

COURSE OUTLINE

(1) GENERAL

MD-103 Social Sciences and Research I

SCHOOL	Medical		
ACADEMIC UNIT	Basic and Clinical Sciences		
LEVEL OF STUDIES	1 st Cycle		
COURSE CODE	MD-103	SEMESTER	Year 1 / Semester 1 (Fall)
COURSE TITLE	Social Sciences and Research I		
INDEPENDENT TEACHING ACTIVITIES <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	WEEKLY TEACHING HOURS	CREDITS	
	8	10	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Core		
PREREQUISITE COURSES:	None		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	English		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

<p>Learning outcomes</p> <p><i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>
<p><u>Theme 1: Introduction to social and behavioural sciences of health and illness, epidemiology and public health</u></p> <ul style="list-style-type: none"> • Define Sociology and apply "Sociological Imagination". • Describe the scope of Medical Sociology, and its usefulness in medical practice. • Define diversity and explain why diversity is important for groups. • Describe the skills or behaviours necessary for working appropriately and effectively within diverse groups. • Describe the different areas of Psychology. • Describe the way by which Psychology is linked to Medicine. • Define the Biomedical and the Biopsychosocial approaches to medicine. • Define the terms 'Epidemiology' and 'Public Health' and understand their role in medicine. • Describe the three Pillars of Public Health Practice.

- Outline the value of studying health and disease in populations.
- Explain “Biostatistics” and their role in medicine.
- Describe the emergence and scope of bioethics and medical ethics and explain its role in medicine and society
- Discuss the relationship between ethics, health law and professional guidelines and the importance of context
- identify ethical challenges and dilemmas in contemporary clinical practice
- Explain the significance of ethical reasoning and ethics support
- Explain the significance of working in multi-disciplinary teams

Theme 2: Core bioethical concepts and ethical reasoning

- Describe ethical reasoning and doing ethics in practice.
- Describe the ethical concepts of autonomy, dignity, medical benefit and patient best interests.
- Distinguish between moral, human and legal rights to health and describe its relevance to ethical medical practice.
- Outline the key ethical principles of healthcare ethics.
- Practise the four pillars of medical ethics.

Theme 3: Introduction to basic statistics and epidemiological research

- Compare and contrast the use, advantages and disadvantages of descriptive and analytic epidemiology.
- Identify appropriate study designs to answer specific epidemiological research questions.
- Outline the different types of variables in biomedical research.
- Determine the applicability of different summary statistics for descriptive analysis of data according to data distribution.
- Calculate basic summary statistics, such as mean, median, standard deviation, interquartile range, proportions.
- Describe public health ethics as a distinct field within health ethics
- Outline the values and key principles of public health ethics
- Practise critical analysis of health promotion campaigns and interventions
- Explain the ethical requirements and guidelines for medical research
- Describe the common ethical issues arising from medical and public health research
- Practise the ethical principles of medical and public health research

Theme 4: The mind, behaviour and social context of health and illness

- Describe specific lay health beliefs.
- Explain how health beliefs affect illness behaviour.
- Describe the characteristics and social meaning of chronic illness.
- Outline the main features of the concepts "the sick role" and “biographical disruption.”
- Practise the sociological principles of lay health beliefs and chronic illness.
- Explain the Basic Structure and function of the Nervous system.
- Describe the basics of Neural Communication.
- Outline the link between biology and behaviour.

Theme 5: Stigma and the human body

- Describe the mechanism of labelling and stigmatisation.
- Explain how patients live with a stigmatising condition.
- Practise the sociological principles of labelling and stigma.
- Explain the concepts “embodiment”

- Outline the features of the concept of “body project”.
- Practise the sociological principles of the body.
- Practise the ethical principles of respect for autonomy, privacy and dignity in healthcare.

Theme 6: Senses and integration of senses

- Outline the main functional theories of vision.
- Outline the main functional theories of audition.
- Outline the main theories of somatosensation.
- Outline the main theories of the functions of taste and smell.

Theme 7: Perception, attention and memory

- Outline the role of the different types of perception.
- Describe the main theories of visual perception.
- Describe the main theories of auditory perception.
- Outline the main types of attention.
- Describe the main theories of attention.
- Explore clinical applications of attentional deficits.
- Outline the main types of memory.
- Describe the main theories of memory.
- Explore clinical applications of memory functions.

Theme 8: Child Development from birth to adolescents

- Describe the main theories of Child Development from birth to adolescence.
- Outline the main stages of cognitive development.
- Outline the main theory of moral development.
- Outline the main findings regarding perception of illness from birth to adolescence.
- Describe the concept of attachment.
- Outline core ethical issues involved in the care of children and adolescents
- Describe legal issues in the care of minors (children and adolescents), in comparative country perspective.
- Practise critical analysis of decision-making with children patients.

Theme 9: Language and Language Development

- Outline the main theories of early stages of language acquisition.
- Describe the main theories of language development.
- Outline the theories connecting language and cognition.

Theme 10: Ethical-Legal aspects of Consent, Capacity & Confidentiality in medical practice

- Explain the primacy of patient autonomy and consent in ethical and legal terms
- Define ‘Informed Consent’ and list the steps as to how it is obtained in medical practice
- Describe the legal concept of ‘Capacity’ and the process of assessing the capacity of a patient
- Practice consent guidelines with reference to challenges facing qualified doctors and medical students
- Explain the duty of confidentiality in medical practice and the importance of respect for patient privacy
- Outline ethical and legal justifications for breaching confidentiality
- Describe confidentiality challenges in the use of social media
- Practice confidentiality rules/guidelines with reference to the challenges facing qualified doctors and medical students
- Familiarise with professional guidelines for ethical medical practice and international codes

- of conduct for medical practitioners and medical students.
- Practice ethical principles and guidelines for medical students.

Theme 11: Digital Health and Ethical Considerations

AI & Digital Health/Medical Ethics

- Analyze the ethical challenges arising from the digitalization of medical practice and research.
- Discuss the implications of digital data collection methods on patient consent, privacy, and autonomy.
- Identify the principles guiding the ethical use of digital tools and the importance of maintaining human oversight.
- Evaluate the ethical considerations of using AI in decision-making for medical diagnostics and treatment.
- Identify and categorise AI tools and their functions in the context of learning and research
- Recognize the practical and ethical pitfalls of incorrect usage of AI
- Understand, through hands-on experience, an effective and efficient use of AI tools in learning and research.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology
Adapting to new situations
Decision-making
Working independently
Team work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas

Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking

Others...

Knowledge

- Explain normal human structure and function at the molecular, cellular, tissue, organ and whole-body level from conception to old age.
- Explain the determinants of normal human behaviour at an individual and societal level.
- Explain how psychological and sociological factors might impact on the risk of disease and the outcome of treatment.
- Describe the role of epidemiology in evaluating the health of a population.
- Discuss the role of environmental, ecological, social, behavioural, occupational and cultural factors in determining health at individual, community and societal levels.
- Discuss the determinants of health from a global perspective and recognise the impact that global factors may have on local health.
- Describe the utility of qualitative and quantitative methods in scientific research.
- Interpret common statistical methods used in medicine and in medical research.
- Critically appraise the research literature in terms of study design, results, analysis and conclusions.
- Discuss the role of doctors in contributing to the collection and analysis of patient data.
- Describe the principles of health informatics.

Competences

- Promote health and wellness through disease prevention and research.

(3) SYLLABUS

Themes:

- Introduction to social and behavioural sciences of health and illness, epidemiology and public health.
- Core bioethical concepts and ethical reasoning.
- Introduction to basic statistics and epidemiological research.
- The mind, behaviour and social context of health and illness.
- Stigma and the human body.
- Senses and integration of senses.
- Perception, attention and memory.
- Child Development from birth to adolescents.
- Language and Language Development.
- Ethical-Legal aspects of Consent, Capacity & Confidentiality in medical practice.
- AI & Digital Health and Ethical Considerations

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	<i>Use of ICT in teaching / Χρήση ΤΠΕ Communication with students / Επικοινωνία με Φοιτητές</i>	
TEACHING METHODS <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc. The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	Activity	Semester Workload
	Lectures/large-group teaching*	48
	Tutorials	36
	Small group work	12
	Directed self-study**	96
	Coursework	30
	Revision/assessment	30
	Total	252
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	<ul style="list-style-type: none"> • Midterm exam (30%) • Final exam (60%) • Coursework (10%) 	

(5) ATTACHED BIBLIOGRAPHY

Required Textbooks/Reading:

Psychology

Authors	Title	Edition	Publisher	Year	ISBN
Susan Ayers, Richard de Visser	Psychology for Medicine and Healthcare	3rd Edition	Sage	2021	9781526496812

Sociology

Authors	Title	Edition	Publisher	Year	ISBN
Barry Anne- Marie, Yuill Chris	Understanding the Sociology of Health	5th Edition	Sage	2021	9781526497536

Medical Ethics

Authors	Title	Edition	Publisher	Year	ISBN
Dominic Wilkinson, Jonathan Herring, Julian Savulescu (eds)	Medical Ethics and Law: A Curriculum for the 21st Century	3rd Edition	Elsevier	2019	9780702075964
Williams, John R.	The WMA Medical Ethics Manual	3rd Edition	World Medical Association	2015	9789299007907

Research Methods

Authors	Title	Edition	Publisher	Year	ISBN
Petrie A., Sabin C.	Medical Statistics at a Glance	4th Edition	Wiley- Blackwell	2020	9781119167815

Recommended Textbooks/Reading:**Psychology**

Authors	Title	Edition	Publisher	Year	ISBN
Karen L. Fingerman, Cynthia A. Berg, Jaqui Smith, Toni C. Antonucci	Handbook of Life Span Development	-	Springer	2011	9780826110794
John Sommers- Flanagan, Rita Sommers- Flanagan	Counselling and Psychotherapy: Theories in Context and Practice, 3rd Edition	3rd Edition	John Wiley and Sons	2018	9781119473312
Carrie Winterowd, Aaron T. Beck, Daniel Gruener	Cognitive Therapy with Chronic Pain Patients	-	Springer Publishing Company	2003	9780826145956

Sociology

Authors	Title	Edition	Publisher	Year	ISBN
Constantinou S Costas	Applied Sociology of Health and Illness: A Problem-Based Learning Approach	2nd Edition	Taylor & Francis, CRC Press	2023	9781032188652
Nettleton Sarah	The Sociology of Health and Illness	4th Edition	Polity Press	2021	9781509512744

Medical Ethics

Authors	Title	Edition	Publisher	Year	ISBN
Herring, J.	Medical Law and Ethics	9th	Oxford University Press	2022	9780192856562
Tom L. Beauchamp, James F. Childress	Principles of Biomedical Ethics	8th	Oxford University Press	2019	9780190640873
Tony Hope, Michael Dunn	Medical Ethics: A Very Short Introduction	2nd	Oxford University Press	2019	9780198815600

Research Methods

Authors	Title	Edition	Publisher	Year	ISBN
Charles H. Hennekens	Epidemiology in Medicine	-	Lippincott, Williams & Wilkins	1987	0316356360, 9780316356367
Hurley, W.L. et al.	Research Methods: A Framework for Evidence-Based Clinical Practice	-	Lippincott, Williams & Wilkins	2011	9780781797689
Babu, Ajit N.	Clinical Research Methodology and Evidence- Based Medicine: The Basics	-	Anshan Limited UK	2008	9781905740901
Kathryn Jacobsen	Introduction to Health Research Methods	3 rd Edition	Jones & Bartlett Publishers	2021	9781284197563