

Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Research Methods and Biostatistics	HEM208	4. Semester / Spring	2	0	0	4
Prerequisites	None					
Language of Instruction	Turkish					
Course Type	Compulsory					
learning and teaching techniques of the Course	Lecture, Discussion, Question & Answer, Brainstorming					
Instructor(s)						
Goal	It is aimed to have the knowledge of planning, conducting research in the field of health, choosing statistical methods appropriate to the obtained data and interpreting their results, appropriate report writing method, footnote and source notation, as well as gaining attitudes that have adopted the rules of scientific research ethics.					
Learning Outcomes	1. Ability to explain the basic concepts related to biostatistics 2. Ability to choose the appropriate statistical method for the data obtained from a research 3. Ability to interpret the findings obtained as a result of statistical analysis 4. Ability to explain the issues to be considered in the planning of scientific research 5. Ability to explain concepts and terms frequently used in scientific research 6. The ability to critically review a scientific article					
Course content	The course focuses on the beginner-level competencies needed by the student in order to use the scientific research process as the basis for professional nursing practice.					
References	1. Sümbüloğlu K., Sümbüloğlu V. “Biyoistatistik” Hatiboğlu Yayınevi, Ankara, 2021. 2. Sümbüloğlu V., Sümbüloğlu K. “Sağlık Bilimlerinde Araştırma Yöntemleri” Hatiboğlu Yayınevi, Ankara, 2021. 3. Sümbüloğlu K., Sümbüloğlu V., Güney Z. “Klinik Araştırmalar Bilimsel Planlama ve Analiz Yöntemleri” Hatiboğlu Yayınevi, Ankara, 2007.					

Course Outline Weekly:

WEEKS	TOPICS
1. Week	Definitions, Health Services and Biostatistics, Frequency Distributions, Descriptive Measures of Distributions
2. Week	Tables and Graphs, Theoretical Distributions
3. Week	Concepts of Significant Tests
4. Week	Independent Samples Two test, Paired Samples t-test, One way ANOVA
5. Week	Hypothesis Test for a Two Percentages, Population Mean, Population Proportion
6. Week	Nonparametric Tests, Chi-Square Test
7. Week	Correlation and Regression Analysis
8. Week	MIDTERM
9. Week	Scientific Method, Definitions, Data and Characteristics of Data
10. Week	Planning, Stages and Types of Research
11. Week	Survey Method, Experiment Planning, Observation Method, Blinding, Randomization
12. Week	Ethical Rules in Researches
13. Week	Common Errors Made in Research
14. Week	Article Review
15. Week	AN OVERVIEW

ECTS (Student WorkLoad Table)

Activities	Number	Duration	Total Work Load
Course Duration (X14)	14	3	42
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	2	28
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)	2	4	8
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	2	7	14
Final Exam Preparation Time	1	8	8
Total Work Load (hour) / 25(s)	100/25=4		
ECTS	4		

Evaluation System

Workload within semester	Number	Contribution
Midterm Exam	1	%40
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If there is)		
Assignments		
Presentations and Seminars		
Projects		
Other		
Total Semester Work Load	1	%40
End-of-year Work Load		
Final Exam	1	%60
Assignments		
Practice		
Laboratory		
Total End-of-year Work Load	1	%60
TOTAL	2	%100

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

Learning outcomes		Program Outcomes													
		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO11	PO12	PO1 3	PO14
1	Ability to explain the basic concepts related to biostatistics	2													
2	Ability to choose the appropriate statistical method for the data obtained from a research	2													
3	Ability to interpret the findings obtained as a result of statistical analysis	2													
4	Ability to explain the issues to be considered in the planning of scientific research				4									4	
5	Ability to explain concepts and terms frequently used in scientific research				4									4	
6	The ability to critically review a scientific article				4	4								4	

SANKO University Faculty Of Health Sciences Deparent Of Nursing Program Outcomes

- 1.** Have the knowledge and skills to fulfill their professional roles and functions.
- 2.** Performs, evaluates and records nursing practices toward professional principles and standards.
- 3.** Practice the health care needs of the individual, family and society with a holistic approach, toward the nursing process.
- 4.** Communicates effectively with the individual, family, community and health team members.
- 5.** Performs professional practices toward current scientific data by using information and maintenance technologies.
- 6.** Have a foreign language profeciency to reach scientific information and communicate effectively.
- 7.** Behaves in accordance with professional, cultural and ethical values in nursing practices.
- 8.** Considers the relevant laws, regulations and legislation in nursing practices.
- 9.** Uses the learning-teaching process in nursing practices.
- 10.** Uses the management process in nursing practice.
- 11.** Uses lifelong learning and career planning skills to contribute to professional development.
- 12.** Uses problem solving and critical thinking skills to contribute to professional development.
- 13.** With the awareness of social responsibility, takes part in research, projects and activities in cooperation with the health team and other disciplines.
- 14.** Contributes to the provision and development of safe and quality health care.