

International School of Medicine / Medicine (English)

2023 - 2024 Academic Year

RESEARCH METHODOLOGY

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
RESEARCH METHODOLOGY	ISM3012656	Yearly	16+0	0	1
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Committee Course				
Course Coordinator					
Name of Lecturer(s)	Prof.Dr. Osman Erol HAYRAN, Assist.Prof. Ömer ATAÇ, Assist.Prof. HÜSEYİN KÜÇÜKALİ, Assist.Prof. Ayşe Nur BALCI YAPALAK, Assist.Prof. Ayşe Seval PALTEKİ, Assoc.Prof. Perihan TORUN, Lect.Dr. Zeynep Meva ALTAŞ				
Assistant(s)	Dr. Ayşe Zülal Tokaç Farmaz				
Aim	The aim of this course is to teach scientific research methods, research errors, usage areas of epidemiology and how to follow scientific publications.				
Course Content	This course contains; Reading Scientific Articles,Errors in Researches,Keeping up with scientific literature,Epidemiology and Its Applications,Cross-sectional Studies,Cohort Studies,Case-Control Studies ,Intervention Studies ,Qualitative Studies .				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
List the types and sections of scientific articles.			10, 16, 9	A	
Can critically evaluate scientific articles.			10, 16, 9	A	
Knows the important errors and biases in the scientific research process.			10, 16, 9	A	
Can find and interpret errors and biases in a research.			10, 16, 9	A	
Lists what can be done to avoid errors and biases during a study.			10, 16, 9	A	
Knows the importance of following scientific publications.			10, 16, 9	A	
Can use digital tools to follow scientific publications.			10, 16, 9	A	
Defines epidemiology and gives brief information about its history.			10, 16, 9	A	
Lists the usage area of epidemiology.			10, 16, 9	A	
Explains the meaning and design of cross-sectional studies.			10, 16, 9	A	
Knows the types, design, objectives and risk calculations of cohort studies.			10, 16, 9	A	
Knows the aims, design and risk calculations of case-control studies.			10, 16, 9	A	
Explains the types and design of interventional studies, knows the risk calculations.			10, 16, 9	A	
Knows the purpose and usage areas of qualitative studies, lists the qualitative research methods.			10, 16, 9	A	
Teaching Methods	10: Discussion Method, 16: Question - Answer Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Reading Scientific Articles				
2	Errors in Researches				
3	Keeping up with scientific literature				
4	Epidemiology and Its Applications				
5	Cross-sectional Studies				
6	Cohort Studies				
7	Case-Control Studies				
8	Intervention Studies				
9	Qualitative Studies				
Evaluation Methods			Weight(%)		
Midterm Exam			40		
General Exam			60		

Resources	
1- www.cochranelibrary.com 2-Hayran O, Özbek H. Sağlık Bilimlerinde Araştırma ve İstatistik Yöntemler (SPSS Uygulama Örnekleri ile Genişletilmiş 2. Baskı) Nobel Tıp Kitabevleri, İstanbul, 2017 3-Straus SE, Glasziou P, Richardson WS, Haynes RB. Evidence-Based Medicine: How to Practice and Teach EBM. 5th ed., 2018. 4-Goodman MS. Biostatistics for Clinical and Public Health Research. Routledge, New York, 2017. 5-Bruce N. Quantitative Methods for Health Research : a practical interactive guide to epidemiology and statistics. Second ed., NJ:Wiley, 2018. 6-Greenhalgh T.□How to read a paper: the basics of evidence-based medicine. Wiley, BMJ Books, 2014.Lecture notes	