Final verdict of the 38th meeting of the High Council of Planning for Medical Sciences, dated 5/11/78, on the curriculum for the Ph.D. Program of Iranian Traditional Medicine

- 1. The Ph.D. Program of Traditional Persian Medicine has been approved with the majority of votes.
- 2. The Ph.D. Program of Traditional Persian Medicine is executable since the date of approval.

Approved.

Dr. Seyyed Amir Mohsen Ziaei Secretary of the High Council of Planning for Medical Sciences

The issued verdict of in 38th meeting of the High Council of Planning for Medical Sciences, dated January 25, 2000, on the curriculum for the Ph.D. Program of Iranian Traditional Medicine is correct and will be executed.

Dr. Kamran Bagher Langarani Minister of Health, Treatment, and Medical Education and the Head of the High Council of Planning for Medical Sciences

In the Name of God

The Curriculum for the Ph.D. Program of Traditional Persian Medicine

Program: Traditional Persian Medicine

Level: Ph.D.

The High Council of Planning for Medical Sciences, in its 38th meeting dated January 25, 2000, approved the Ph.D. Program of Traditional Persian Medicine in four chapters (General Specifications, Curriculum, Courses and Assessment) as attached. The following was decided:

- 1. The execution of the Ph.D. Program of Traditional Persian Medicine is compulsory for all universities and institutes of higher education in the country as listed below.
 - a. Universities and institutes of higher education under the supervision of the Ministry of Health, Treatment, and Medical Education.
 - b. Institute that are established based on regulations and with a permit from the Ministry of Health, Treatment, and Medical Education and therefore follow the approvals of the High Council of Planning for Medical Sciences.
 - c. Other institutes of higher education that are established under particular regulations and are obliged to comply with the university regulations of the Islamic Republic of Iran.
- 2. As of January 25, 2000, all academic and similar programs in the field of the Ph.D. of Traditional Persian Medicine in all universities and institutes of higher education in Article 1 will be rendered annulled, and the above-mentioned institutes of higher education are permitted to establish and run this program instead.
- 3. The general specifications, curriculum, courses and assessment of the Ph.D. Program of Traditional Persian Medicine is communicated in four chapter for execution.

Chapter 1

General Specifications of

the Ph.D. Program of Traditional Persian Medicine

1. Defining the Relevant Program and Level

Ph.D. of Traditional Persian Medicine

Traditional Persian Medicine is a branch of medical sciences in which selected general physicians will be familiarized with the principles and conventional methods of prevention, treatment, education, and applied and innovative research in traditional Persian medicine to use the most advanced and updated information of classic medicine in instances where the application of traditional medicine is to the benefit of the patient, the society, and the advancement of human knowledge, as well as utilizing this method for the sake of providing, returning and improving the health of patients and the society.

2. History

Upon the entrance of modern medicine to Iran, especially with the establishment of Dar al-Funun, the teaching of the principles and basics of Traditional Persian Medicine was gradually forgotten. Although, for many years, special course credits were available at Dar al-Funun, and later at University of Tehran, for teaching traditional medicine, no official specific education was designated in the country's education system.

In eastern countries, especially post-revolution China, revising and restructuring traditional medicine and offering official education commenced with the goal of creating confidence, reinforcing cultural and national confidence, and achieving economic efficiency. Similarly, in certain countries, particularly India, Pakistan, Bangladesh, Sri Lanka, Nepal, Indonesia, Thailand, Malaysia, the UAE, etc., several schools and faculties were established that engaged in scientific, research and treatment activities. Moreover, the scope of activities for such institutes started to expand in certain western countries. Recently, certain schools have been established in South Africa, following the experiences of traditional medicine in India, in which general physicians, who have graduated from medical schools, are continuing their education.

Given the fact that the vast and priceless heritage of medical sciences in Iran is the source of medical education in some of the above-mentioned countries, particularly the traditional medicine of the Indian subcontinent, and even books written in Persian are currently being used as textbooks and references in those countries, the lack of formal education in our country is an inexcusable void and negligence.

In any case, the World Health Organization's approach toward the restoration of national traditional medicine in the past two decades, together with the valuable and unique experiences in traditional Persian medicine, reinforced by the sheer interest on the part of physicians and medical researchers in traditional medicine, coupled with the current

setting of the country and the possibility of delivering scientific education, demands that such education takes place in our country as well.

Studies and global experiences indicate that applying Traditional Persian Medicine and its rich, priceless heritage in the context of today's scientific advances can be highly beneficial for improving human knowledge, and opening novel and bright horizons for medical sciences. As a result, it appears that besides national aspects, the teaching of the Ph.D. Program of Traditional Persian Medicine and the scientific restoration of this magnanimous heritage can greatly benefit the entire human society on a global scale.

3. Values

Based on divine and religious basic of an Islamic society, the existential human value, the vitality of efforts toward safeguarding life and providing and improving human health, the innate human dignity, and the responsibilities of the state and society toward the masses, it appears that the backbone of this program crucially consists of efforts to create a variety of efficient settings by taking advantage of the experiences of past centuries; innovative research and emphasis on the application of available national resources; utilizing the best and most advanced sciences and technologies of the day; creating the applications of traditional medicine; and respecting the individual and social rights of all humans. Furthermore, the importance of the 20-Year Prospect Plan of the Islamic Republic of Iran and the significance of achieving an appropriate regional and global scientific standing, the establishment of this Ph.D. program is a parallel, purposeful and hopeful effort.

4. Mission

The mission of this program includes the education of a group of physicians, who have graduated from official Doctor of Medicine (M.D.) programs from accredited local or overseas schools of medicine, in order to complete the Ph.D. program and utilize advance contemporary knowledge, and novel technology, and simultaneously benefit from the reliable and unique data of Traditional Persian Medicine in order to treat patients, prevent diseases, and improve the health of the society through cutting unnecessary costs and drug side-effects and using pathogenic treatment methods. They are also expected to improve and expand the realms of medical sciences and clinical skills and provide an extended academic and research basis at the highest levels by conducting in-depth research endeavors.

5. Vision

Based on the 20-Year Prospect Plan of the Islamic Republic of Iran and the elevated goals of gaining scientific advantage and production, and given the national and global expectations regarding the application of valuable past experiences, utilizing national resources, restoring forgotten values, and the simultaneous use of latest scientific human

achievements, it appears that educating and training medical professionals — who will adopt an active role in preparing, revising and improving academic sources and texts, and conducting applied research, and, on the other hand, bring about patient satisfaction by responding to the physical and mental needs of patients with low costs — will reduce the country's medical expenses, to be hailed and praised in the near future. It is expected that, with the success of this program, a suitable example can be set for other countries from which they will greatly benefit.

6. Aims

Providing flexible, easy and low-cost medical services, with extended acceptance on the part of patients, in order to improve the health of individuals and the society, together with conducting relevant research.

7. Role Definition

The graduates from this program will take on different roles in academic, research and medical services settings.

8. Professional Task Analysis of Graduates

a. Academic

- i. Teaching essential healthcare activities to students, nurses, patients, and patient companions;
- ii. Educating students and interns of Traditional Persian Medicine, and transferring experiences and findings;
- iii. Developing essential educational sources.

Exam Items and Related Factors of the Entrance Exam

No.	Exam Items	Factor
1	Persian Medical Texts	1.5
2	Arabic Medical Texts	1
3	History of Medicine	1
4	Generalities and Symptomology	2
5	Treatments	1.5
6	Nutrition and Simple Medicines	1.5
7	Selection of Classic Medicine Subjects including Internal, Infectious, Pediatric, Gynecologic, Obstetric, Health and Nutritional Diseases*	1.5
	Total	10

^{*} As per the approvals of the Secretariat for the Council of Medical Education

• For more information regarding the latest changes in acceptable academic documents, as well as exam items and factors for each academic year, please refer to the exam handbook of that year's Ph.D. entrance examination of medical sciences.

11. Similar Programs Inside the Country

There is no similar program currently available in the country, though the Ph.D. Program of Traditional Pharmacy is similar to this program for different reasons.

12. Similar Programs Outside the Country

There are more or less similar programs in the field of traditional medicine in countries such as China, South Africa, India, Pakistan, Bangladesh, Sri Lanka, Nepal, Indonesia, Thailand, Malaysia and, to a somewhat more limited extent, in western countries. Moreover, a major titled Natural Medicine with essential similarities is being taught at Canadian universities.

13. Necessary Conditions for Launching the Program:

All necessities are based on the rules and regulations of the Council of Development and Assessment of Medical Education.

14. Miscellaneous (such as scholarships):

Not applicable.

Chapter 2 Curriculum of the Ph.D. Program of Traditional Persian Medicine

Table A. Deficiency/Compensatory Courses for the Ph.D. Program of Traditional Persian Medicine

	Course Title		edit U	nits	Credit Hours					
Course Code			Theoretical	Practical	Theoretical	Practical	Total			
01	Medical Information Systems*	1	0.5	0.5	9	17	26			
02	Reading, Interpreting and Revising Persian Medical Texts	3	2	1	34	34	68			
03	Syntax, Reading and Translation of Arabic Medical Texts	4	4	-	68	-	68			
04	Complementary and Folklore Medicine	2	1.5	0.5	26	17	43			
05	Medical Ethics, Rights and Jurisprudence	1	1	-	17	-	17			
06	Analytical History of Medicine	1	1	-	17	-	17			
07	Research Methodology in Classic and Traditional Medicine	2	1	1	17	34	51			
08	Principles of Logic and their Applications in Medicine	1	1	-	17	-	17			
09	Health Safety Measures and Prevention Principles	2	1	1	17	34	51			
10	Islamic Teachings in Medicine	1	1	-	17	-	17			
11	Management and Multilateral Social Research in Medicine	1	0.5	0.5	9	17	26			
12	Bibliography and Principles of Revising Medical Texts	2	1	1	17	34	51			
	Total			21						

⁻ Based on the decision of the academic department and the approval of the university's Council of Graduate Studies, students are required to pass a maximum of 16 credits of the deficiency/compensatory courses (Table A) besides their program credits.

^{*} Passing this course is compulsory for all students who have not already taken and passed this course.

Table B. Core Courses for the Ph.D. Program of Traditional Persian Medicine

			Credit Units			dit H			
Course Code	Course Title	Total	Theoretical	Practical	Theoretical	Practical	Total	Pre- Requisite	
13	Generalities and Natural Affairs	2	2	-	34	-	24	-	
14	Grounds, Causes, Reasons and Symptoms	4	2	2	34	68	102	12	
15	Simple and Compound Substances (Graphidions)	4	1.5	2.5	26	85	111	-	
16	Principles and Basics of Therapeutics	4	4	-	68	-	68	14	
17	Comprehensive Subjects in Persian- Islamic Medicine	3	3	-	51	-	51	16	
18	Hand Treatments and Minor Surgeries	3	1	2	17	68	85	17	
19	Emergencies, Novel Diagnostic Methods, and Treatment in Classical Medicine	4	1	3	17	102	119	-	
20	Internship (1)	2	-	2	-	136	136	18	
21	Internship (2)	2	-	2	-	136	136	20	
22	Dissertation	20	-	-	-	-	-	-	
Total			48						

Table C. Non-Core Courses for the Ph.D. Program of Traditional Persian Medicine

			Credit Units			dit H		
Course Code	Course Title	Total	Theoretical	Practical	Theoretical	Practical	Total	Pre- Requisite
23	Contrastive Analysis of Medical Schools During the Islamic Civilization	2	2	-	34	-	34	-
24	Application of Advanced Technology in Traditional Medicine	2	1	1	17	34	51	-
25	Novel Teaching Methods and Behavior Principles in Medicine	2	1	1	17	34	51	-
26	Custom Nutrition and Preparation Methods for Special Food	2	1	1	17	34	51	-
27	Massage Therapy	2	1	1	17	34	51	-

28	Spiritual Medicine, Hypnosis and Psychological Therapies	2	1	1	17	34	51	-
Total		12						

^{*} Students are required to pass two course credits of the above courses (Table C) based on the subject of their dissertation, the agreement of their advisor, and the approval of the University's Council of Graduate Studies.

Chapter 3

Course Specifications of

the Ph.D. Program of Traditional Persian Medicine

Course title: Medical Information Systems

Course code: 01

Prerequisite or concurrent course: None. Credit hours: 1 (0.5 theoretical, 0.5 practical)

Course type: Theoretical-practical

Objective: At the end of this course, students are required to know the different components of a personal computer and their usages, be familiar with the Microsoft Windows operating system, be able to install and troubleshoot Microsoft Windows, and learn how to work with different important software. Moreover, students are expected to learn different library patterns, models and methods, be able to search for information in databases relevant to their field of study, and be familiar with the library services of their place of study. Other objectives include familiarity with well-known Internet browsers in a way that students can work with search engines, and be familiar with important and beneficial websites relevant to their field of study. Lastly, students must have the crucial knowledge and ability to work with email services to send and receive letters and files.

Course Description: In this course, students must be familiarized with different components of a personal computer, the Microsoft Windows operating system, the Internet, important websites, email, and databases in order to practically put these equipment to use for studying and conducting research.

Outline (9 theoretical hours and 17 practical hours):

- Familiarity with a personal computer:
 - a. Understanding different hardware components of a personal computer and its accessories;
 - b. Understanding the application and importance of each hardware component and accessory.
- Familiarity with and operating the Microsoft Windows operating system:
 - a. Familiarity with the history of advanced operating systems, especially Windows;
 - b. The abilities and characteristics of Windows;
 - c. How to use Windows Help;
 - d. Familiarity with useful Windows programs and applications.
- Familiarity with important databases and useful academic software:
 - a. Introducing information terminology.

- b. Familiarity with the software of reference books on CD and how to use them;
- c. Familiarity with databases such as Biological Abstract, Embase, Medline, etc. and how to use them;
- d. Familiarity with full-text electronic journals on CD and how to search them.

• Familiarity with the Internet

- a. Familiarity with information channels;
- b. Familiarity with major Internet browsers and their comprehensibility;
- c. Learning the setup of Internet browsers in order to connect to the World Wide Web:
- d. Learning how to work with major search engines;
- e. Familiarity with several websites well-known and important in the respective field of study.

Course resources:

- Finding Information in Science, Technology and Medicine, Jill Lambert, Taylor & Francis, Latest Edition.
- Information Technology Solutions for Healthcare, Krzysztof Zieli'nski et al., Latest Edition.

Assessment:

- Cognitive: Assessment of students understanding in the middle and at the end of the program through essay questions.
- Mental-Kinetic: Assessment of students' skills to work with computers, Microsoft Windows operating system, and Internet search through a checklist.

Course title: Reading, Interpreting and Revising Persian Medical Texts

Course code: 02

Prerequisite or concurrent course: None. **Credit hours:** 3 (2 theoretical, 1 practical)

Course type: Theoretical-practical

Objective: Providing grounds to easily use old medical texts by acquiring reading and interpreting skills, as well as gaining familiarity with an extensive range of common words and phrases, and gaining the ability of proofreading old texts and revising them.

Outline (34 theoretical hours and 34 practical hours):

• Theoretical:

 Reading selected Persian medical texts related to different centuries and regions including: Zakhīra-i Khwârazmshâhī, Al-Aghraz al-Tibb va al-Mabahes al-Alaieah, Summary of Experiences (Kholasat Al-Tajarob), Tohfe of Hakim Momen, Makhzan ul-Advia, Yousefi Medicine, Mizan al-Tebb, and Tonekaboni's Motaleb al-Soal

- Reading and interpreting the medical phrases and terminologies in the selected readings;
- o Reading similar excerpts and extracts from other medical texts as per the need.

• Practical:

- Creating a summarized dictionary for a portion of the selected readings and finding their equivalents in contemporary scientific references;
- Proofreading and revising at least 50 pages of a medical text by referring to different versions, rereading and rewriting;
- o Annotation and adding marginalia if necessary.

Course resources:

• Zakhīra-i Khwârazmshâhī, Al-Aghraz al-Tibb va al-Mabahes al-Alaieah, Summary of Experiences (Kholasat Al-Tajarob), Tohfe of Hakim Momen, Makhzan ul-Advia, Yousefi Medicine, Mizan al-Tebb, and Tonekaboni's Motaleb al-Soal.

Assessment:

- Oral and written exams
- Practical project report

Course title: Syntax, Reading and Translation of Arabic Medical Texts

Course code: 03

Prerequisite or concurrent course: None.

Credit hours: 4

Course type: Theoretical

Objective: Preparing the students to use important Arabic medical texts and their simplified translations through the utilization of dictionaries.

Outline (68 theoretical hours):

- Reading selected medical texts including: Qanunchi Fi Al-Tibb Al-Aqsara'i, Al-Asbaab va al-Elaamaat, Tashil ul-Manafe, etc. (latest editions).
- Reading and interpreting the medical phrases and terminologies in the selected readings;
- Reading and understanding common words and their translations;
- Translating the selected texts in general.

Course resources:

• Qanunchi Fi Al-Tibb Al-Aqsara'i, Al-Asbaab va al-Elaamaat, Tashil ul-Manafe, etc. (latest editions).

Assessment:

Oral and written exams

Course title: Complementary and Folklore Medicine

Course code: 04

Prerequisite or concurrent course: None. **Credit hours:** 2 (1.5 theoretical, 0.5 practical)

Course type: Theoretical-practical

Objective: Familiarizing students with the branches of complementary medicine in the world and their understanding the principles and applications, as well as the strategies of global and scientific organizations in using them.

Outline (26 theoretical hours and 17 practical hours):

• Theoretical:

- Common terminologies for complementary medicine (alternative, marginal, etc.), their record and interpretation;
- O Different branches of complementary medicine such as acupuncture and acupressure, homeopathy, chiropractic, aromatherapy, gemmotherapy, opotherapy, hydrotherapy, balneotherapy, ayurvedic, siddha, clay therapy, etc.;
- Familiarity with the principles and applications of acupuncture, homeopathy, mud therapy, etc.;
- o Reasonable assessment of the application extent of major branches of complementary medicine;
- o Familiarity with ethnomedicine and folklore medicine (with an emphasis on Iranian folklore medicine)

• Practical:

- o Gathering and interpreting the folklore medicine of a region of the country;
- Annotation and its assessment;
- o Practical work report.

Course resources:

- Monographs and documents related to Iranian folklore medicine (Latest editions).
- The Evaluation of Complementary and Alternative Medicine; Complementary and Alternative Medicine in Rehabilitation; Complementary and Alternative Medicine Intervention (Latest editions).
- New articles.

Assessment:

Oral and written exams

Course title: Medical Ethics, Rights and Jurisprudence

Course code: 05

Prerequisite or concurrent course: None.

Credit hours: 1

Course type: Theoretical

Objective: Familiarizing students more deeply with the principles and basics of medical ethics; ways to obtain ethical virtues in behavior and self-development; understanding jurisprudent base and applied religious laws in medical services; and the methods of jurisprudent analysis regarding medical affairs.

Outline (17 theoretical hours):

- Medical ethics and rights (9 hours):
 - Reviewing lessons on medical ethics and rights with an emphasis on Islamic culture;
 - o Case studies and their analysis from the viewpoint of ethics and rights;
 - Medical ethics and rights in works of traditional medicine, and the relationship between the doctor, patient and nature;
 - o Ethics and rights in the education and research of traditional medicine;
 - Efforts toward creating a comprehensive charter of medical ethics and rights based on Islamic and traditional medicine suitable for contemporary times.
- Medical jurisprudence (8 hours):
 - o A review of the principles and basics of Islamic jurisprudence;
 - o Suitable jurisprudent laws supervising medical affairs;
 - o Proposing unique medical cases with a jurisprudent viewpoint;
 - Efforts toward creating a comprehensive reference of medical jurisprudence and determining its Outline;
 - Jurisprudent medical inquiries.

Course resources:

 A selection of books and documents from the Research Center of Medical Ethics including specialized books on medical jurisprudence, medical ethics, Medical Laws and Legislation (Islamic Law), etc. (Latest editions).

Assessment:

• Written exams

Course title: Analytical History of Medicine

Course code: 06

Prerequisite or concurrent course: None.

Credit hours: 1

Course type: Theoretical

Objective:

- Familiarizing students more deeply with the historic development of the emergence of medicine, medical advances, and their underpinning rationale;
- Understanding major historic schools of medicine;
- Understanding major schools of medicine affecting Islamic and traditional medicine;
- Understanding the presence of western medicine in Iran and the rationale behind halting and forgetting traditional medicine;
- Analytical review methods for history of medicine.

Outline (17 theoretical hours):

- The emergence of medicine in different nations;
- The share of different nations in developing and advancing medicine;
- The share of divine and prophetic teachings in advancing medicine;
- Major historic schools of medicine (Sumer, Assyria, Chaldea, Greece, India, China, Egypt, Iran, etc.);
- Islam's viewpoint toward medicine and its role in the development of medical knowledge;
- The era of translation and its impact on Iranian traditional medicine;
- The era of medical prosperity in the Islamic civilization;
- The role of Islamic and Iranian medicine in forming and developing European medicine;
- The rationale behind the gradual decline of Iranian-Islamic medicine;
- Iranian schools of traditional medicine inside and outside Iran:
- The entrance of western medicine in Iran and Islamic lands;
- Key figures of Iranian and Islamic medicine, their innovations, and the value of their efforts:
- Medical history references, their advantages and disadvantages;
- Efforts toward creating the preliminary stages of the great encyclopedia of the history of medicine in Iran.

Course resources:

Oyoun Al-Anba, History of the Sages of Ghafta, History of Medicine (by the late Dr. Najm Abadi), History of Medicine and Medical Practice in Iran, Cyril Elgood's A Medical History of Persia and the Eastern Caliphate: From the Earliest Times Until the

Year A.D. 1932), History of Medicine (Siegfried Hunke, Manfred Ulman, Edward Brown, etc.) (Latest editions).

Assessment:

• Written exams

Course title: Research Methodology in Classic and Traditional Medicine

Course code: 07

Prerequisite or concurrent course: None. Credit hours: 2 (1 theoretical, 1 practical)

Course type: Theoretical-practical

Objective: Understanding research methods in classic and traditional medicine and proposing new practices based on the grand heritage of Iranian-Islamic medicine.

Outline (17 theoretical hours and 34 practical hours):

• Theoretical:

o Familiarity with the following subjects: Generalities of research; devising a research blueprint (introduction, title, statement of the problem, literature review, purposes and hypotheses, methodology, variables, type of research (nontreatment, exploratory, descriptive, comparative), sampling, data collection, execution, ethical considerations, data analysis); principles of writing articles (the structure and types of articles, introduction, methodology, results, references); how to write a letter to an editor-in-chief; how to write an abstract for scientific events; how to write case reports; how to write a review.

• Practical:

o Applied practices with the supervision of related teachers.

Course resources:

• Research in Health Systems, Section Two: Analyzing Data and Writing Report, the World Health Organization (Latest edition).

Assessment:

• Written exams and the score of the applied practices.

Course title: Health Safety Measures and Prevention Principles

Course code: 09

Prerequisite or concurrent course: None. **Credit hours:** 2 (1 theoretical, 1 practical)

Course type: Theoretical-practical

Objective: Understanding the scientific disease prevention methods, and health safety and improvement suitable for specific individual and environmental settings based on traditional medicine with attention given to contemporary scientific circumstances.

Outline (17 theoretical hours and 34 practical hours):

- The six essential principles;
- The concepts of health and disease;
- Nutrition and freedom of choice regarding food based on the quality of temperament, adjustment to an improved temperament, food ethics, inappropriacies, and cooking, and keeping food;
- Nutrition in health and disease;
- Hydration, the ethics of drinking water, and relevant measures;
- The body's movement and immovability, different austerity measures, specific austerity measures of each limb, and different types of traditional massages;
- Measures regarding willful movements;
- Measures regarding bathing;
- Measures regarding sleeping and dreaming;
- Measures regarding retention and vomiting;
- Comprehensive measures;
- Measures based on seasons and temperaments;
- The decaying of the air and its relevant measures;
- Measures regarding pregnant women, lactating mothers, and children, and measures regarding subsequent diseases;
- Measures regarding children and adjustment of human behavior;
- Measures regarding breastfeeding, breastfeeding conditions, and the upbringing of children after the breastfeeding stage;
- Specific pediatric diseases and the relevant measures;
- Measures regarding the youth, adult, and the elderly;
- Measures regarding travelers;
- General public health form the medical viewpoint of our ancestors.

Course resources:

• The Canon of Medicine (Vol. 1), Kholasat Al-Hikmah, Zakhīra-i Khwârazmshâhī, Sources of Nutrients and Repelling Diseases (Rhazes); Daf'I Mazar Al-Koliyah, Taghziah Al-Marza (Samarqandi), etc. (Latest editions).

Assessment:

Written exams

Course title: Islamic Teachings in Medicine

Course code: 10

Prerequisite or concurrent course: None.

Credit hours: 1

Course type: Theoretical

Objective: Familiarity of students with Islamic teachings regarding medicine.

Outline (17 theoretical hours):

• Medical theoretical principles in Islamic teachings;

- Necessary characteristics and attributes of medical personnel;
- Narrative resources of Islamic medicine;
- Innovations of Islamic medicine;
- Ways to use Islamic teaching in novel medical planning;
- Creating a charter of medical education in Islam;
- Reviewing and criticizing available opinions and books in this field.

Course resources:

- Major narrative resources such as Bahar al-Anwar, Kotob-e Arba'e, Sahah o-Settah, Vaafi, etc. (Latest editions).
- Special resource such as Fosul al-Mohemah, Tebb ol-Etrah, Tebb ol-Nabawi, Resalat Zahabiyah, etc. (Latest editions).
- Contemporary resources such as the Encyclopedia of Medical Hadith, The First University and the Last Prophet, The Ethics of Well-Being, etc. (Latest editions).

Assessment:

• Written exams

Course title: Management and Multilateral Social Research in Medicine

Course code: 11

Prerequisite or concurrent course: None. Credit hours: 1 (0.5 theoretical, 0.5 practical)

Course type: Theoretical-practical

Objective: Enabling students with regard to management skills and conducting studies in the fields of sociology, economics of medicine, population, culture, and their impact on prevention and treatment.

Outline (9 theoretical hours and 17 practical hours):

• Theoretical:

- o Familiarity with the principles of management in medicine;
- o Familiarity with medical sociology and cases of its studies;
- Conducting qualitative and quantitative studies and interpreting them in the field of medicine.

• Practical:

- o Conducting practical studies to create a monograph for each district;
- o Creating monographs for city and rural district with emphasis on medical aspects.

• Course resources:

Determined by the teacher.

Assessment:

- Written exams (30 percent);
- Applied work (70 percent) by submitting monographs for one city or rural district.

Course title: Bibliography and Principles of Revising Medical Texts

Course code: 12

Prerequisite or concurrent course: None. **Credit hours:** 2 (1 theoretical, 1 practical)

Course type: Theoretical-practical

Objective: Familiarity with medical variety and differentiation, and its impact on writing medical books and texts, as well as the ability of scientifically revising medical texts.

Outline (17 theoretical hours and 34 practical hours):

• Theoretical:

- Medical bibliography;
- o Principles and basics of revising old texts;
- Attributes of revising medical texts.
- o The development of medical varieties and the writing of books in this regard.

• Practical:

- Introducing 100 books of medicine during the Islamic civilization since the translation era until the beginning of the 14th Hijri century based on bibliography principles and basics;
- o Criticizing new and repetitive ideas in the mentioned resources;
- o Revising texts and presenting the revised work for at least 10 pages of one of the traditional medicine books.

Course resources:

• A collection of printed and handwritten books on traditional medicine (special publication of the Institute for Studies on Medical History, and Islamic and Complementary Medicine, the documents of similar universities in India and Pakistan, and Aligarh Muslim University) (Latest editions).

Assessment:

- Submitting work reports in the form of writing a research article based on course subjects in cooperation with a librarian expert from one of the country's national libraries (50 percent);
- Giving a presentation with the title of the written article (50 percent).

Course title: Generalities and Natural Affairs

Course code: 13

Prerequisite or concurrent course: None.

Credit hours: 2

Course type: Theoretical

Objective: Learning about the theoretical basis of Iranian traditional medicine and how to interpret health and diseases, as well as their treatments based on this interpretation.

Outline (34 theoretical hours):

- Theoretical and practical wisdom, sensations, and the place of medicine in this categorization;
- Definition of medicine, its categorization to theoretical and practical medicines, the place of natural affairs, causes and rationale, reasons, and symptoms in this categorization;
- Natural affairs and their significance in Iranian traditional medicine;
- Principles, temperaments, humors, body parts, spirit, power, actions.

Course resources:

• Zakhīra-i Khwârazmshâhī (annotated by the late Dr. Seyyed Jalal Mostafawi), Kholasat Al-Hikmah, Majma Al-Jawameh, Mizan Al-Tibb, Maghame Al-Rashiq li-Monkerah Tibb Al-Atiq, etc. (Latest editions). (Latest editions.)

Assessment:

• Written exams

Course title: Grounds, Causes, Reasons and Symptoms

Course code: 14

Prerequisite or concurrent course: Generalities and Natural Affairs (Code 13).

Credit hours: 4 (2 theoretical, 2 practical)

Course type: Theoretical-practical

Objective: Familiarity with diseases and their symptoms, different stages of diseases, and disease diagnosis based on the principles of Iranian traditional medicine.

Outline (34 theoretical hours and 68 practical hours):

- Theoretical:
 - o Causes, reasons and symptoms:
 - Defining health and disease;
 - Disturbance in actions and their types;
 - Simple or compound disease;
 - Mal-temperament and its types;
 - Diseases of compound body parts and organs and their types (paralysis, skin disorders, etc.)
 - Compound diseases (inflammations, impacts, etc.)
 - Disorders and injuries relating to bones, limbs, joints, etc. including breakages and fragmentations;
 - Four stages of a disease (Commencement, intensification, hindrance, resolution)
 - Causes of diseases (external, health record, contractions)
 - The six core principles.
 - o Reasons and symptoms:
 - Simple and compound tangible pulse and their types (long, short, neutral, wide, narrow, large, raised, lowered, small, thick, wavy, bouncy, etc.);
 - Urine sample.
- Practical:
 - Obtaining the patient's complete status;
 - o Diagnosing diseases and offering the rationale for the diagnosis;
 - o Checking the pulse and recognizing at least 10 types;
 - o Interpreting or identify the disease based on pulse;
 - o Laboratory examination of the urine, sweat, etc. to identify the disease.

Course resources:

• Al-Asbaab va al-Elaamaat, The Canon of Medicine, Zakhīra-i Khwârazmshâhī, Kholasat Al-Hikmah, etc. (Latest editions).

Assessment:

- Written exam:
- Practical medical exam.

Course title: Simple and Compound Substances (Graphidions)

Course code: 15

Prerequisite or concurrent course: None. Credit hours: 4 (1/5 theoretical, 2.5 practical)

Course type: Theoretical-practical

Objective: To identify common medical practices in traditional Iranian medicine and to obtain complete information on at least 5 common forms of drug preparation and compounding in Iranian traditional medicine.

Outline: (26 theoretical hours and 85 practical hours):

• <u>Theoretical:</u>

- o Simple medical substances including their essence, nature, activity and properties;
- How to identify the temperaments of spice and nutrients based on experience and analogy;
- Spice preparation and preservation;
- Spice construction;
- o Spice burning, purification, simulation, calorie, contrivance, and rinsing;
- Quality of spice composition;
- o Different forms of medicine:
- Preparation of compound medicines: Baths, tablets, triphala, antidotes; serums; doughs; sauces; syrups; perfumes; distillates; ointments; poisons; laxatives; electuaries, etc.

• Practical:

- Viewing medical practices and record their physical and organoleptic characteristics;
- o Cleansing, preparing, packaging and maintaining them;
- o Providing sustainable traditional medicines;
- o Introducing new pharmaceutical technologies and providing delayed-release medicines based on traditional medicine knowledge.

Course Resources:

 Discoveries of Discordidus, Mufradat al-Hawi, The Canon of Medicine, Badiee's Ekhtiyarat, Davood Antaki's Musings, Jama'ah Ibn Battar, Tohfe of Hakim Momen, Makhzan al-Advieh, Kabir Graphidions, Shafaii's Graphidions, Salehi's Graphidions, Mohammad ibn-Ali Samarqandi's Graphidions, Iran Floral Pharmacopoeia, similar pharmacopoeia, etc. (Latest editions).

Assessment:

• Written exam;

Practical exam.

Course title: Principles and Principles of Therapeutics

Course code: 16

Prerequisite or concurrent course: Grounds, Causes, Reasons and Symptoms (Code 14)

Credit hours: 4

Course type: Theoretical

Objective: To identify different therapeutic methods in Iranian traditional medicine and to identify diseases that can be treated with traditional medicine by the aforementioned method as well as to identify problematic diseases in classical medicine that are either fully or partially treated with traditional medicine.

Outline: (2 theoretical hours):

- Principles and basics of disease control;
- Natural treatments (nutrition, austerity, etc.), medicinal treatments, surgical treatments;
- Distillation, rubbing ointments, fomentation, orthopedics, treating dislocation, Key, vomiting, diarrhea, enema, leeching, phlebotomy, cupping, etc.;
- Major diseases including headache, temporal headache, meningitis, melancholia, epilepsy, stroke, paralysis, facial nerve paralysis, tremor, seizure, catarrh, xerophthalmia, eye, ear, nose, and oral diseases, swallowing problems, cough, pneumonia, tuberculosis, cyanosis, pursiness, choking, nausea, gastric diseases, fainting, colic, hiccups, chronic diarrhea and vomiting, dysentery, gripes, liver diseases, stomachache, and jaundice.

Course Resources:

• The Comprehensive Book on Medicine, Al-Mansouri, The Canon of Medicine, The Complete Book of the Medical Art, Zakhīra-i Khwârazmshâhī, Al-Aghraaz al-Tabbiah, Kholasat Al-Hikmah, etc. (Latest editions)

Assessment:

Written exam

Course title: Comprehensive Iranian-Islamic Medicine Topics

Course code: 17

Prerequisite or concurrent course: Principles and Basics of Therapeutics (Code 16)

Credit hours: 3

Course type: Theoretical

Objective: To teach the critical method in the texts of Iranian-Islamic traditional medicine.

Outline (2 theoretical hours):

• Studying the first volume of the book Kholasat Al-Hikmah, and the interpretation of its topics using the major references of Iranian-Islamic medicine, in particular The Canon of Medicine, Mujaz al-Qanun, Al-Aqsara'i, Al-Mansouri, The Complete Book of the Medical Art, Zakhīra-i Khwârazmshâhī, Al-Aghraaz al-Tabbiah, The Comprehensive Book on Medicine, Al-Asbaab va al-Elaamaat, initial works (translations by Honeyn ibn Ishaq, Sabet ibn Arwah, Istefen ibn Basil, etc.), will be carried out by the students under the guidance of the professors by reading Kholasat Al-Hikmah line by line and discussing the content using the sources cited above. Students will interpret and critique the contents.

Course Resources:

• Kholasat Al-Hikmah (Vol. 1, 2, and 3) (Latest editions).

Assessment:

• Written exam (50%);

• 50% of student evaluation will be based on the amount and quality of the students participation during the course.

Course title: Hand Treatments and Minor Surgeries

Course code: 18

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Prerequisite or concurrent course: Comprehensive Subjects in Iranian-Islamic Medicine

(Code 17)

Credit hours: 3 (1 theoretical, 2 practical)

Course type: Theoretical-practical

Objective: To teach the practice of conventional hand treatments in traditional medicine and their applications.

Outline (17 theoretical hours and 68 practical hours):

- Theory:
 - o The importance of hand treatments in traditional medicine;
 - Types of hand treatments including ghamz, dalk, cupping, key, nishtar, treating dislocations, treating broken bones and fractures, etc.;
 - Medical warnings about minor surgeries;
 - The scope of application of the surgeries and their effects;
 - o Traditional medicine in minor surgeries;
 - o Use of assistive devices in surgeries.
- Practical

 Executing hand treatments first using a proper moulage and then performing them on patients with the supervision of a professor.

Course Resources:

• A collection of printed and handwritten books on traditional medicine (special publication of the Institute for Studies on Medical History, and Islamic and Complementary Medicine, the documents of similar universities in India and Pakistan, and Aligarh Muslim University) (Latest editions).

Assessment:

• Written exam;

• Practical exam.

Course title: Emergencies, Novel Diagnostic Methods, and Treatment in Classical Medicine

Course code: 19

Prerequisite or concurrent course: None. Credit hours: 4 (1 theoretical, 3 practical)

Course type: Theoretical-practical

Objective: To familiarize students with the latest classical medical achievements, to empower them to benefit from the most advanced methods of disease diagnosis, and to prepare them for immediate medical services and reasonable behavior in the face of emergency and difficult conditions.

Outline: (17 theoretical hours and 102 practical hours):

• Theory:

- New methods of diagnosis and treatment in internal diseases, pediatrics, gynecology, infections, skin, poisoning, etc.;
- Emergency (medical emergencies) in internal diseases, pediatrics, general surgery, orthopedics, poisonings, nerves, the elderly, women, and cardiovascular cases.

• Practical:

- Attending the above wards and departments, and participating in morning reports;
- Performing essential services alongside the personnel from the aforementioned departments;
- Attending emergency departments and performing essential services under the supervision of emergency medicine specialists

Course Resources:

• Based on resources approved by the Secretariat for the Council of Medical Education.

Assessment:

• Written exam:

• Practical exam.

Course title: Internship (1)

Course code: 20

Prerequisites or concurrent course: Hand Treatments and Minor Surgeries

Credit hours: 2

Course type: Internship

Objective: To enhance scientific and experimental knowledge and medical skills to provide, maintain and promote the health of individuals and society, as well as to conduct thorough examinations, diagnose diseases, prescribe appropriate therapies, and select the most appropriate therapies for patients by taking account their benefits, current scientific breakthroughs, as well as the preparation of compound medicines (if necessary) under the supervision of their respective professors.

Outline: (136 hours of internship):

• Learn, practice, and conduct independent work in the fields of preservation, diagnosis, and treatment in qualified health centers.

Course Resources:

Related to Professors Courses

Assessment:

Practical and clinical exams.

Course title: Internship (2)

Course code: 21

Prerequisites or concurrent course: Internship (1)

Credit hours: 2

Course type: Internship

Objective: To enhance scientific and experimental knowledge and medical skills to provide, maintain and promote the health of individuals and society, as well as to conduct thorough examinations, diagnose diseases, prescribe appropriate therapies, and select the most appropriate therapies for patients by taking account their benefits, current scientific breakthroughs, as well as

the preparation of compound medicines (if necessary) under the supervision of their respective professors.

Outline: (136 hours of internship):

• Learn, practice, and conduct independent work in the fields of preservation, diagnosis, and treatment in qualified health centers.

Course Resources:

• Related to Professors Courses

Assessment:

Practical and clinical exams.

Course title: Dissertation

Course code: 22

Prerequisite or concurrent course: None.

Number of units: 20

Course type: -

Objective: To design and implement a research project related to traditional medicine topics.

Course description: Students must conduct research in accordance with the regulations of the specialized doctoral program approved by the High Council of Planning for Medical Sciences.

Essential requirements and explanations:

- 1. The student, with the guidance of traditional medicine professors, specifies the title of his or her clinical dissertation.
- 2. In the questionnaire presented, it is necessary to nominate a supervisor in addition to one of the professors of traditional medicine with a sub-specialty degree.
- 3. There will be no restrictions regarding the selection of advisory professors depending on the subject.
- 4. The student is required to do part of the practical work related to his or her dissertation under the supervision of the second supervisor in the specialty clinical departments with the relevant and supervised field assistants. Upon the approval of the second supervisor, the student will commence clinical research based on the teachings of traditional medicine and the ethics of research under the direct supervision of the first supervisor.

Course Resources:

• According to the course relevant professors' opinions.

Assessment:

• Writing and defending a dissertation.

Course title: A Comparative Study of the Medical Schools of the Islamic Civilization

Course code: 23

Prerequisite or concurrent course: None.

Credit hours: 2

Course type: Theoretical

Objective: To empower students to understand the evolution and exchanges of medical knowledge from the beginning of the translation era to the mid-13th Hijri century.

Outline: (2 theoretical hours)

- Translation of medical books and the influence of Greek and Syriac schools;
- Characteristics of the Andalusian school of medicine and its relation to the lands of the eastern caliphate;
- Medical innovations of the Islamic civilization until the end of the 14th century;
- Iranian medical influence on India;
- A comparative study of theoretical foundations in Iranian, Indian, Chinese, etc. medicine;
- Iranian medical works in other countries:
- Persian medical terminologies in other nations' medicine.

Course Resources:

• A collection of printed and handwritten books on traditional medicine (special publication of the Institute for Studies on Medical History, and Islamic and Complementary Medicine, the documents of similar universities in India and Pakistan, and Aligarh Muslim University) (Latest editions).

Assessment:

- Submission of a report in the form of a research paper based on course outline and with the assistance of an expert in history (50%);
- Presentation of a lecture with the title of the written article (50%).

Course titles: Application of Advanced Technology in Traditional Medicine

Course code: 24

Prerequisite or concurrent course: None. Credit hours: 2 (1 theoretical, 1practical)

Course type: Theoretical-practical

Objective: To enable the use of modern tools to increase the effectiveness and facilitate the delivery of traditional medical services.

Outline: (1 theoretical hour - 2 practical hours)

- <u>Theoretical:</u>
 - o Diagnostic systems in classical medicine;
 - Documenting common causes and symptoms in traditional medicine using stateof-the-art technology and new tools.
- Practical:
 - Laboratory work

Course Resources:

• According to the course instructor's opinion.

Assessment:

- Submission of a report in the form of a research paper based on the course outline and with the assistance of a medical engineering expert (50%);
- Presenting a lecture as a written article (50%).

Course title: Novel Teaching Methods and Behavior Principles in Medicine

Course code: 25

Prerequisite or concurrent course: None. Credit hours: 2 (1 Theoretical, 1 practical)

Course type: Theoretical-practical

Objective: To provide students with the necessary abilities to apply the latest perspectives and theories in medical education and to use them in delivering modern traditional medicine education as well as understanding the developments and exchanges of medical knowledge.

Outline: (17 theoretical hours and 34 practical hours)

- Theory:
 - Human resources communications;
 - o Group dynamics;
 - Medical education practices and their assessment;
 - o The role of roll playing;
 - o Lectures, conferences, symposiums, etc., their benefits and weaknesses;
 - Accreditation in medical education.
- Practical
 - o Role playing;
 - o Teaching with related professors;

- o Correcting deficiencies;
- o Re-presenting conferences and speeches.

Course Resources:

• According to the course instructor's opinion.

Assessment:

• Submission of work report in the form of a research paper based on course outline (50%)

• Holding a lecture, conference, symposium, etc. in this field and evaluating it (50%)

Course title: Custom Nutrition and Preparation Methods for Special Food

Course code: 26

Prerequisite or concurrent course: None. Credit hours: 2 (1 theoretical, 1 practical)

Course type: Theoretical-practical

Objective: To gain practical ability to prepare and evaluate different types of traditional foods in traditional medicine and the principles and basics of nutritional management

Outline (17 theoretical hours and 34 practical hours):

• Theory:

- Overview of nutrition fundamentals in traditional medicine and findings of the world of modern science;
- Nutrition in health and disease:
- Nutrition review in traditional medicine and classical medicine based on new and old knowledge, their preparation and uses;
- o Beverages, salts, spices, auxiliaries, soups, etc.;
- Special breads and methods of preparation;
- Conventional drinks in traditional medicine, their therapeutic effects, and their preparation;
- o Using knowledge of the day to improve the quality of traditional diet foods;
- Health considerations in the preparation, cooking and preservation of food using contemporary knowledge;
- Investigating new strategies in the industrial production of traditional dietary ingredients

• Practical:

- Presence in the kitchen and practicing patient-specific food preparation guidelines;
- Evaluating different preparation, cooking, and food preservation practices;
- o Performing urgent tests to detect corruption and food contamination;

o Practical cooking training for colleagues.

Course Resources:

- Sources of Nutrients and Repelling Diseases (Rhazes); At'ameh Al-Marza (Samarqandi); Cooking during the Safavid Era; Nutritional Health; Edibles and Treatment through Food;
- A collection of printed and handwritten books on traditional medicine (special publication of the Institute for Studies on Medical History, and Islamic and Complementary Medicine, the documents of similar universities in India and Pakistan, and Aligarh Muslim University) (Latest editions).

Assessment:

- Written exam:
- Practical exam.

Course title: Massage Therapy

Course code: 27

Prerequisite or concurrent course: None. Credit hours: 2 (1 theoretical, 1 practical)

Course type: Theoretical-practical

Objective: To prepare students for traditional and modern massage therapies and to inform patients about their effective use and evaluation of their efficacy.

Outline (17 theoretical hours and 34 practical hours):

- Theoretical:
 - o Traditional massage therapy and its examples;
 - Classical massage therapy and its applications;
 - o Possibility to improve the quality of traditional massage therapies by utilizing the latest knowledge and available technology
- Practical:
 - o Performing a variety of massage therapies on the joints and patients under the supervision of a professor.

Course Resources:

- New books on physical therapy and massage therapy based on the teacher's opinion;
- A collection of printed and handwritten books on traditional medicine (special publication of the Institute for Studies on Medical History, and Islamic and Complementary Medicine, the documents of similar universities in India and Pakistan, and Aligarh Muslim University) (Latest editions).

Assessment:

• Written exam;

• Practical exam.

Course title: Spiritual Medicine, Hypnosis and Psychological Therapies

Course code: 28

Prerequisite or concurrent course: None. Credit hours: 2 (1 theoretical, 1 practical)

Credit type: Theoretical-practical

Objective: To empower students to utilize the standards of spiritual medicine, induction, hypnosis and psychotherapy and their practical use in dealing with patients.

Outline (17 theoretical hours and 34 practical hours):

- <u>Theoretical:</u>
 - o The concept of spiritual medicine;
 - Human spiritual identity and its impact on biopsychosocial identity and function of different body systems;
 - o Hypnosis: Principles, basics and practical use.
- Practical:
 - Using hypnosis alongside traditional medicine and evaluating its efficacy;
 - The role of game in applying spiritual medicine and psychiatric treatments to patients.

Course Resources:

- Books on spiritual medicine and psychiatric therapies based on the teacher's opinion;
- Dr. Reza Jamalian's collection of works on hypnosis introduction and its use in therapy (Latest edition).

Assessment:

- Written exams
- Practical exercises.

Chapter 4

Assessment of the Ph.D. Program of Iranian Traditional Medicine

1. Purpose of Assessment:

- a. Achieving the professional expectations of the graduated students of the program with a task-oriented approach;
- b. Determining deficiencies, excesses, strengths and weaknesses of the program;
- c. Modifying and gradually improving the program.

2. Assessment Methods:

Assessment will be summative with participation from the teachers, learners, and other key figures, conducted by the Secretariat for the Council of Traditional and Complementary Medicine Education.

3. Executive Stages of Assessment:

- a. Determining assessment purposes;
- b. Supplying assessment tools;
- c. Conducting the assessment;
- d. Analyzing the results;
- e. Making necessary decisions;
- f. Submitting a proposal to the High Council of Planning.

4. Succession of Assessment:

At the end of each academic cycle (every 4 years) at the graduated students' centers of medical services.

5. Proposed Indices for Program Assessment:

- a. The obtained scores in final exams based on professional duties;
- b. Achievement rate regarding professional abilities compared to the predicted purposes of the program;
- c. Determining the efficiency level of graduated students from the viewpoint of department heads regarding the fulfillment of professional duties;
- d. Determining the satisfaction level of patients regarding professional behavior and the benefits of the graduated students' treatment methods.

6. Program's Success Criteria Regarding Each Index:

- a. Above %70 obtained score in final exams:
- b. Above %80 achievement of professional abilities;
- c. Above %75 efficiency level from the viewpoint of department heads;
- d. Above %85 patient satisfaction.