

International School of Medicine / Medicine (English)

2023 - 2024 Academic Year

BIOSTATICS (Elective)

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
BIOSTATICS (Elective)	ISM6014779	Yearly	0+40	0	2
Prerequisites Courses					
Recommended Elective Courses	No other suggested courses for now				
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Elective				
Course Coordinator	Prof.Dr. Mehmet KOÇAK				
Name of Lecturer(s)	Prof.Dr. Abdulbari BENER				
Assistant(s)					
Aim	The course comprises techniques for planning, conducting and analysing a clinical investigation including drawing unbiased sample. Data analysis include tests of hypotheses, correlation and regression methods, analysis of variance and nonparametric statistics. The course also covers statistical methods in epidemiology to prepare students for the public health research. to appreciate the possibility of bias and different sources of error in clinical measurements. to be aware of preserving the integrity of collected data through proper experimental design. to be able to analyze, present and report the findings in a scientific fashion. to be able to describe and rationally present their data, Basic Concepts and Definitions, Measurement and Measurement Scales,				
Course Content	This course contains; DESCRIPTIVE STATISTICS ,SOME BASIC PROBABILITY CONCEPTS ,HYPOTHESIS TESTING ,CHI-SQUARE TEST,ONE WAY ANALYSIS OF VARIANCE,SIMPLE LINEAR REGRESSION AND CORRELATION ,SURVIVAL ANALYSIS ,Epidemiological studies,Nonparametric and Distribution-Free Statistics.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
The course comprises techniques for planning, conducting and analysing a clinical investigation including drawing unbiased sample. Data analysis include tests of hypotheses, correlation and regression methods, analysis of variance and nonparametric statistics. The course also covers statistical methods in epidemiology to prepare students for the public health research. to appreciate the possibility of bias and different sources of error in clinical measurements. to be aware of preserving the integrity of collected data through proper experimental design. to be able to analyze, present and report the findings in a scientific fashion. to be able to describe and rationally present their data, Basic Concepts and Definitions, Measurement and Measurement Scales,			10, 14, 16, 6, 8, 9	A	
Teaching Methods	10: Discussion Method, 14: Self Study Method, 16: Question - Answer Technique, 6: Experiential Learning, 8: Flipped Classroom Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	DESCRIPTIVE STATISTICS	DESCRIPTIVE STATISTICS			
2	SOME BASIC PROBABILITY CONCEPTS				
3	HYPOTHESIS TESTING				
4	CHI-SQUARE TEST				
5	ONE WAY ANALYSIS OF VARIANCE				
6	SIMPLE LINEAR REGRESSION AND CORRELATION				
7	SURVIVAL ANALYSIS				
8	Epidemiological studies				
9	Nonparametric and Distribution-Free Statistics				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
1.Fundamentals of Biostatistics By Bernard Rosner Seventh or Later Editions Brooks/Cole Cengage Learning.
Note: Powerpoint Slides and other digital materials will be provided as the primary sources of materials for this class. No other courses of materials for now.