

<b>COURSE INFORMATON</b>					
<b>Course Title</b>	<i>Code</i>	<i>Semester</i>	<i>L+P+L Hour</i>	<i>Credits</i>	<i>ECTS</i>
Public Health	MED409	Phase 4/7-8	11	2	2*

\* ECTS credits are the university credits of the courses in Yeditepe University, Faculty of Medicine, Undergraduate Medical Education Program

<b>Prerequisites</b>	The student that joins this course, should completed Phase 1, 2 and 3 courses of medical faculty.
<b>Language of Instruction</b>	English
<b>Course Level</b>	Second Cycle including First Cycle Degree (One Tier Programme)
<b>Course Type</b>	Compulsory
<b>Course Coordinator</b>	Hale Arik Taşyikan, MD. Assist. Prof.
<b>Instructors</b>	Hale Arik Taşyikan, MD. Assist. Prof.
<b>Assistants</b>	-
<b>Goals</b>	To understand the nature of the preventive, curative, and promotive health care services as part of the primary health care system of the country and learn how to manage health and disease within natural settlements of the individuals.
<b>Content</b>	Principles of preventive and promotive medicine, healthcare delivery systems and facilities, comparison of the primary health care systems across countries, types and methods of epidemiological studies, biostatistical methods, meaning and importance of the health information systems for assessment of the public health status, social, cultural and economic determinants of health and diseases

<b>Learning Outcomes</b>	<b>Programme Learning Outcomes</b>	<b>Teaching Methods</b>	<b>Assessment Methods</b>
At the end of this clerkship, the student should be able to;			
1. Define the steps to evidence based medicine	3.1.1	1,2	A,B
2. Define a clinical question in pico format from a patient scenario	3.1.1,3.1.2, 3.1.3,3.1.4	1,2	A,B
3. Identify main databases necessary for evidence based medicine	3.1.2	1,2	A,B

4. Explain research methods and hierarchy among methods for producing evidence	3.1.1	1,2	A,B
5. Define the types of clinical questions	3.1.3	1,2	A,B
6. Identify clinical evidence using clinical query database	3.1.1,.3.1.3	1,2	A,B
7. Explain common study designs and identify the major strengths and limitation of each.	3.1.1	1,2	A,B
8. Define which study designs are best for answering clinical questions related to therapy/prevention.	3.1.1,.3.1.3	1,2	A,B
9. Define therapy/prevention	3.1.3,.3.1.4	1,2	A,B
10. Assess study for validity	3.1.1	1,2	A,B
11. Derive number needed to treat (nnt), number needed to harm (nnh)	3.1.2,3.1.3,3.1.4	1,2	A,B
12. Apply therapy evidence to patients	3.1.2,3.1.3,3.1.4	1,2	A,B
13. Define bias in epidemiologic studies	3.1.1	1,2	A,B
14. Assess study for validity	3.1.1	1,2	A,B
15. Derive sensitivity, specificity, positive predictive value, negative predictive value, and likelihood ratios.	3.1.1	1,2	A,B
16. Apply diagnostic evidence to patients	3.1.2, 3.1.3	1,2	A,B
17. Summarize diagnostic evidence in written report	3.1.2, 3.1.3, 3.1.4	1,2	A,B

18. Summarize diagnostic evidence verbally to colleagues	3.1.2, 3.1.3, 3.1.4	1,2	A,B
19. Summarize and interpret diagnostic evidence for a patient in terms he/she will understand	2.5.3, 3.1.2	1,2	A,B
20. Identify common pitfalls to communicating evidence to patients	2.5.3, 3.1.2	1,2	A,B
21. Describe the steps to communicating evidence to patients	2.5.3, 3.1.2	1,2	A,B
22. Advocate and use the evidence based medicine approach	2.2.1, 2.2.2	1,2	A,B

**Teaching Methods:**

1: Lecture, 2: Individual discussion sessions with the instructor

**Assessment Methods:**

A: Presentation of a project B: Participation to the interactive lectures

<b>COURSE CONTENT</b>	
<b>Week I Topics</b>	<b>Study Materials</b>
<b>Study Materials</b>	
Introduction to EBM	Materials will be provided by the instructor
Structured group presentations and discussions	Materials will be provided by the instructor
Discussion: An EBM Story I	Materials will be provided by the instructor
Epidemiologic Research Types and Basic Concepts I-II	Materials will be provided by the instructor
Discussion: An EBM Story II	Materials will be provided by the instructor
Evaluation of Screening Tests	Materials will be provided by the instructor
Confounding Factor, Bias and Types of Bias	Materials will be provided by the instructor
Discussion: An EBM Story III	Materials will be provided by the instructor

**RECOMMENDED SOURCES**

<b>Textbook</b>	<ul style="list-style-type: none"> <li>Glasziou P, Del Mar C, Salisbury J. Evidence-based Practice Workbook. BMJ Books, Blackwell Publishing, 2007.</li> <li>Mayer D. Essential Evidence-based Medicine. Second Edition 2010. Cambridge University Press.</li> </ul>
<b>Additional Resources</b>	Lecture notes

<b>ASSESSMENT</b>		
<b>IN-TERM STUDIES</b>	<b>NUMBER</b>	<b>PERCENTAGE</b>
Evaluation of EBM homework (with a checklist)	1	50
Evaluation of group presentations and discussions (with a checklist)	1	40
Participation to sessions	7	10
<b>Total</b>		<b>100</b>

<b>MATERIAL SHARING</b>	
<b>Documents</b>	Photocopy shareable.
<b>Assignments</b>	Shareable

<b>COURSE CATEGORY</b>	Expertise/Field Courses
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<b>COURSES CONTRIBUTION TO PROGRAM</b>					
<b>COMPETENCE AREA-1 / Professional Practices</b>	<b>Contribution</b>				
<b>COMPETENCE 1.1. Health Service Provider</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Competency 1.1.1.</b> Integrates knowledge, skills, and attitudes acquired from basic and clinical medical sciences, behavioral sciences, and social sciences to provide health services.					
<b>Competency 1.1.2.</b> Demonstrates a biopsychosocial approach that considers the individual's sociodemographic and sociocultural background without discrimination based on language, religion, race, or gender in patient management.					
<b>Competency 1.1.3.</b> Prioritizes the protection and improvement of individuals' and community's health in the delivery of healthcare services.					
<b>Competency 1.1.4.</b> Performs the necessary actions in the direction of maintaining and improving the state of health as considering the individual, social, social and environmental factors affecting health.			x		
<b>Competency 1.1.5.</b> Provides health education to healthy/ill individuals and their families, as well as to other healthcare professionals, by recognizing the characteristics, needs, and expectations of the target audience.					x
<b>Competency 1.1.6.</b> Demonstrates a safe, rational, and effective approach in the processes of protection, diagnosis, treatment, follow-up, and rehabilitation in health service delivery.			x		
<b>Competency 1.1.7.</b> Performs interventional and/or non-interventional procedures safely and effectively for the patient in the processes of diagnosis, treatment, follow-up, and rehabilitation.					

<b>Competency 1.1.8.</b> Provides healthcare services considering patient and employee health and safety.					
<b>Competency 1.1.9.</b> Considers changes related to the physical and socio-economic environment at both regional and global scales that affect health, as well as changes in the individual characteristics and behaviors of those who seek healthcare services.					
<b>COMPETENCE AREA-2 / Professional Values and Approaches</b>	<b>Contribution</b>				
<b>COMPETENCE 2.1. Adopting Professional Ethics and Principles</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Competency 2.1.1.</b> Considers good medical practices while performing the profession.					
<b>Competency 2.1.2.</b> Fulfills duties and obligations within the framework of ethical principles, rights, and legal responsibilities required by the profession.					
<b>Competency 2.1.3.</b> Demonstrates determined behavior in providing high-quality healthcare while considering the patient's integrity.					
<b>Competency 2.1.4.</b> Evaluates own performance in professional practices by considering own emotions and cognitive characteristics.					
<b>COMPETENCE 2.2. Health Advocate</b>					
<b>Competency 2.2.1.</b> Advocates for the improvement of healthcare service delivery by considering the concepts of social accountability and social responsibility in the protection and enhancement of community health.					
<b>Competency 2.2.2.</b> Plans and implements service delivery, education, and counseling processes related to individual and community health, in collaboration with all stakeholders, for the protection and improvement of health.					
<b>Competency 2.2.3.</b> Evaluates the impact of health policies and practices on individual and community health indicators and advocates for the improvement of healthcare quality.					
<b>Competency 2.2.4.</b> Gives importance to protecting and improving own physical, mental, and social health and takes necessary actions for it.					
<b>COMPETENCE 2.3. Leader-Manager</b>					
<b>Competency 2.3.1.</b> Demonstrates exemplary behavior and leadership within the healthcare team during service delivery.					
<b>Competency 2.3.2.</b> Utilizes resources in a cost-effective, socially beneficial, and compliant manner with regulations in the planning, implementation, and evaluation processes of healthcare services as the manager in the healthcare institution.			x		
<b>COMPETENCE 2.4. Team Member</b>					
<b>Competency 2.4.1.</b> Communicates effectively within the healthcare team and takes on different team roles as necessary.					
<b>Competency 2.4.2.</b> Displays appropriate behaviors while being aware of the duties and responsibilities of healthcare workers within the healthcare team.					
<b>Competency 2.4.3.</b> Works collaboratively and effectively with colleagues and other professional groups in professional practice.					
<b>COMPETENCE 2.5. Communicator</b>					
<b>Competency 2.5.1.</b> Communicates effectively with patients, their families, healthcare professionals, and other occupational groups, institutions and organizations.					
<b>Competency 2.5.2.</b> Communicates effectively with individuals and groups who require a special approach and have different sociocultural characteristics.					
<b>Competency 2.5.3.</b> Demonstrates a patient-centered approach that involves the patient in decision-making mechanisms during the diagnosis, treatment, follow-up, and rehabilitation processes.					
<b>COMPETENCE AREA-3 / Professional and Personal Development</b>	<b>Contribution</b>				
<b>COMPETENCE 3.1. Scientific and Analytical Approach</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Competency 3.1.1.</b> Plans and implements scientific research, as necessary, for the population it serves, and utilizes the results obtained, as well as those from other research, for the benefit of the community.					x
<b>Competency 3.1.2.</b> Accesses and critically evaluates current literature related to their profession.					x

<b>Competency 3.1.3.</b> Applies evidence-based medicine principles in the clinical decision-making process.					<b>x</b>
<b>Competency 3.1.4.</b> Uses information technologies to enhance the effectiveness of healthcare, research, and education activities.					<b>x</b>
<b>COMPETENCE 3.2. Lifelong Learner</b>					
<b>Competency 3.2.1.</b> Manages effectively individual study processes and career development.			<b>x</b>		
<b>Competency 3.2.2.</b> Demonstrates skills in acquiring, evaluating, integrating new information with existing knowledge, applying to professional situations, and adapting to changing conditions throughout professional career.					<b>x</b>
<b>Competency 3.2.3.</b> Selects the right learning resources to improve the quality of health care and organizes the learning process.					<b>x</b>

<b>ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION</b>			
Activities	Quantity/ day	Duration (Hour)	Total Workload (Hour)
Course Duration (1 week)	5	3	15
Hours for off-the-classroom study (Pre-study, practice, review/week)	5	5	25
Homework	4	2	8
Exam	-	-	-
<b>Total Work Load</b>			<b>48</b>
<b>Total Work Load / 30 (h)</b>			<b>1.6</b>
<b>ECTS Credit of the Course</b>			<b>2</b>