TEHRAN UNIVERSITY
OF
MEDICAL SCIENCES

School of Medicine
Department of E-learning in Medical Sciences

An Overview to Curriculum

Doctor of Philosophy (PhD) in:

E-learning in Medical Sciences

Description

E-learning in medical sciences is an interdisciplinary field that combine various academic disciplines including educational sciences, medical sciences and e-learning. This program mainly focusses on educational planning for e-learning paying critical attention to medical and health related area including clinical and laboratory practice. In addition, capabilities such as leadership, theory development in e-learning systems and applied research are considered in this program.

Duration

4 to 5 years for on-campus and 4 to 8 years for online mode, including minimum of 3 semesters for courses and then conducting PhD dissertation.

Note: Applicants can enroll for on-campus or online mode according to their preferences.

Courses and number of credits:

Core Courses	17 credits
Non-core Courses (Electives)	5 credits
Dissertation:	20 credits
Total:	42 credits
Compensatory*:	10 credits

* Students should study some or all of these courses according to their background degree(s).

Objectives:

At the end of the program graduates will be competent in the following areas:

- Main competencies:
  - Acting as teacher in courses/workshops regarding e-learning in medical and health related fields
  - Acting as instructional designer for establishing e-learning/ blended learning systems in medical sciences
  - Instructional designing and developing multimedia contents
  - Planning and choosing appropriate e-learning software and platforms
  - Evaluating and accrediting e-learning programs and institutions
  - Conducting research and writing scientific paper in the field of e-learning
  - Using evidence-based approach to educational management and leadership in e-learning
  - Applying professionalism and ethical codes in e-learning environment

- Meta competencies
  - Critical thinking and problem-solving as an e-learning professional
  - Team working and collaborating effectively in a group
  - Creativity and innovation as an e-learning professional

Tables of the Courses

Table 1. Compensatory Courses

No.	Course Title	Credits			Prerequisite
		Theoretical	Practical	Total	
01	Research in Education	1	1	2	-
02	Analytical Statistics	1	-	1	-
03	Writing Scientific Papers	-	1	1	-
04	Learning Theories in Medical Education	2	-	2	-
05	Ethics and Professionalism in e-Learning	1	-	1	-
06	Virtual Teaching Strategies and Methods in Medical Sciences	0.5	0.5	1	-
07	Principles and Foundations of e-Learning in Medical Sciences	1	-	1	-
08	Medical Information Systems	0.5	0.5	1	-
	Total	7	3	10	-

Table 2. Core Courses

No	Course Title	Credits			Prerequisite
		Theoretical	Practical	Total	
09	e-Learning Planning in Medical Sciences 1	1	1 (workshop)	2	-
10	e-Learning Planning in Medical Sciences 2	2	1 (Internship)	3	09
11	Hardware and Software Requirement in e-Learning	2	1	3	-
12	e-Content Design in Medical Sciences Education	1	1 (Internship)	2	10
13	New Trends of e-Learning in Medical Sciences	2	-	2	09
14	Educational Leadership and Management	2	-	2	-
15	Qualitative Research Methods	1	1	2	-
16	Best Evidence Medical Education (BEME)	0.5	0.5	1	-
	Total	11.5	5.5	17	-

Table 3. Non-Core Courses*

No	Course Title	Credits			Prerequisite
		Theoretical	Practical	Total	
17	Futures Studies in e-Learning	1	-	1	10
18	Gamification and Game-based Learning in Medical Sciences Education	1	-	1	12
19	Virtual and Augmented Reality in Medical Sciences Education	1	-	1	10
20	Economy of e-Learning	1	-	1	11-12
21	Data Analysis in Qualitative Research	1	1	2	15
22	Quality Assurance and Accreditation in e-Learning Systems	1.5	0.5	2	10
23	Change Management in e-Learning Systems	2	-	2	14
Total		8.5	1.5	10	-

* Students have to study 5 credits among the above courses.