



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Extended epidemiology	EPVS 7115

Lecturer(s)	Department(s) where the course unit (module) is delivered
Coordinator: Assoc.prof. Giedrė Smailytė , PhD. Other(s): Aušvydas Patašius, PhD	Medical faculty, Institute of Health Sciences, Public Health Department

Study cycle	Type of the course unit (module)
Second	Compulsory

Mode of delivery	Period when the course unit (module) is delivered	Language(s) of instruction
Face-to-face	1 year, semester 1 (autumn)	Lithuanian

Requirements for students	
Prerequisites: Fundamentals of epidemiology, Introduction to Public Health, Preventive medicine, Biostatistics, Social Medicine, Nutrition and food safety, Basics of environmental health and occupational health.	Additional requirements (if any): Health Sociology, Fundamentals of Bioethics

Course (module) volume in credits	Total student's workload	Contact hours	Self-study hours
5	135	66	69

Purpose of the course unit (module): programme competences to be developed

The purpose of this course is to develop an epidemiologic thinking and provide an opportunity for students to extend their knowledge and understanding of design, analysis and interpretation of epidemiological studies in the context of public health research.

Learning outcomes of the course unit (module)	Teaching and learning methods	Assessment methods
Known theoretical and practical concepts in planning and conduct of epidemiological studies, be familiar with the principles of Good epidemiology practice;	Seminars. Exercises	Active student participation. Written quiz.
Be able to design and to write a study protocol	Seminars. Exercises	Study protocol
Known sources of bias, concepts of confounding, be able critically appraise results of epidemiological studies	Seminars. Exercises	Active participation in class discussions
Be able to understand of design, analysis and interpretation of epidemiological studies in the context of public health practice and research	Seminars. Exercises	Active participation in class discussions

Content: breakdown of the topics	Contact hours	Self-study work: time and assignments

	Lectures	Tutorials	Seminars	Exercises	Laboratory work	Internship/work	Contact hours	Self-study hours	Assignments
Areas of epidemiological research. Problems of epidemiological research on non - communicable diseases. Assessment of causality			2	8			10	10	Write a study protocol.
Research ethics, Good epidemiological practice. Critical appraisal of epidemiological papers.			2	18			20	18	Critically read selected papers (critical appraisal of the design, analysis and interpretation of an epidemiological study)
Validity, sources of error in epidemiologic studies. Systematic errors (selection bias, information bias, confounding and interaction)			2	6			8	13	Practical task
Techniques to reduce bias. Methods to control confounding. Randomization, restriction, matching.			2	6			8	14	Study questions. Additional readings.
Analysis of descriptive, cross-sectional, cohort, case-control research data. Survival analysis.			8	12			20	14	Study questions. Additional readings.
Total			16	50			66	69	

Assessment strategy	Weight, %	Deadline	Assessment criteria
Active student participation in lectures, seminars	5	During semester	10-8 scores: actively participate in discussions, answer questions, formulate problems, provides critical remarks. 7-5 scores: participating in discussions, answering questions. 4 - 0 scores: passive attendance at seminars, or cut more than a third of seminars.
Study protocol	10	1semester	10-5 scores: The structure and scope: the structure of the protocol is clear and logical, there are all necessary components, comprehensive; 4-1 scores: superficial knowledge.
Midterm exam	5	1semester	10-15 open questions.

Author	Year of publication	Title	Issue of a periodical or volume of a publication	Publishing place and house or web link
Compulsory reading				
David D Celentano, Moyses Szklo, and Youssef Farag	2025	Gordis Epidemiology, 7th Edition	=	Elsevier
Merrill, Ray M	2024	Introduction to epidemiology, 9th Edition	=	Jones & Bartlett Learning, LLC
Optional reading				
Quinlan, S. C., & Friis, R. H	2024	Friis' Epidemiology 10, 3th edition		Jones & Bartlett Learning, LLC
TL Lash, TJ VanderWeele, S Haneuse, KJ Rothman	2021	Modern epidemiology, 4th ed.	-	Lippincott, Williams, & Wilkins