yenilenmiş 2. Baskı, 2011, İstanbul Tıp Kitabevi.</li> <li>7. Daniel W.W. <b>Biostatistics A foundation for Analysis in The Health Sciences</b>. 2005, John Wiley and Sons, USA.</li> <li>8. Schork M.A., Remigton R.D. <b>Statistics with Applications to the Biological and Health Sciences</b>. 2000, Prentice Hall, New Jersey, USA.</li> <li>9. Dawson B., Trapp R.G., <b>Basic&amp;Clinical Biostatistics</b>, 2004, McGraw-Hill Companies Inc. Newyork, USA.</li> </ol>					

#### WEEKLY COURSE TOPICS

Weeks	Topics
1	Health care services and biostatistics
2	Frequency distributions, descriptive statistics
3	Table and graph method
4	Sampling
5	Principles of significance tests
6	Independent samples tests
7	Paired samples test
8	<b>Mid-term examination</b>
9	Analysis of variance
10	Analysis of variance
11	Two proportions test, one sample tests
12	Chi-square tests
13	Nonparametric tests
14	Correlation and Regression analysis
15	<b>Final exam</b>

## 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)	14	4	56
Presentations (Video preparation / Poster preparation / Oral presentation / Focus group discussion / Applying questionnaire/ Observation and report writing)			
Seminars			
Project			
Case study			
Role playing, dramatization			
Preparing and criticizing article			
Semester midterm exams	2	10	20
Semester final exams	1	7	7
<b>Total Work Load ( hour) / 25(s)</b>		125/25=5	
<b>ECTS</b>		<b>5</b>	

## EVALUATION SYSTEM

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

RELATIONSHIPS BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS						
Program Qualifications		Learning outcomes				
		L.O.1	L.O.2	L.O.3	L.O.4	L.O.5
1.	To be able to develop knowledge on the level of expertise.	3				
2.	To be able to use theoretical and practical information at the level of expertise.					
3.	To be able to create new information by integrating information came from another discipline.					
4.	To be able to solve problems that requires expertise by using scientific research methods.		4	4	4	4
5.	At the unforeseen complex situations encountered in applications, to be able to develop new strategic approach and to be able to produce a solution by taking responsibility.					4
6.	To be able to transfer current developments and their works to in the field and outside groups as written, verbal and visual in a systematic way.			5		
7.	To be able to use advanced information and communication technologies with the required level of computer software in the field of expertise, and to be able to translate from English into Turkish.					
8.	To be able to develop strategy, policy and implementation plans about the field of expertise and to be able to evaluate the results obtained within the framework of quality processes.					4
9.	To be able to share social, scientific and ethical values by considering them at the stages of data collection, interpretation and announcement in the field of expertise.	4	4	4		4

**Contribution to the level of proficiency:** 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent