In the Name of God

Islamic Republic of Iran Ministry of Health and Medical Education Deputy Ministry for Education

Physical Therapy

Degree: Doctor of Philosophy (PhD)

Total Course Credits:

- Core: 10
- Non-core (Electives): 11
- Dissertation (PhD): 24

Program Description

Physical Therapy (PT) is a clinical and dynamic profession that presents many opportunities to promote health and provide rehabilitation through clinical practice, education and critical inquiry. The PhD program in PT focuses on research and educational subjects. It provides the academic and clinical opportunities for individuals to develop the knowledge, skills and attitudes necessary for the ethically and professionally competent practice.

The Physical Therapy program at Ph D level focuses on research. It additionally offers taught courses and prepares students for clinical practice. As such, the PhD (PT) program is divided into two sections: a 2-year, full-time taught course section with 21 credits and a 2-year research-based section with a 24 credit research course for the Ph D dissertation. The students must complete all taught courses in the first two years (four semesters) and pass a comprehensive exam before entering the research-based section. The student is awarded a PhD (PT) degree after successfully defending her/his dissertation.

The graduates will be able to offer numerous services to the health system. The services include prevention and management of pain and treatment of physical impairments and disabilities, which can be achieved by designing a treatment plan and using different modalities, therapeutic exercises, manual therapies and other related techniques.

The main objective of the PT doctoral program is to prepare critical thinkers and independent researchers so as to further expand the knowledge base of the physical therapy profession. Through an integrated approach, students will enhance their capacities to critically review scientific literature, formulate questions, devise hypotheses, and test those hypotheses using valid and reliable research designs. Also, the graduates, trained as leaders in Physical Therapy, will be proficient in the areas of research, supervision, management, consultation, promotion of health, prevention of dysfunction and provision of care, based on the latest information in the physical therapy filed.

Admission Requirements

The PhD program in PT is looking for top candidates interested in research in physical therapy. A candidate with a master's degree in Physical Therapy or a MD awarded by one of the home universities or those in other countries and approved by the Ministry of Health, Treatment and Medical Education can participate in the PhD entrance exam and enter the course as stipulated in the PhD educational rules and regulations.

Expected Competencies at the End of the Program

General Competencies* 🔎

*Note: The related document(s) can be found at http://hcmep.behdasht.gov.ir/

Specific Competencies and Skills

The PT graduates will be able to take educational responsibilities, conduct research and offer expert consulting services related to Physical Therapy. At the end of the program learners will be competent in the following skills:

- In education:
 - Contributing in teaching Physical Therapy to students of various fields according to the university needs.
 - Establishing a plan for professional development and lifelong learning
- In research:
 - Designing, implementing and evaluating basic and applied research in various contexts of the related fields
 - Utilizing research to support practice
- In consulting services:
 - *o* Offering leadership roles in prevention and health maintenance programs and rehabilitation services
 - o Preventing and managing pain, physical impairments and disabilities
- In clinical services:
 - Being able to diagnose and treat impairments or disabilities of the clients.
 - Improving and maintaining functional independence and physical performance of the client
 - Ensuring availability, accessibility, and excellence in the delivery of physiotherapy services to patients/clients across the life span;

Educational Strategies, Methods and Techniques* 📿

Educational Strategies, Methods and Techniques:

Ethical Considerations*

Student Assessment (Methods and Types)

- Formative (Quizzes and Midterm Exam)
- Summative (Final Exam)
- Comprehensive exam

Ethical Considerations*

*Note: The related document(s) can be found at <u>http://hcmep.behdasht.gov.ir/</u> **Tables of the Courses:**

Table 1.Compensatory Courses

Code	Title of the course	Credits			Hours			Prerequisite
of the course		Theoret ical	Practic al	Tot al	Theoreti cal	Practic al	Tot al	or concurrent courses
-	Medical Information Systems	0.5	0.5	1	9	17	26	-
Total		0.5	0.5	1	9	17	26	

Table 2.Core Courses

Code	Title of the	Credits				Prerequisi		
of the cours e	course	Theoretic al	Practic al	Tota l	Theoretic al	Practic al	Tota l	te or concurren t courses
12	Physiological Principles of Therapeutic Exercise	2	-	2	34	-	34	-
13	Advanced Physiology of Muscles and Nerves	2	-	2	34	-	34	-
14	Occupational Biomechanics	2	-	2	34	-	34	-
15	Electrophysiolo gy	1	1	2	17	34	51	-
16	Seminar	2	-	2	34	-	34	-
17	Dissertation *	-	-	24	-	-	-	-
	Total	9	1	34	153	34	187	

* Dissertation is included in the research-based section of program.

Code	Title of the course	Credits Hours			Hours		Prerequisite	
of the course		Theoreti cal	Practic al	Tot al	Theoreti cal	Practic al	Tot al	or concurrent courses
01	Analysis of Sensory and Motor Systems	3	-	3	51	-	51	-
02	Motor Control	3	-	3	51	-	51	-
03	Advanced Anatomy and Physiology of Cardio- Pulmonary System	3	-	3	51	-	51	-
04	Physiotherapy in Musculoskeletal Injuries	2	1	3	34	34	68	-
05	Physiotherapy in Sport Injuries	2	-	2	34	-	34	-
06	Biochemistry	2	-	2	34	-	34	-
07	Pharmacology in Rehabilitation	2	-	2	34	-	34	-
08	Histology	1	1	2	17	34	51	-
09	Familiarity with Laboratory Animals	1	1	2	17	34	51	-
10	Tissue Biomechanics	2	-	2	34	-	34	-
11	Manual Therapy	1	2	3	17	68	85	-
	Total		5	27				

Table 3.Non- Core Courses (Electives)

* The student should pass 10 to 11 credits of Non-core courses.

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