

**H.U. INSTITUTE OF HEALTH SCIENCES
COURSE SYLLABUS**

PROGRAM NAME		BIOSTATISTICS	
CODE	BIS 627	TITLE	STATISTICAL METHODS FOR RATES AND PROPORTIONS
LECTURER (S)		ASSOC. PROF. OSMAN SARAÇBAŞI, PhD INSTRUCTOR ERDEM KARABULUT, PhD INSTRUCTOR PINAR ÖZDEMİR GEYİK, PhD	
TYPE	<input type="checkbox"/> COMPULSORY <input checked="" type="checkbox"/> SELECTIVE	LANGUAGE	<input checked="" type="checkbox"/> TURKISH <input type="checkbox"/> ENGLISH
LEVEL		<input checked="" type="checkbox"/> MASTER OF SCI. <input type="checkbox"/> DOCTORATE <input type="checkbox"/> PREREQ. PREP.	

THEORETICAL (HRS/WK)	3	PRACTICAL (HRS/WK)	0	H.U. CREDIT	3	ECTS CREDIT	7
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WHAT IS THE IMPORTANCE OF THIS COURSE IN THE PROGRAM'S LEARNING OBJECTIVES		
PRE-REQUISITE(S)	NONE	
COURSE OBJECTIVES	Introduction of specific descriptive statistics and related statistical methods used in medicine and health sciences	
LEARNING OUTCOMES AND ACQUIRED COMPETENCES	Students will learn different types of descriptive statistics, interpret these statistics and apply related statistical methods.	
COURSE CONTENT	Definition and measures of risk, calculation of risk in different types of researches, confidence intervals and hypothesis tests for different risk measures, statistical methods used for proportions.	
COURSE SCHEDULE	Week 1	Definition of rates and proportions, measures of risk
	Week 2	Confidence intervals and significance tests of measures of risk
	Week 3	Estimation of risk measures in different types of researches
	Week 4	Practice
	Week 5	Midterm exam
	Week 6	Estimation of risk measures in matched pairs samples
	Week 7	Comparison of proportions: "Gradient" and Rigit Analysis
	Week 8	Inferences and Applications for Chi-Square Analysis
	Week 9	Errors due to misclassification
	Week 10	Practice
	Week 11	Mid-term exam
	Week 12	Standardization of rates
	Week 13	Group discussion
	Week 14	Group discussion
	Week 15	Group discussion

SUGGESTED COURSE MATERIAL	<ol style="list-style-type: none"> 1. Fleiss, J. Statistical Methods For Rates and Proportions, John Willy & Sons. 1980. 2. Kleinbaum D., G. Lawrence L.,K., Morgenstern, H., Epidemiologic Research : Principles and Quantitative Methods, Van Nostrans Reinhold, 1982
TEACHING METHODS	Research planning presentations, mid-term exams and discussions following the theoretical lectures.
ASSESSMENT METHODS	Evaluation of building, applying and managing a model at the end of the term