## HEM 512 - BIOSTATISTICS - Fen Bilimleri Enstitüsü - Hemşirelik Ana Bilim Dalı General Info

#### Objectives of the Course

The aim of this course is to provide students with the knowledge and skills to understand and put into practice the concepts and processes of planning, implementation, evaluation and reporting of a research, to scan resources from libraries, to discover ways of using resources, to read published research in line with the research process, to criticize it and to use its results.

#### Course Contents

This course covers the fundamental concepts of statistics, the subject matter and fundamental concepts of statistics: unit, population, and variable, the definition and types of variables, measuring variables and determining the appropriate level of measurement, data collection and methods, sampling methods, and an introduction to statistical software. It also covers data entry, data definition, graphical and tabular presentations, confidence intervals, hypothesis testing, and significance testing.

"Scientific Research Process and Data Analysis with SPSS" A., URAL, İ., KILIÇ, "Statistical Data Analysis with Package Programs-I" Prof. Dr. Kazım ÖZDAMAR Planned Learning Activities and Teaching Methods

Lecture method. Question and answer method. Problem solving method. Report preparation. Creating tables and graphs. Computer application.

Recommended Optional Programme Components

Recommended or Required Reading

The theoretical portion of this course consists of 30 hours over a 15-week period. According to Nevşehir Hacı Bektaş Veli University's examination regulations, students who miss more than 30% of the theoretical courses will not be able to take the final exam and will have to repeat the course.

Instructor's Assistants

It is not available

Presentation Of Course

Face to face.

Dersi Veren Öğretim Elemanları

Prof. Dr. Şahlan Öztürk

### **Program Outcomes**

- 1. Defines the basic concepts of statistics.
- 2. Defines and measure variables in statistical analysis and determine the appropriate level of measurement.
- 3. Performs table and graphical representations, significance levels, analysis and synthesis.
- 4. Knows and uses statistical analysis methods.

## Weekly Contents

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
1	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer method. Problem-solving method. Report preparation	Fundamental Concepts of Statistics. Recognition of the place and importance of statistics in the field of health sciences.	
2	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer method. Problem-solving method. Report preparation	The subject and basic concepts of statistics: unit, population and variable. Definition and types of variables. Measurement of variables and determination of appropriate measurement level.	
3	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer method. Problem-solving method. Report preparation	Data Collection Methods. Survey method. Sampling.	
4	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer method. Problem-solving method. Report preparation	Introduction to statistical package software. Data entry, data definition.	
5	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Creating tables and graphs. Narrative method. Question and answer method. Problem-solving method. Report preparation.	Graphical and tabular displays.	
6	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Confidence intervals.	

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical Pro	actise
7	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Hypothesis testing.	
8				Midterm Exam	
9	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Chi-square analysis.	
10	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	t-tests	
11	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	t-tests	
12	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Analysis of variance.	
13	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Analysis of variance.	
14	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Non-parametric tests	
15	Students should be prepared for the topic by reading the week-specific sections from relevant sources.		Lecture method. Question and answer. Problem solving method. Computer application.	Non-parametric tests	
16				Final Exam	

# Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Vize	1	2,00
Final	1	2,00
Proje	2	2,00
Ara Sınav Hazırlık	1	2,00
Final Sınavı Hazırlık	1	2,00
Uygulama / Pratik	9	1,00
Ders Öncesi Bireysel Çalışma	14	4,00
Ders Sonrası Bireysel Çalışma	14	4,00
Bütünleme	1	2,00
Teorik Ders Anlatım	14	2,00
Sözlü	4	2,00

# Assesments

Activities	Weight (%)
Final	60,00
Ödev	40,00

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14
L.O. 1		4		4	1				4	3	3			
L.O. 2		2		3	1				4	2	4			
L.O. 3		1		3	1				4	2	4			
L.O. 4		1		4	1				5	2	4			

Table:

- **P.O. 1:** Hemşirelik felsefesini bilir
- P.O. 2: Hemşireliğin temel kavramları arasındaki ilişkiyi analiz eder
- P.O. 3: Hemşireliğin mesleki değerlerini içselleştirir
- P.O. 4: Hemşirelik alanında derin ve sistematik bir bilgi düzeyine sahip olur
- P.O. 5 : Sağlık alanındaki modern, teknik ve bilgi teknolojilerini bilerek kanıta dayalı hemşirelik uygulamaları doğrultusunda bilgi ve becerisini kullanır
- P.O. 6: Grup içinde "lider ve/veya üye olarak" uyum içinde çalışır.
- P.O. 7: İş yaşamında yeni durumları çabuk öğrenir ve farklı beceriler geliştirir.
- P.O. 8: Geliştirdiği profesyonel hemşirelik bilincini hemşirelik bakımına yansıtır
- P.O. 9: Hemşirelik alanına katkı sağlayacak araştırmalar yapar
- P.O. 10: Hemşirelik alanına özgü bilimsel gelişmeleri izler
- P.O. 11: Hemşirelik alanına özgü eriştiği bilgiyi analiz eder
- P.O. 12: Kanıta dayalı uygulamaları hemşirelik bakımına yansıtır
- P.O. 13: Hemşirelik öğretiminin temel felsefesini bilir
- P.O. 14: Hemşirelik öğretiminde uygun öğretim ilke ve yöntemleri kullanır
- **L.O. 1:** İstatistiğin temel kavramlarını tanımlar.
- **L.O. 2:** İstatistik analizde değişkenleri tanımlayabilir, ölçebilir ve uygun ölçme düzeyini belirler.
- L.O. 3: Tablo ve grafik gösterimlerini, anlamlılık düzeylerini, analizini ve sentezini yapar.
- **L.O. 4:** İstatistiksel analiz yöntemlerini bilir ve kullanır.