



TEHRAN UNIVERSITY  
OF  
MEDICAL SCIENCES

## « Course plan of Digital Health 1»

### Details of course:

Educational group providing the course: Digital Health

Course title: Digital Health 1

Course ID: 07

Type and number of units: 2 theoretical units

Name of the person responsible for the course: Dr. Ardalan Shariat

Instructor/ Instructors: Dr. Ardalan Shariat

Prerequisites/simultaneous: none

Field and level of education: Master's degree in Digital Health

### Course instructor information:

Academic level: Assistant Professor

Specialized field: PhD in Digital Health

Workplace: Department of Digital Health, Faculty of Medicine, Tehran University of Medical Sciences

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General description of the course (the person in charge of the course is expected to describe the different content parts of the course in the form of one or two paragraphs while providing general explanations):

General goals: An introduction to introduce the Telemedicine and define the role of telemedicine in current world.

**Specific goals/ sub-themes of each ability:**

- 1- An introduction on the meaning of Telemedicine
- 2- Role of telemedicine in diagnosis, and treatment
- 3- Role of telemedicine in rehabilitation
- 4- Needs of the world related to telemedicine based on the published papers

After the end of this course, it is expected that the student:

Creating capabilities in a comprehensive way to achieve specific goals

**Educational approach:**

Virtual and in person

**Teaching-learning methods according to the chosen educational approach:**

Problem Based Learning (PBL)

Discussion

Speech

**Combined approach**

A combination of virtual and face-to-face educational approaches is used.

**Sessions of the course:**

Instructor	Tasks of student	Teaching technique	Topic	Session
Dr.Ardalan Shariat	-	Combined approach	History of digital health - review of the work that has been done in the past -	1

Instructor	Tasks of student	Teaching technique	Topic	Session
			mentioning a successful example	
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Objectives of telemedicine – based on the examples</b>	2
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Requirements and main applications of telehealth services - Ethical points - Limitations</b>	3
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Application of telehealth in prevention and screening</b>	4
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Educating the community and patients remotely</b>	5
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Medicine, nursing, pharmacy and dentistry remotely</b>	6
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Necessary infrastructures to provide tele health services</b>	7
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>The state of the country and its challenges in the field of tele health</b>	8
	Conversation			9

Instructor	Tasks of student	Teaching technique	Topic	Session
<b>Dr.Ardalan Shariat</b>	question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Recognizing journals and books in the field of tele health</b>	
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Introducing the platforms available in the country in the field of tele health</b>	10
<b>Dr. Ali Alizadeh</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Technical and software problems in existing platforms</b>	11
<b>Dr. Ali Alizadeh</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Review and analyze a platform</b>	12
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Telerehabilitation and review of available articles</b>	13
<b>Dr.Ardalan Shariat</b>	Conversation question and answer Shorthand Presentation of students	<b>Combined approach</b>	<b>Q&amp;A</b>	14

2 sessions will added based on the needs of students with focus on team work in class.

If any of the sessions are canceled for any reason, compensatory sessions will be held.

**Duties and expectations from the student:**

Attending class regularly, checking resources and reading texts before attending class, doing homework

Student evaluation method:

Oral questions in different sessions

Quiz

Midterm exam

End of semester exam.

**References:**

- 1- Värri, A. (2020). What is digital health? Review of definitions. *Integrated Citizen Centered Digital Health and Social Care: Citizens as Data Producers and Service co-Creators*, 275, 67.
- 2- Jandoo, T. (2020). WHO guidance for digital health: what it means for researchers. *Digital health*, 6, 2055207619898984.
- 3- Aulenkamp, J., Mikuteit, M., Löffler, T., & Schmidt, J. (2021). Overview of digital health teaching courses in medical education in Germany in 2020. *GMS journal for medical education*, 38(4).
- 4- Cohen, B. J., & DePetris, A. (2013). *Medical terminology: An illustrated guide*. Lippincott Williams & Wilkins.
- 5- Hussein, M. H., Ow, S. H., Cheong, L. S., Thong, M. K., & Ebrahim, N. A. (2019). Effects of digital game-based learning on elementary science learning: A systematic review. *IEEE Access*, 7, 62465-62478.
- 6- Tan, A. J., Rusli, K. D., McKenna, L., Tan, L. L., & Liaw, S. Y. (2024). Telemedicine experiences and perspectives of healthcare providers in long-term care: A scoping review. *Journal of telemedicine and telecare*, 30(2), 230-249.
- 7- Lee, J. M., Ospelt, E., Noor, N., Mungmode, A., Ebekozi, O., Gupta, M., ... & T1D Exchange Quality Improvement Collaborative. (2024). Institutional barriers to the successful implementation of telemedicine for type 1 diabetes care. *Clinical Diabetes*, 42(1), 34-39.
- 8- Komalasari, R., & Khang, A. (2024). An Integrated Approach to Next-Generation Telemedicine and Health Advice Systems Through AI Applications in Disease Diagnosis. In *Driving Smart Medical Diagnosis Through AI-Powered Technologies and Applications* (pp. 258-274). IGI Global.

