

Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Biostatistics	BIS601	1	3	0	0	5
Prerequisites	-					
Course Language	Turkish					
Course Type	Compulsory					
Teaching Methods	Lecture, Question & Answer, Practice					
Instructor(s)						
Course Objective	To emphasize the role of biostatistics methods and principles on health sciences; to teach basic concepts of biostatistics; to give sufficiently biostatistics knowledge in planning, executing, evaluating results and interpreting stages of a research					
Course Learning Outcomes	At the end of this course, the students are; <ol style="list-style-type: none"> able to express the basic concepts of biostatistics, able to calculate descriptive statistics, able to determine the appropriate type of tables and graphs, able to perform the application of theoretical distributions, able to define the concept and methods of sampling, able to determine the appropriate hypothesis test. 					
References	1. Süm Büloğlu Kadir ve Süm Büloğlu Vildan. Biyoistatistik . 16. bs., Ankara, Hatiboğlu Yayınevi, 2014. 2. Akdag Beyza ve Süm Büloğlu Kadir. Önemlilik Testleri , 2010, Hatiboğlu Basım ve Yayımlan San. Tic. Ltd. Şti. 3. Özdamar Kazım. SPSS ile Biyoistatistik . Genişletilmiş Beşinci Baskı, 2003, Kaan Kitapevi. 4. Alpar Reha. Spor, Sağlık ve Eğitim Bilimlerinden Örneklerle, Uygulamalı İstatistik ve Geçerlik-Güvenirlik , 2010, Detay Yayıncılık. 5. Çelik Yusuf. Nasıl? Biyoistatistik, Bilimsel Araştırma, SPSS , 2011. 6. Dişçi Rian. Temel ve Klinik Biyoistatistik , Yenilenmiş 2. Baskı, 2011, İstanbul Tıp Kitabevi. 7. Daniel W.W. Biostatistics A foundation for Analysis in The Health Sciences . 2005, John Wiley and Sons, USA. 8. Schork M.A., Remington R.D. Statistics with Applications to the Biological and Health Sciences . 2000, Prentice Hall, New Jersey, USA. 8. Dawson B., Trapp R.G., Basic&Clinical Biostatistics , 2004, McGraw-Hill Companies Inc. Newyork, USA.					

WEEKLY COURSE TOPICS

Weeks	DISCUSSION TOPICS TO BE PROCESSED
1.	Health Care Services and Biostatistics
2.	Frequency Distributions, Descriptive Statistics
3.	Table and Graph Method
4.	Theoretical Distributions
5.	Sampling
6.	Principles of Significance Tests
7.	Independent Samples Tests-Paired Samples Test
8.	Mid-Term Examination
9.	Analysis of Variance
10.	Two Proportions Test, One Sample Tests
11.	Chi-Square Tests
12.	Nonparametric Tests
13.	Correlation and Regression Analysis
14.	Multivariate Statistical Methods
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)	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
Total Work Load (hour) / 25(s)			125/25
ECTS			5

EVALUATION SYSTEM

Midterm Studies	Number	Contribution
Midterm exam	1	%50
Quiz		
Laboratory		
Practice		
Field Study		
Specific practical training (If exists)		
Homework assignment		
Presentation and seminar		
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	LO4	LO5	LO6
1. Accesses, interprets, and applies advanced and original knowledge in the field of physiotherapy and rehabilitation.	1	1	1	1	1	1
2. Conducts original research plans that contribute to the field using scientific methods.	4	4	4	4	4	4
3. With a commitment to lifelong learning, follows current developments and technologies in the field, develops existing methods and techniques, and designs and implements new applications.	2	2	2	2	2	2
4. Adopts and implements an evidence-based approach in clinical decision-making processes. Acts in accordance with ethical principles in research and practice.	4	4	4	4	4	4
5. Establishes effective collaboration in interdisciplinary projects, plans, manages, and executes scientific projects. Effectively shares scientific knowledge on national and international platforms.	3	3	3	3	3	3
6. Performs advanced clinical and laboratory practices in various specialties. Contributes to undergraduate and graduate educational activities and mentors students.						
7. Contributes to the development of health policies that improve rehabilitation services and public health.						
8. Is knowledgeable about statistical methods frequently used in health studies. Selects, applies, and interprets appropriate statistical methods.	5	5	5	5	5	5
9. Contributes to expanding the boundaries of knowledge in the field by publishing at least one scientific article in national and/or international peer-reviewed journals.	3	3	3	3	3	3

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