

Islamic Republic of Iran
Ministry of Health and Education
Secretariat of the Supreme
Council for Medical Science Planning

Curriculum for Non-Continuous Master's
Program in Health and Hospital
Management

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Introduction:

One of the most important responsibilities of any health systems is the provision of a competent and efficient workforce across all medical and related disciplines. Achieving this goal requires proper and equitable distribution of personnel and fair allocation of human resources at every level of the health system. Health and Hospital Management is a branch of humanities and an interdisciplinary subject which is applied in the field of medicine. Over the past several decades, it has consistently been regarded as an important and influential discipline by health system policymakers.

The primary objective of launching this program is: 1- to train professional and committed experts capable of leading healthcare organizations, including the health service networks, hospitals, and other health sectors and 2- to provide appropriate human resources to deliver effective healthcare and administrative services in organizations.

Health systems, have distinctive characteristics, including high value of health as their ultimate output, their complexities, considerable amount of resources needed, required professionals, advanced and expensive instruments, information asymmetry between service providers and service recipients, external effects (externality), and monopoly within the sector, significance of ethics, equity, — quality, responsiveness, and fairness, effectiveness, efficiency and cost-effectiveness, high cost of errors, high level of induced demand and unnecessary consumption of services, so they differ from other sectors. ,

In Iran, Health and Hospital Management program has received considerable attention and is considered as an independent program

This program is offered at three academic levels: Bachelor's, non-continuous Master's, and Doctoral (PhD). The contents of each level are designed to enhance students' knowledge and skills. Admission to the PhD level requires applicants to possess the necessary knowledge and competencies from the lower levels.

Given the extensive role of graduates in this field within the healthcare network, health system improvement, and hospital administration, and considering the specific social and health conditions of the country, it is essential to create training programs and curriculum content that support the required knowledge and competencies according to national priorities.

Thus, the master's program in Health and Hospital Management has been revised in alignment with global recommendations and national policies to strengthen foundational knowledge in management and health system organization and to ensure consistency in graduate training. Furthermore, updates in the curriculum related to the master's program in Health and Hospital Management have been approved.

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Health and Hospital Management (MSc)

Program Definition:

Health and Hospital Management, as a branch of human sciences, is an interdisciplinary program applied within medical sciences. Its activities and main responsibilities include planning, organizing, coordinating, leading, and controlling healthcare organizations, and considering the internal and external factors affecting organizational performance. Other issues addressed in this program include: policy making,

quality, safety, occupational security, ethics, accreditation standards, performance management, financial management, change management, communication management, management of unexpected events and uncertainties, information technology development, human resource management, patient-centered standards, insurance, equity, productivity, health management, strategic management, and intra- and inter-organizational relations within various segments of the health system.

Healthcare and hospital management emphasize strategic and operational planning, fair resource management, efficiency, effectiveness, responsiveness, equitable access, and service continuity.

In this discipline, students are admitted based on the level of knowledge, skills, and general competencies expected of graduates at the master's level. The career categories for graduates, as specified in the "National Occupational Classification," fall under administrative, executive, and managerial roles as well as teaching and research in the provision of health services.

Graduates entering the master's program are expected to demonstrate higher abilities compared to the bachelor's level. These competencies prepare them to work as supervisors and directors within healthcare and hospital settings and to support organizational goals. Since healthcare systems require trained managers, and hospital managers operate at the frontline of service delivery, students in this major must acquire essential competencies such as:

- Understanding healthcare systems
- Managing hospital and health organization information systems
- Organizational analysis
- Strategic thinking
- Leadership and general management
- Budgeting and financial management
- Decision-making under uncertainty

This program enables graduates to assume more senior leadership and academic roles and actively contribute to solving problems and addressing questions posed by stakeholders and health system managers.

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Admission Requirements:

- Passing the national entrance exam in accordance with the regulations of the Ministry of Health, Treatment, and Medical Education
- Acceptable academic qualifications as specified below:
 - General Doctorate in Medicine (MD), Dentistry, or Pharmacy
 - All bachelor's degrees in medical sciences and allied programs
 - Bachelor's degrees in management (all majors), Hospital administration, Management, law, accounting, economics, and social sciences

Note:

To gain detailed information on accepted academic degrees, exam subjects, admission capacity, quotas, and any updates or changes based on annual policies of the Ministry of Health regarding master's programs in medical sciences, refer to the latest exam guidelines

History and Evolution of the Program in the World and Iran:

The establishment of this program, initially under the titles of **Hospital Management** and **Administration of Hospital Affairs**, dates back to 1956. At that time, the Ministry of Health provided in-service training programs, which were financially supported by the Planning Organization. In the 600th session of the University of Tehran Council, dated June 11, 1962 the proposal to establish the **Institute of Hospital Sciences** was approved. A memorandum of understanding was signed between the University of Tehran and the Ministry of Health, and from 1962 to 1963 (1340-1341), hospital management courses officially became part of the higher specialized education curriculum at the university.

Subsequently, the **Hospital Management Program** was organized in accordance with the above statute and approved by the authorities of the Ministry of Health and the Planning Organization. The educational system was developed by reviewing training programs in the United States, with the cooperation of the hospital management education officers, and financial support of Leeds University (UK) and Nuffield center for Health Services research.

For four years, the program was implemented in collaboration with **Artuz Hurst Academy**, a hospital advisory center of Nuffield, until the Cultural Revolution in Iran, when the program underwent some changes. After the victory of the Islamic Revolution in Iran and the Cultural Revolution, on June 24, 1984, based on the **Bachelor's Program in Health Services Management** (prepared and approved by the **Health Services Management** Branch of the Medical Group of the Cultural Revolution Headquarters) the undergraduate curriculum was officially approved.

Later, in its 220th session dated May 6, 1991, the **Supreme Council for Planning of Medical Education** approved the **Master's Program in Health Services Management** (non-continuous),

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based on a plan prepared by the specialized committee of the Medical Group of the Supreme Planning Council.

Currently, the program is taught at the **bachelor's, master's, and doctoral levels** in several universities across Iran.

Global History:

It is noteworthy that **Hospital Management** as a discipline was first established in 1934 at the **University of Chicago, USA**, at the master's level as a one-year program, which was later extended to a two-year program. In 1983, approximately 51 educational programs at the master's level in this program were approved by the U.S. Department of Health, resulting in the graduation of around 20,000 students with a Master's degree in **Hospital Management** in the country.

Today, this program is offered in most countries, including the **USA, Canada, Australia, Germany, and the UK**, either as formal academic programs under titles such as **Health Services Management, Health Care Management, and Hospital Management**, or as in-service training programs for healthcare managers and students.

These programs are taught academically and practically through various learning modalities and are delivered to students and health system managers applying modern training methods.

Career Status of Graduates

All graduates—based on their knowledge, skills, capabilities, experience, background, and both acquired and inherent competencies, as well as according to the needs of the health system—can serve in various sectors of the health system and in a wide range of job positions.

Most of these positions are specified in the *Health Services Job Classification Scheme* and include administrative, executive, and expert roles, as well as managerial, educational, research, and consulting positions. Graduates may perform duties and provide services in the following areas:

- Headquarters of the Ministry of Health and Medical Education
- Universities of Medical Sciences and Institutions Affiliated with the Ministry of Health
- Deputies of Universities of Medical Sciences, such as:
 - Deputy for Development
 - Deputy for Treatment
 - Deputy for Public Health
- Hospitals (Public and Private)
- Public and Private Health Insurance Organizations
- Research Centers and Medical_Research Institutes

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- Health and Treatment Networks and Centers
- Other Health Sectors

The **master's program** in this program, in terms of the level of knowledge and skills, is positioned between the bachelor's and doctoral levels. Its graduates, similar to other master's programs, are primarily practice-oriented and, depending on their competencies and qualifications, may assume a wide range of responsibilities—from administrative and executive expert positions to operational and mid-level managerial roles within the health system. Part of their responsibilities also includes research and educational activities.

Philosophy (Values, and Beliefs:

Over the past several decades—especially in recent years—many countries around the world, particularly developed nations, have moved toward greater **professionalism** in all fields, including health system management. This means that a person can take on a responsibility and perform it correctly only if they possess the necessary competence and qualifications, including the required knowledge, skills, and professional commitment in that specific area. Naturally, part of these competencies—mainly knowledge-based—are acquired through classroom lectures, workshops, seminars, webinars, journal clubs, and studying relevant resources. Another part—mainly skill-based—is gained through practical training / practicum. Ultimately, competencies are gradually strengthened and completed over the course of professional experience and service, while some competencies are rooted in the individual's innate characteristics. In this program, efforts have been made to emphasize the major and essential competencies of graduates; however, all graduates must continue to work persistently and continuously to enhance their competencies throughout their careers.

Additionally, in revising this program, the following values are emphasized:

- Human, ethical, spiritual, and divine principles
- Alignment with national priorities, programs, and high-level policy documents
- Priority of prevention, health promotion, and maintaining health over treatment
- Respect for human dignity, ethics, professional commitment, and justice in health and health system
- Comprehensiveness and community-orientation
- Efficiency, effectiveness, and cost-effectiveness
- Strengthening teamwork, collaboration, and class participation
- Promoting a culture of justice-seeking and honesty at the highest ethical standards
- Commitment and Responsibility in Performing Duties

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- Personal and social growth, and strengthening the spirit of participation and entrepreneurship
- Setting the highest standards for students, faculty members, and academic programs
- Accountability of faculty and students and their active participation in the program
- Flexibility, dynamism, creativity, innovation, initiative, and creative thinking in classroom and program activities
- Attention to professional development to support student success
- Alignment of material and human resources, along with leading and guiding the organization toward its goals and delivering high quality services
- Contributing to the promotion and enhancement of public health and social well-being.

Vision

The vision of the Master's Program in Health and Hospital Management is to educate graduates possessing the professional competencies required to assume a wide range of responsibilities in the health system—from expert roles to managerial positions. Within a ten-year perspective, graduates should be able to strengthen and complete their competencies by actively participating in key positions across the health system and contributing to operational processes, planning, decision-making, and policy formulation. This will ultimately support the improvement of governance quality, the management of health organizations, and the advancement of good governance indicators in the health sector, leading to significant improvements in community health outcomes. Another vision of the program, within this ten-year period, is to be recognized among the leading programs in the region in terms of educational standards, research output, and management of health services delivery to the population.

Mission

The mission of this program is to train competent and responsible human resources who are knowledgeable the health system and are sensitive to individual and community health. With their knowledge and capabilities, graduates should be able to fulfill assigned duties across various areas of the health system and thereby play an effective role in health system management and community health improvement.

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General Objectives:

The main goal of the program is to provide qualified human resources capable of undertaking administrative and executive responsibilities in various health and treatment units, in order to enhance efficiency, effectiveness, and the overall quality of services within organizations responsible for public health. Additional overarching goals include developing technical knowledge and practical competence through research and internships within the health system, and strengthening entrepreneurial skills and value creation within the health sector.

Roles of Graduates in Society

Educational: The ability to teach in higher education institutions and private training centers to transfer knowledge in the field of health management.

Research: Conducting research projects and data analysis related to the management of healthcare centers.

Managerial and Executive: Applying and implementing managerial knowledge in health service delivery centers to improve service quality and enhance the overall health status of the community.

Consultative:

Providing consultation to health system managers and staff to support optimal management of organizational units.

Entrepreneurship and Wealth Creation: Utilizing modern technologies in health management, promoting a knowledge-based economy, and adopting an entrepreneurial approach to enhance community health.

Expected Competencies and Skills:

A. Core Competencies

The general competencies expected from graduates of this program include:

- Ability to use of Internet-based electronic resources
- Communication and interpersonal skills
- Presentation and teaching skills
- skills in Research and scientific writing
- Critical thinking and problem-solving abilities
- Executive and managerial competencies
- Professionalism

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- Teamwork

B: A comparative table of professional functions, expected specific competencies of graduates, and course codes

Competency	Professional Tasks	Course Code
Educational	- Participating in teaching classes for lower-level students - Delivering lectures and conducting training courses and workshops in the field of health - Training health workers and community members on various public health issues	01, 02, 06, 15, 18, 21, 22, 23
Research	- Writing research proposals - Designing and conducting quantitative and qualitative research - Using databases and specialized scientific journals - Carrying out activities related to research data collection - Performing tasks related to research data analysis and interpretation - Writing scientific texts and disseminating findings through publications and participation in scientific congresses and conferences	16, 20, 26, 27, 28
Managerial, Executive, and Consultative	- Performing managerial duties (policy-making, planning, organizing, monitoring, supervision, and evidence-based evaluation) in organizations- - Developing strategic and operational plans for health organizations - Applying modern performance evaluation methods in health care centers - Using modern human resource management methods in health centers - Implementing accreditation processes for health organizations	04, 05, 07, 11, 13, 15, 17, 22, 23
Entrepreneurship and Wealth Creation	- Presenting innovative models and entrepreneurial approaches to improve quality, cost-management, and developing new health services- - Expanding health tourism	30

Expected Procedural Skills

Skill	Minimum Number of Skill Performance for Learning			
	Observation	Assistance	Independent	Total Times
Accreditation of health centers	5	10	4	19
Quality improvement activities in health centers	5	10	4	19
Strategic and operational planning	3	8	2	13
Using software specific to the program	3	4	5	12
Preparing personnel contracts and outsourcing contracts	5	5	2	12
Preparing a feasible research proposal	6	5	3	14
Conducting evaluations and performance assessment	2	3	2	7

Educational Strategies:

- Task Based Education
- Problem Based Education
- Community Oriented Education
- Subject Based Education
- Field Based Education
- Evidence Based Education
- Student and teacher-Orientd Education

Teaching Methods and Techniques:

In this course, the following teaching methods and techniques are employed:

- Lectures
- Seminars
- A range of conferences: intra-group, hospital-based, interdisciplinary, and inter-university

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- Small group discussions, educational workshops, Journal clubs and book reading sessions
- Use of simulation techniques and distance learning, depending on available resources
- Participation in teaching lower-level students
- Internship and practical training/ practicum
- Self-education and self-study
- Other teaching methods and techniques as needed based on educational objectives

Ethical Expectations:

Learners are expected to:

- Strictly adhere to the Patients' Rights Charter (Appendix 1)
- Comply with the university's educational regulations, research ethics, and codes of conduct
- Maintain confidentiality during all internship and practical training / practicum
- Observe the official dress code regulations (Appendix 12)
- Show respect for instructors, staff, peers, and other learners, and contribute to fostering a friendly and respectful workplace atmosphere
- Obtain the course logbook from the head of the educational department before the start of the academic semester and commit to completing it with honesty, and
- Information privacy compliance in the healthcare industry
- Furthermore, learners are expected to observe the principles of professionalism:
- Safeguard all resources and equipment under all conditions
- Consider social and professional ethical principles when evaluating programs
- Follow ethical research when conducting field-related research

Evaluation:

A - Evaluation Method:

Given that the program combines theoretical courses, practical training/ practicum and fieldwork, it is recommended that instructors use the following assessment methods depending on the type of course and their professional judgment

- **Written Exams:** Multiple-choice exams, descriptive exams, completion of assignments, and submission of written reports during the term and at the end of the term
- **Oral Exams and In-Class Presentations**

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- **Practical Work Reports:** Documentation of practical tasks in the form of research projects, applied projects, and their results

To evaluate students' **professional ethics**, the **360-degree assessment method** is also employed. Considering the expansion of digital technologies and virtual courses, **electronic exams** (both online and offline) are increasingly used in higher education for student assessment.

For the purpose of **continuous assessment throughout the course**, the use of a **portfolio** is recommended, which includes:

- Logbook assessment (tracking practical activities)
- Evaluation of all scientific, educational, research, and professional behaviors of the student from the beginning of the course, such as regular participation in group scientific sessions, article discussions, commendations, warnings, certificates of completed work, and similar activities

B. Frequency of Evaluation

Assessment will be summative and formative: continuously, periodically, and at the end of the semester

Chapter Two

Minimum Requirements for the Non-Continuous Master's Program in Health and Hospital Management

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Minimum Requirement for Faculty members (Number, Specialization, and Rank)

The educational group is composed of following faculty members:

a. Faculty Members appointed according to the decree of the Council for the Expansion of Medical Universities

- At least **one full-time, permanent Associate Professor** in Health and Hospital Management.
- At least **two Assistant Professors** with a minimum of **three years of teaching and research experience** in Health and Hospital Management.

b. Required Supporting Specializations

- Health Economics
- Health Policy
- Epidemiology
- Biostatistics
- Medical Informatics
- Health Technology Assessment
- Accounting
- Sociology
- Medical Ethics

Trained Staff Required for Program Implementation

- Two staff members with a **Master's degree in Health and Hospital Management**

Required Educational Spaces and Facilities Required

Classrooms	Interns' Room	Education Archive	Educational Website for the Department
Instructors' Rooms	Department Secretary's Office	Conference Hall	
Experts Room	Computer Site	Virtual Learning Platforms	
Students' Room	Library	High-Speed Internet	

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Required Population or Samples

- **Service delivery units** such as hospitals, comprehensive health service centers, health houses, and deputies of medical universities as well as the Ministry of Health and Medical Education, the Parliament, the Management and Planning Organization, and health insurance organizations
- **Registered data** at various levels of the health system, including service delivery units, insurance organizations, and statistical centers. Documents and national plans, such as upstream policy documents, the country's five-year development plans, the Comprehensive Health Map, the National Scientific Map, and health system transformation plan packages, are among the required samples for this field

Required Equipment

- English language laboratory
- Various platforms required for virtual education
- Video conferencing equipment
- Computers and laptops
- Bookshelves
- Personal storage cabinets

Chapter Three

Program specifications and courses

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Name: Health and Hospital Management (MSc)

Program Details:

1- Program Name: Non-Continuous Master's Program in Health and Hospital Management (MSc)

2. Program Duration and Structure:

This program adheres to the educational regulations set forth by the Supreme Council for Medical Science Planning for non-continuous master's programs.

Total Number of Credits:

A total of 32 credits is required for completion, outlined as follows:

Core Courses (Compulsory Specialized Credits)	22
Non-Core Courses (Elective Specialized Credits)	6
Thesis	4
Total Credits	32

In addition to the standard program credits, the student is required, based on the recommendation of the educational group and the approval of the university's Postgraduate Council, to complete **compensatory courses** as indicated in **Table (A)**

Table A –Compensatory Courses (Prerequisite) for Master's Program in Health and Hospital Management

Course Code	Course Name	Course Credits			Training Hours			Prerequisite / Presented Simultaneously
		Total	Theoretical	Practical	Total	Theoretic	Theoretical	
01	Medical Information Systems	1	0.5	0.5	9	17	26	–
02	Hospital Organization and Management	2	2	–	34	–	34	–
03	Principles of Health Services	2	2	–	34	–	34	–
04	Health Information Technology	2	2	–	34	–	34	–
05	Budget and Financial Management in Healthcare	2	2	–	34	–	34	–

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06	Management: Basics and Principles	2	2	–	34	–	34	–
07	Rules of Writing and Administrative Correspondence	2	2	–	34	–	34	–
08	Principles and Fundamentals of Micro and Macro Economics	2	2	–	34	–	34	–
09	Principles of Accounting	2	2	–	34	–	34	Management: Basics and Principles Code 05
10	Health Sociology	2	2		34	–	34	
11	Marketing in Health Organizations	2	2		34	–	34	
12	Organizational Behavior Management	2	2	–	34	–	34	–
	TOTAL						23	

Table B – Core Courses (Compulsory Specialized Courses) of the Master's Program in Health and Hospital Management

Course Code	Course Name	Course credits					Training Hours					Prerequisite / Presented Simultaneously Presented Simultaneously
		Total	Theoretical	Practical	Internship	Practicum	Theoretical	Practical	Internship	Practicum	Total	
13	Strategic Management in Health System	3	3	–	–	-	51	–	–	-	51	Course Code 02, Course Code 14
14	Health Systems in Iran and the World	3	3	–	–	-	51	–	–		51	
15	Internship 1	2	–	–	2		–	–	102		102	–
16	Health Economics	2	2	–	–	-	34	–	–		34	–

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17	Project Management in Health System	2	2	—	—	-	34	—	—		34	—
18	Case Seminar	2	2	—	—	-	34	—	—		34	—
19	Communication Management in Health System	2	2	—	—	-	34	—	—		34	—
20	Performance Management in Healthcare Organizations	2	2	—	—	-	34	—	—		34	—
21	Human Resource Management in Health System: Advanced	2	2	—	—	-	34	—	—		34	—
22	Internship 2	2	—	—	2	-	102	—	-		102	Course Code 15
23	Thesis	4	—	4	—	—	—	—	—			—
	TOTAL	26										

Non-Core Courses (Elective Specialized Credits)

Course Code	Course Name	Course Credits			Training Hours			Prerequisite / Presented Simultaneously
		Total	Theoretical	Practical	Theoretical	Practical	Total	
24	Advanced English Language	2	2	—	34	-	34	—
25	Research Methods in Health Sciences	2	1	1	17	34	51	—
26	Epidemiology and Biostatistics	2	2	—	34	-	34	—
27	Insurance in Health System	2	2	—	34	-	34	—
28	Management of Drug and Medical Equipment Management	2	2	—	34	-	34	—
29	Ethics and Laws in Health	2	2	—	34	-	34	—

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30	Entrepreneurship in the Health System	2	2	–	34	-	34	–
	Total	14						

- The student must complete 6 credits from the above courses (Table C), selected in accordance with the thesis topic and approved by the thesis supervisor and the University Postgraduate Council

Workshops:

Workshop Title	Duration	Optional / Mandatory
Referencing	4 hours	Optional
Reading and Writing Skills for Scientific Articles	4 hours	Mandatory
Introduction to National Accreditation Standards of Iranian Hospitals	4 hours	Mandatory
Knowledge-Based Economy and Knowledge-Based Institutions in the Health Sector	4 hours	Mandatory
Ethics in Research and Examples of Research Misconduct	4 hours	Mandatory
Entrepreneurship, Commercialization, and Wealth Creation	4 hours	Mandatory
Artificial Intelligence Startups in Health Management	4 hours	Mandatory
Development of Modern Technologies in Health Management	2 hours	Mandatory

- Practical courses and internships are offered in person.
- Theoretical courses, based on the instructor's discretion, are delivered either in person or online in accordance with the blended learning educational regulations

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Course Name: Medical Information Systems

Course Code: 01

Prerequisite / Presented Simultaneously: None

Course Credits: 1 (0.5 theoretical – 0.5 practical)

Course Type: Theoretical–Practical

Overall Course Objective:

By the end of this course, the student should be familiar with the function of search engines and the role of the five key software components within them—**Spider (Crawler), Crawl, Indexer, Database and Ranker**. Students should be able to recognize the differences and capabilities of these components in several major search engines such as **Google, Bing, and Yahoo**, and compare them. They should also become familiar with several **Meta Search Engines**, understand search methods and influencing factors, including Advanced search techniques, Boolean operators, Common search errors in Shortening or truncation of keywords (e.g., the use of the asterisk symbol *), the use of parentheses and interaction among keywords and their effect on search results. Furthermore, the students should be familiar with Internet-related software such as **Internet Explorer, Mozilla Firefox, and Google Chrome**.

Students must also become familiar with their university's library services, major **health and medical databases**, and leading academic publishers. Special emphasis is placed on:

PubMed, Cochrane Library, Article-level metrics (*e.g., citations*), Journal-level metrics (*Impact Factor*), Author-level metrics (*H-index*) and at least one **reference management software** (e.g., Reference Manager)

Course Description

This course is designed to familiarize students with scientific search strategies, common challenges in online searching, and ways to overcome them. Students will learn the basics of article and journal evaluation, and how to search key publisher websites. By the end of the course, students will be able to conduct an organized search using browsers and scientific databases. They will also be able to create a personal reference library using a reference management software, enabling them to collect and manage resources for writing theses, articles, and reports.

Main Topics: (9 hours theoretical – 17 hours practical)

- Introduction to general search engines, their differences, and comparative evaluation using identical search queries (Practical session: Individual advanced search exercises using Boolean operators (AND, OR, NOT) in PubMed during class)

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- Introduction to the five key software components of search engines (Spider/Crawler, Crawl, Indexer, Repository, Ranker)
- Introduction to internet browsers (**Internet Explorer, Mozilla Firefox, Google Chrome**) and their features (Practical activity: Organizing and saving Favorites on a flash drive)
- Familiarity with the university library services, including access to national and international journals and comprehensive electronic resources
- Familiarity with publishers such as **Elsevier, EBSCO, Wiley, Springer**
- Familiarity with major scientific databases and information resources such as: **Web of Science, ScienceDirect, Scopus, ProQuest, Biological Abstracts**
- Familiarity with citation and indexing databases
- Familiarity with comprehensive Iranian medical article databases such as: **Medlib, IranMedex, IranDoc**
- Search methods using **Medical Subject Headings (MeSH)**
- Understanding article-level metrics (e.g., **Citations**), journal metrics (**Impact Factor**), and author metrics (**H-index**) in the relevant databases
- Familiarity with the use and importance of **DOI (Digital Object Identifier)**
- Familiarity with **PubMed**, the Medline database, and online tools available within it, including genomic databases
- Practical training/Practicum in using **EndNote** software and creating a personal reference library

References (Latest Edition)

- Hassanzadeh, M., Navidi — *Information Resources in Medical and Health Sciences*, Tehran: Ketabdar Publishing
- Assemi & Baharloo — *Accessing Information in the Digital Environment: From Theory to Practice*, Tehran: Ketabdar Publishing
- Bihaghi, Hadi & Rajabnejad, Maryam — *Searching in Medical Resources*, Center for Excellence, Shahid Beheshti University
- www.medlib.ir
- www.proquest.com
- www.ncbi.nlm.nih.gov

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Student Evaluation Method

- Attendance and active participation: 10%
- Mid-term exam(s): 25%
- Final exam : 50%
- Class assignments and coursework: 15%

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Course Name: Hospital Organization and Management

Course Code: 02

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

To familiarize students with the processes and operational activities of hospitals and hospital operations based on the principles of management science

Course Description:

In this course, students will learn about the characteristics and functions of clinical, diagnostic, and non-clinical departments within a hospital. Students will also become acquainted with interdepartmental and extra-departmental processes so that, upon completion, they will be able to effectively manage operational hospital units.

Main Topics: (34 hours Theoretical)

- Introduction to the objectives of establishing hospitals and understanding healthcare processes
- Introduction to hospital organizational charts and job descriptions of staff and departments
- Introduction to the roles and functions of medical and nursing service units
- Introduction to the roles and functions of diagnostic and therapeutic units
- Introduction to the roles and functions of administrative, financial, and non-clinical units
- Introduction to patient safety indicators
- Introduction to quality improvement approaches in hospitals and performance evaluation processes, including accreditation
- Introduction to hospital committees, their duties, and their operational processes
- Introduction to the principles of disaster and emergency management in hospitals

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References: (Latest Edition)

- Arab M. and colleagues, Hospitals: What They Are and How They Work, Jahad Daneshgahi Publications
- Fransis C.M Hospital Mangement, translated by: Ali Kebriayee. Foruzan Rooz Publications
- Sharon B, Buchbinder, Nancy H. Shanks, Introduction to Health care Management
- Lawrence F. Wolper, Health care administration: Management organized delivery System
- Charles R.McConnell. Hospital and Health system What They Are and How They Work
- Joydeep Das Gupta. Hospital Administration and management A comprehensive Guide

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Principles of Health Services

Course Code: 03

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective

In this course, students will become familiar with various health issues and the factors that contribute to improving the health status of the community.

Course Description:

This course introduces definitions, concepts, and the importance of personal, public, environmental, food, family, school, occupational, maternal and child, and oral health, as well as their application within health system organizations.

Main Topics: (34 hours Theoretical)

- Fundamentals of public health
- Health and disease
- Introduction to personal and public Health
- Introduction to principles of prevention
- Introduction to health education
- Introduction to environmental health
- Introduction to occupational health
- Introduction to food hygiene
- Introduction to family health
- Introduction to epidemiology of diseases
- Introduction to school health
- Introduction to oral and dental health

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References: (Latest Edition)

1. Hatami H., et al. *Comprehensive Public Health*, 3 volumes, Arjmand Publications, Tehran.
2. Ebadi Fard Azar F., Shojaei Tehrani H., Mansourian M., Rezapour A. *Principles of Health Services*, Ebadi Azar Publications, Tehran.
3. Bagianian Moghadam M.H., Ahrampoush M.H. *Principles and Fundamentals of Health Services*, Asar-e- Sobhan Publications.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Health Information Technology

Course Code: 04

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

Students will become familiar with health information management and its importance in health-related decision-making and planning.

Course Description:

This course covers topics related to health information management, including the processes of generating, collecting, storing, retrieving, and using health information for decision-making and planning in healthcare systems.

Main Topics: (34 hours Theoretical)

- Concepts of data, information, and knowledge in health services management
- Information processing cycle
- Definition and dimensions of health information management
- Definition and characteristics of health information systems
- Role of medical records in health information management
- Care processes, data generation and data flow in healthcare organizations
- Coding of diseases, medical procedures, and causes of death/ mortality
- Introduction to the health information management department and the roles and activities of its units
- The role of health information management units in the health system, and mechanisms supporting these roles
- Health Information Management Committee and managerial responsibilities for the committee
- Principles of privacy and confidentiality in health information management, consent forms, and information disclosure

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- Disease registry systems in the health sector
- Health Information System (HIS) and its characteristics
- Retention and disposal of health information
- Legal aspects of health information management
- The role of health information technology in patient safety
- Electronic health records (EHR)
- E-health
- Telehealth

Learning Methods

- Lecture, Question and Answer and Group Discussion

Assessment Methods

- Formative assessment: through Q&A in each session, Mid-term exam
- Final exam

General Guidance for Instructors

Given the importance of health information management, instructors are expected to present topics related to health information management and the applications of information using multiple practical examples. It is strongly recommended that instructors avoid delving into unnecessary details or focusing on less important topics. It should be noted that students need to become familiar with the concepts, data sources, common methods of data collection and storage, data retrieval, and various applications of health information.

References: (Latest Edition)

1. Publications.
2. Wager, K.A., & Wickham, F. (2009). *Managing Health Care Information Systems: A Practical Guide for Healthcare Managers*. Tehran: A'sar-e-Sobhan publications.

Additional References

1. Tabibi, S.J., Ebadi Fard Azar, F., Hajavi, A., & Meydani, Z. (2004). *Standards of Health Information Management*. Tehran: Ebadi-Far Publications
2. Hajavi, A., Sarbaz, M., & Moradi, N. (2002). *Medical Records III & IV*. Tehran: Jahān Rāyāneh Electronic Publishing

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Course Name: Budget and Financial Management in Healthcare

Course Code: 05

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

To enhance students' knowledge of financial management and familiarize them with financial concepts in the context of health care services

Course Description:

Today, financial information plays a critical role in the health system because most managerial decisions within organizations whether directly or indirectly influence organizations financial status. This purpose of the course is to increase students' knowledge of financial management and essential financial concepts in the health care sector and enable them to make sound financial decisions.

Main Topics: (24 hours Theoretical)

- Fundamentals of Financial Management
- Financial Ratio Analysis in Health Care Organizations
- Financial Statements in Health Care System
- Health System Financing
- Inventory Control in Health Care Organizations
- Pricing Health Care Services and Related Approaches
- the Health Sector Budgeting
- Types of Budgeting in Health Sector
- Working Capital Management in Health Care Organizations
- Capital Project Analysis in the Health System

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References: (Latest Edition)

1. RezaPour, Aziz; Ebadi Fard Azar, Farid. *Financial Management in Health Care and Hospitals*. Ebadi Far Publications. .
2. Mokhtari, Mehdi; Sarabi Asyabar, Ali; RezaPour, Aziz. *Budgeting in the Health System*. Arvan Publications. .
3. Zelman, W. N., McCue, M. J., Millikan, A. R., & Glick, N. D. *Financial Management of Health Care Organizations: An Introduction to Fundamental Tools, Concepts, and Applications*.
4. Gapenski, L. C., & Pink, G. H. *Understanding Healthcare Financial Management*.

Student Evaluation Method:

- Active class participation: 10%
- Mid-term exam during the semester: 20%
- Final exam: 70%

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Course Name: Management: Basics and Principles

Course Code:06

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

To familiarize students with general management concepts and the application of management principles in relation to the needs of society and the health system

Course Description:

This course provides an overview of management principles, with an emphasis on the four primary managerial functions: **planning, organizing, leading, and controlling.**

Main Topics: (34 hours Theoretical)

- Definitions and concepts of organization and management
- Organizational and management theories
- Planning Principles
- Problem-solving and decision-making
- Elements and concepts of organizing
- Human resource management
- Fundamentals of Leadership
- Leading through motivation
- Leading through communication
- Basics of control

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References: (Latest Edition)

1. Rezaeian, Ali. *Fundamentals of Organization and Management*. SAMT Publications, Tehran.
2. Irannejad Parizi, Mehdi; Sasan, Gohar; Parviz, *Organization and Management: From Theory to Practice*. Iranian Banking Institute Publications, Tehran.
3. Robbins, Stephen P. *Fundamentals of Management*. Translated by Mohammad Aarabi. Cultural Research Office Publications, Tehran.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam : 20%
- Final exam : 70%

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Course Name: Rules of Writing and Administrative Correspondence **Course Code:** 07

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

To enhance students' skills in writing various types of business correspondence.

Course Description:

Currently, administrative documents are the primary means of formal communication within organizations. Effective communication in an organization functions like the bloodstream in a living organism. Ineffective communication can lead to organizational inefficiency or, in extreme cases, dissolution. Most managerial activities are conducted through letters, circulars, reports, notifications, and meeting minutes. Ambiguities in wording or instructions can lead to wasted time, confusion, and inconsistent interpretations by staff. Upon completion of this course, students are expected to acquire the skills necessary for report writing, composing formal and informal letters, and other administrative documentation.

Main Topics: (34 hours Theoretical)

- Understanding the importance and necessity of report writing
- Characteristics of a good document
- Definitions and types of reports
- Principles of report writing
- Understanding different types of administrative correspondence
- General and technical principles of administrative correspondence
- Components of official letters
- Standard phrases in administrative correspondence
- Methods for writing standard administrative letters

References: (Latest Edition)

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1. Safarpour, Abolfazl. *Principles of Administrative Correspondence and Reports*. Pardis Publications.
2. Mohseni, Ahmad; Aghamardi, Mehdi. *Principles of Writing and Editing Administrative Correspondence*. Marandiz Publications.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam : 20%
- Final exam : 70%

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Course Name: Principles and Fundamentals of Microeconomics and Macroeconomics

Course Code: 08

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

- To familiarize students with fundamental concepts and basic issues in microeconomics and macroeconomics
- To enhance students' analytical skills in understanding economic phenomena and improve decision-making abilities

Course Description:

This course is designed to familiarize students with the concepts of limited resources and factors of production in contrast to unlimited human needs, emphasizing the necessity of optimal allocation of resources. Students will learn about the applications of microeconomics in analyzing and modeling managerial problems, as well as monetary and fiscal policies and their effects on the market.

Main Topic: (24 hours Theoretical)

- Definitions of economic Science
- Supply, demand, and market equilibrium
- Consumer behavior theory
- Income and substitution effects
- Production and costs
- Perfect competition
- Market intervention and welfare effects
- Monopoly and price discrimination
- Types of goods and markets
- Income flow and circular flow of the economy

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- Aggregate supply and demand
- Economic management
- Fiscal policy and government finance
- Money, banking, and interest rates
- Monetary policy
- Economic growth and supply-side economics
- Inflation
- Unemployment and employment
- Exchange rates
- Market forces and macroeconomic management

References: (Latest Edition)

1. Salvatore, D. *Theory and Problems of Microeconomics*. Translated by Hamidreza Arbab, Ney Publications..
2. Baipar, R. *Microeconomic Theory*. Translated by Hossein Raghfar, Ney Publications, Tehran.
3. Mankiw, G. *Macroeconomics*. Translated by Hamidreza Arbab, Ney Publications, Tehran.
4. Yousef Faraji. *Microeconomics*. Commercial Printing and Publishing Company.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam : 20%
- Final exam : 70%

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Course Name: Principles of Accounting

Course Code: 09

Prerequisite / Presented Simultaneously: Budget and Financial Management in Healthcare –
Course Code 05

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

To familiarize students with fundamental concepts of accounting and its role in providing useful information for decision-making in health organizations

Course Description:

In this course, students will become acquainted with financial statements and their analysis, decision-making by using internal and external financial information, and the principles of maintaining accounting records, which serve as the basis for preparing financial information.

Main Topics: (34 hours Theoretical)

- Introduction to accounting concepts
- Recording financial transactions
- Adjusting accounts and preparing financial statements
- Using worksheets and closing bank accounts
- Cash holdings, petty cash, receivables, and notes receivable
- Inventory and cost of goods sold
- Training in accounting software
- Value-added tax (VAT) accounting
- Accounting principles and assumptions
- Types of business enterprises
- Prepayments and pre-received

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- Types of financial reports

References: (Latest Edition)

1. Roudaki, Jamal. *Principles of Accounting*. University of Shiraz publications.
2. Alimi, Hassan-Ali. *Principles of Accounting*. Industrial Management Institute, Tehran.
3. Eskandari, Jamshid. *Principles of Accounting I & II*. Farshid Publications.
4. Donatila Agtarap-San Juan. *Fundamentals of Accounting: Basic Accounting Principles* ..Simplified for Accounting student. Author House
5. Steven A. Finkler, David Mare Ward, Thad D. Calabrese. *Accounting Fundamentals for* .Health Care Management. Jones & Bartlett learning, latest edition
6. .Greg Shields. *Accounting Principles*. Bravex Publications

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Health Sociology

Course Code: 10

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

The course is designed to familiarize students with modern concepts and approaches in sociology as they relate to individual, group, social, and organizational health, and equip them with skills necessary to identify, analyze, and document social behaviors.

Course Description:

In this course, students will learn about the social foundations of health, including social and sociological determinants of health and lifestyle factors such as culture, literacy, access to services, equity, and gender. Students will also develop the ability to analyze social behavior in health-related contexts.

Main Topics: (34 hours Theoretical)

- Sociological perspectives on health
- Social determinants of health
- Social theories of health
- Sociological theories and their application in health
- Lifestyle in society
- Social patterns of disease
- Social medicine
- Social pathology and public health
- Behavioral aspects of illness and social roles
- Culture, social institutions, and health
- The role and importance of culture in health
- Socialization, values, social control, institutions, and health
- Social roles and health
- Cultural layers of health
- Principles and methods of assessing social impact

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References: (Latest Edition)

1. Armstrong, David. *Medical Sociology*. Translated by Mohammad Tavakkol. Shahid Beheshti University of Medical Sciences Legal Publications.
2. Mohseni, Manouchehr. *Al-Jami'a: Medical Sociology*. Tahouri Publications. .
3. Hamid Azdanal. *Introduction to Fundamental Concepts of Sociology*. Ney Publications.
4. Wainwright, David. *A Sociology of Health*. SAGE Publications.
5. White, Kevin. *An Introduction to the Sociology of Health and Illness*. SAGE Publications.
6. Barry, Anne-Marie & Yuill, Chris. *Understanding the Sociology of Health: An Introduction*. SAGE Publications.
7. Wilkinson, R., & Marmot, M. *Social Determinants of Health: The Solid Facts*.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Marketing in Health Care Organizations

Course Code: 11

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

The main objective of this course is to familiarize students in Health and Hospital Management with the principles, concepts, and processes of marketing management and its application in health service organizations. Upon completing this course, students are expected to gain sufficient theoretical knowledge of marketing principles, practical skills in designing marketing programs, and apply these skills in hospitals and other health care organizations.

Course Description

The course *Principles of Marketing and Market Management* is a core subject in this program. It provides students with an understanding of the concept and role of marketing in health care services, along with practical techniques and principles of service marketing.

Main Topics: (34 hours Theoretical)

- Concepts, processes, and nature of marketing
- Emergence of marketing in the health care sector
- The marketing mix: product, price, place, promotion, and their role in the marketing process
- Marketing environment and the impact of environmental changes on organizational marketing strategies
- Nature of marketing strategies and service marketing concepts
- Market segmentation and target market selection
- Marketing planning process
- Strategy of marketing and understanding available strategic options for health care organizations
- Customer relationship management (CRM)
- Branding in health care and medical services
- Marketing research process and various methods of conducting research
- Health care market segmentation

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- Customer loyalty and creating customer value
- Pricing and pricing strategies in health care
- Different approaches to health care service delivery and distribution in the market
- Advertising and public relations in health care
- Monitoring and controlling the marketing process

References: (Latest Edition)

1. Berkowitz, Eric. *Principles of Marketing in Health Care*. Translated by Dr. Mohammad Arab, Dr. Ehsan Zarei, Dr. Roghieh Khabiri, Dr. Behrooz PourAgha. Jihad Daneshgahi Publications, Tehran.
2. Kotler, Philip & Armstrong, Gary. *Principles of Marketing*. Translated by Bahman Forouzandeh. Nashr Amoodeh Publications. .
3. Barbara Wooldridge, Kerr Camp . *Healthcare Marketing: Strategies for Creating Value in the Patient Experience (First Edition)*. Cognella Academic Publishing.
4. Steven G. Hillestad, Eric N. Berkowitz *Health Care Market Strategy*. Jones & Bartlett Learning.
5. Glenn E. Pearson. *Thriving in the Healthcare Market: Strategies from an Industry Insider for Selling Your Product*. Taylor & Francis.
6. Richard K. Thomas *Marketing Health Services*. Health Administration Press.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Organizational Behavior Management

Course Code: 12

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective

This course is designed to familiarize students with factors influencing the behaviors and attitudes of individuals, groups, and organizational units. Upon completing this course, students are expected to understand human behavior in the workplace, predict future behaviors, and guide and control behavior at individual, group, and organizational levels to create conditions conducive to personal and organizational development.

Course Description

Organizational behavior is an interdisciplinary field that studies the behavior of individuals, groups, and organizations. Systematic study of behavior reveals relationships between actions and significant realities, providing a foundation for accurate behavior prediction. The primary goal of this course is to achieve organizational effectiveness and individual well-being by understanding the principles and concepts of individual behavior, including perception, learning, motivation, goal-setting, and related aspects.

Main Topics: (34 hours Theoretical)

- Overview and definitions of organizational behavior
- Perception process
- Cognition and knowledge acquisition processes
- Motivation and behavior
- Goal setting
- Job attitudes and work behavior
- Fundamentals of group behavior
- Team and group management
- Communication and communication skills
- Leadership in teams and organizations
- Organizational change and transformation management
- Conflict management and negotiation
- Organizational culture

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- Organizational commitment

References: (Latest Edition)

1. Rezaeian, Ali. *Organizational Behavior Management*. SAMT Publications.
2. Robbins, Stephen. *Organizational Behavior: Concepts, Theories, and Applications*. Translated by Seyed Mohammad Arabi & Ali Parsaeian. Office for Cultural Studies Publications.
3. Zarei, Matin Hassan. *Advanced Organizational Behavior Management*. AGAH Publications.
4. Brooks, Ian. *Organizational Behavior: Individual, Group, and Organization*. Translated by Omid Mahdiah & Ghasem Ansari Renani. Mehraban Book Publishing.
5. Mohammadi, Hamed; Rigi, Behrooz; Soleimani, Ahmad. *Organizational Behavior Management*. Ava Publications. Blanchard, Ken & Hersey, Paul. *Organizational Behavior Management: Human Resources Applications*. Translated by Ali Alaghebond. International Printing & Publishing Company, affiliated with the Islamic Propagation Organization.
6. Borkowski, Nancy. *Organizational Behavior in Health Care*. Jones & Bartlett Learning.
7. Griffin, Ricky W., Phillips, Jean M., & Gully, Stanley M. *Organizational Behavior: Managing People and Organizations*. CENGAGE Learning, 2016.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Strategic Management in Health System

Course Code: 13

Prerequisite/ Presented Simultaneously:

- Hospital Organization and Management (Course Code 02)
- Health Systems in Iran and the World (Course Code 14)

Course Credits: 3

Course Type: Theoretical

Overall Course Objective:

To familiarize students with internal and external organizational environments, and the formulation of strategic, tactical, and operational policies and programs. It aims to develop the knowledge and skills necessary for designing, implementing, and evaluating effective strategies for health care service organizations.

Course Description:

Strategic management involves the analysis of key organizational issues, typically undertaken by senior managers to control resources in external environments. The process includes defining the organization's mission, vision, assets, and developing programs and policies to achieve organizational goals. In this course, students will become familiar with the objectives and foundations of strategic management, various strategic models, and internal and external organizational environments.

Main Topics: (51 hours Theoretical)

- Introduction to the objectives and principles of management and strategic planning
- Strategic management and planning in health care
- Types of strategic planning models
- Foresight and futures studies in health care
- Methods for developing, implementing, and evaluating strategies in health care organizations
- Mission, values, and vision in health care organizations and their formulation
- Internal and external organizational environments

References: (Latest Edition)

1. David Fred R. *Strategic Management*. Translated by Ali Parsaeian & Mohammad Arabi. Office for Cultural Studies Publications. Maleki, Mohammad Reza & Tabibi, Seyed

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Jamaluddin. *Strategic Planning*. Termeh Publications. Ginter, Peter M., Duncan, W. Jack, & Swayne, Linda E. *The Strategic Management of Health Care Organizations*. Wiley.

2. Karuppan, Corinne M., Waldrum, Michael R., & Dunlap, Nancy E. *Operations Management in Healthcare: Strategy and Practice*. Springer Publishing.
3. Walston, Stephen Lee. *Strategic Healthcare Management: Planning and Execution*. Health Administration Press

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Health Systems in Iran and the World

Course Code:14

Prerequisites / Presented Simultaneously : None

Course Credits: 3

Course Type: Theory

Overall Course Objective:

To familiarize students with health care systems and organizations, analyze their policies, programs, objectives, and functions, and provide a foundation for informed decision-making in health management and policy

Course Description:

Introduction to health systems and the experiences of other countries which can serve as a valuable guide for health managers and policymakers. Awareness of the functions and characteristics of health systems worldwide, as well as indicators and performance under various conditions, allows for better decision-making. This course familiarizes students with the functions, objectives, strengths, and weaknesses of health systems in Iran and other countries.

Main Topics: (51 hours Theoretical)

- Introduction and analysis of objectives, functions, and programs of health systems worldwide
- Analysis of national health policies approved by the Expediency Council and the Health System Vision in Iran
- Analysis of health sector development policies, missions, and programs
- Familiarity with Iran's health system, its objectives, functions, and control mechanisms
- Examination and analysis of health system functions in different countries
- Overview and analysis of health care organizations in Iran
- Organization, structure, and management of health care organizations in Iran
- Concepts and tools for evaluating health system performance worldwide
- Analysis of strengths and weaknesses of health system functions in Iran and other countries

References: (Latest Edition)

1. Approvals of the Expediency Discernment Council on general health policies
2. Vision documents, development plans, and other relevant health legislation ratified by the Iranian Parliament

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3. Government regulations and approvals in the health sector
4. Programs and guidelines from the Ministry of Health and Medical Education and the Ministry of Labor, Social Welfare, and Cooperation
5. Health system reforms: Guide to Equity and Efficiency, Ministry of Health and Medical Education
6. World Health Organization (WHO) and World Bank websites
7. Mossialos, Elias, et al. *International Profiles of Health Care Systems*. Canadian Agency for Drugs and Technologies in Health, 2015
8. Xiaoming Sun. *World Health Systems*. Wiley & Sons
9. Johnson, Carleen; Stoskopf, Leiyu Shi. *Comparative Health Systems*. Jones & Bartlett publisher.
10. Charles R. McConnell. *Hospitals and Health Systems*. Jones & Bartlett Learning.
11. Christian Aspalter, Kenny Teguh Pribadi, Robin Gauld. *Health Care Systems in Developing Countries in Asia*. Taylor & Francis Group.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 50%
- Class assignments / practical work: 20%

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Course Name: Internship 1

Course Code: 15

Prerequisite: None

Course Credits: 2

Course Type: Internship

Overall Course Objective:

Students will become familiar with the county health network system, rural and urban family medicine programs, and primary health care (PHC) services.

Course Description

In this course, students get familiar with the primary health care (PHC) system and the county health network. They will learn about the processes in health houses and health centers, the supporting system for service delivery, and the integration of services across different levels of the health care system. Students will also explore the geographical, economic, and health conditions of the villages served by health centers, household records, methods of data collection, health indicators, the roles and responsibilities of family physicians, and quality assessment and improvement of services at various levels.

Main Topics: (102 hours Internship)

A. Introduction to health care services and primary health care in the following areas:

- Population and environmental assessment
- Health education
- Integrated care for pregnant mothers
- Reproductive health
- Communicable diseases
- Immunization
- Child health care
- Environmental health
- Symptomatic treatment
- First aid
- Non-communicable diseases
- School health
- Occupational health

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- Oral and dental health
- Health care of the elderly

B. Introduction to processes of network development teams and health promotion

- Management of health houses

Learning Methods

The teaching approach is centered on processes, students, and the community. Instruction is delivered based on the course plan and syllabus in a participatory format, including:

- Orientation workshops at the beginning of the course (Service process training and process documentation)
- Small group work and group discussions
- Practical work in health houses and health centers
- Completion of a portfolio by students in service delivery units

References: (Latest Edition)

1. Ministry of Health and Medical Education (2005). *Comprehensive Health Worker Training Book Series*, Center for Network Development and Health Promotion.
2. Tabrizi, J.S. (2012). *Process Documentation: A Method for Standardizing and Improving Process Quality*, Tabriz: Alwin Publishing in collaboration with Tabriz University of Medical Sciences.
3. Amiri, F. (2011). *Organization and Management of Health Systems in Iran and Worldwide*, Tehran: Homa Salamat Publications. .

Additional References

- Janati, A., Jabbari Birami, H. (2012). *Service Leveling in the Health System*, Tabriz University of Medical Sciences in collaboration with Alwin Publications.
- Ministry of Health and Medical Education (2004). *Health Team and Family Physician Service Descriptions*, Office of Family and Population Health.
- Lamei, I. (2003). *Comprehensive Quality Management: Principles, Applications, and Lessons Learned*, Tehran: Teb Novin Publications.

Student Evaluation Method:

- Written test following the orientation workshop

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- Evaluation of active participation of students during fieldwork and completion of the portfolio
- End-of-term evaluation using the OSFE (Objective Structured Field Evaluation) method

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Course Name: Health Economics

Course Code: 16

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

Introduction to the characteristics of healthcare market and the application of economic principles in the health sector

Course Description:

Health economics is a branch of economics that addresses issues related to the efficiency, effectiveness, value, and behavior in the production and consumption of health and healthcare services. The importance of this field arises from the scarcity of resources for healthcare and the fact that demand often exceeds the supply of health services; therefore, economic techniques are essential to analyze and evaluate healthcare market. . In this course, students will become familiar with topics such as healthcare demand and supply, microeconomic evaluation in healthcare, characteristics of healthcare market, and health system financing.

Main Topics: (34 hours Theoretical):

- Introduction to basic economic concepts and their application in the health sector
- Definition, importance, and scope of health economics
- Characteristics of healthcare market and how it differs from other markets
- Supply and demand for healthcare services
- Payment systems in health sector
- Methods of financing healthcare services

References: (Latest Edition)

1. Ebadi Azar, A. & Reza Pour, A. *Economics of Healthcare*
2. *Health Economics for Developing Countries*, translated by Dr. Pour Reza
3. Nekouei Moghadam, M., et al., *Health Economics*
4. Sherrin, F., Allen Goodman, M., Stano, M., *Health Economics and Healthcare*, translated by Ghazanfari, Kazemi Nik Afshar, Shahri Rostami, Emam Qolipour, Akbari Sari, Aasar Sobhan

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5. Darsnameh Health Economics and Enderling, translated by Dr. Shahram Tofighi, Ali Asghar Kia Deliri, Hasan Haqparast, Tehran: Vajeh Pardaz
6. Charles E. Phelps, *Health Economics*, Taylor and Francis Group
7. Frank A. Sloan & Chee-Ruey Hsieh, *Health Economics*, MIT Press
8. Steph Bernel, *Health Economics: Core Concepts and Essential Tools*, Health Administration Press

Student Evaluation Method:

- Active attendance and participation in class
- Mid-term exam: 20%
- Final exam: 50%
- Completion of class assignments: 20%

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Course Name: Project Management in Health System

Course Code: 17

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

This course is designed to familiarize students with the definitions and concepts of projects, differentiating them from other organizational activities, understanding project outputs, types of networks, project planning, calculations, and project control. Students will learn how to manage resources, costs, and time, and how to use project planning and control software.

Course Description:

The course covers fundamental definitions and concepts of contracts, projects, work breakdown structures (WBS), networks, and project execution methods. Students will learn project scheduling, activity float calculations, progress tracking (both activity and overall project), resource allocation, cost and time control, and performance evaluation. Commonly used software tools for project management and control will also be introduced.

Main Topics: (34 hours Theoretical)

- Definitions and characteristics of projects
- Concept of project and project management
- Project life cycle and management of project processes
- Project phases and methods to control them
- Components and elements of projects
- Breaking down projects into activities
- Planning stages, defining activities, and estimating activity durations
- Project time and cost management
- Project planning and control techniques: Critical Path Method (CPM), Gantt charts, PERT
- Calculating activity and project completion percentages , Earned Value Management (EVM)
- Project quality evaluation
- Introduction to project control software

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References: (Latest Edition)

1. Bahrami, M. A., Esmaeili, M., Ranjbar, M., Ezzat Abadi, M., *Management of Health Programs and Projects*, Sana Scientific Publications.
2. Judith Dwyer, Pauline Stanton, Valerie Thiessen, *Project Management in Health and Community Services*
3. David Shirley, *Project Management for Healthcare*, Taylor & Francis Group

Student Evaluation Method:

- Active attendance and class participation: 10%
- Mid-term exam: 20%
- Final exam: 50%
- Completion of class assignments: 20%

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Course Name: Case Seminar

Course Code: 18

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

Enhance students' ability to analyze managerial issues in healthcare organizations.

Course Description:

In this course, each student selects a topic and conducts a study under the supervision of the instructor. The research should include a review of the background and current status, a SWOT analysis related to the topic, the latest developments to date, future trends, and proposed solutions. The course aims to familiarize students with oral presentation skills, various scientific topics in their specialization. analyzing the current state of the healthcare system and its dimensions, identifying priority issues, and presenting feasible solutions are essential skills for students in Health and Hospital Management.

Main Topics: (34 hours Theoretical)

- Introduction to concepts, theories, and tools for case study research
- Familiarity with key criteria in case studies
- Concepts and principles of report preparation and presentation
- Concepts and principles of consultation, participation, and group discussion on a selected issue
- Analysis of the current state of healthcare system and its dimensions
- Identification of existing problems and challenges in health system
- Selection of a priority issue
- Presentation of solutions for the identified issue
- Reporting results of the analyzed issue in class through presentation and discussion

Student Evaluation Method:

- Active attendance and participation in class: 10%
- Final exam: 40%
- Completion of assignments, including topic selection, report preparation, and presentation: 50%

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Course Name: Communication Management in Health System

Course Code: 19

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

Familiarize students with internal and external hospital communications, including human relations among staff, physical and structural relationships, and organizational relationships between hospitals and other institutions

Course Description:

An organization exists because of communication, and managers typically spend a significant portion of their time establishing and maintaining it. Therefore, students need to become familiar with key concepts of organizational communication, the role and importance of communication in the healthcare system, and models and styles of organizational communication.

Course Content (34 hours Theoretical):

- Key concepts of organizational communication
- Role and importance of communication in healthcare system
- Models and styles of organizational communication (e.g., teaching hospitals with higher-level organizations, teaching hospitals with physicians and private providers)
- Communication networks in healthcare organizations
- Group communication and group performance
- Communication between hospitals and strategies to improve it
- Communication between hospitals and insurance organizations: barriers and solutions
- Communication between hospitals and governmental organizations: improvement strategies
- Communication between hospitals and civil society, charities, and NGOs: improvement strategies
- Communication between hospitals and outsourcing companies: considerations
- Internal relations among hospital units

References: (Latest edition)

1. Darley, Mark. *Managing Communication in Health Care*. Bailliere Tindall, US.

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2. Schiavo, Renata. *Health Communication: From Theory to Practice*. Jossey-Bass publisher.
3. Ledema, Rick; Piper, Donella; Manidis, Marie. *Communicating Quality and Safety in Health Care*. Cambridge University Press.
4. Van Servellen, Gwen. *Communication Skills for the Health Care Professional: Concepts, Practice, and Evidence*. Jones and Bartlett Publishers.
5. Stolt, Robert. *Communication Management in Hospitals*. Grin Verlag.

Student Evaluation Method:

- Active participation in class: 10%
- Mid-term exam : 20%
- Final exam: 50%
- Completion of class assignments: 20%

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Course Name: Performance Management in Healthcare Organizations

Course Code: 20

Prerequisite/ Presented Simultaneously: None

Course Credits: 2 units

Course Type: Theoretical

Overall Course Objective:

In this course students get familiar with various issues related to performance and performance management, as well as different methods for evaluating performance. Students will become familiar with the goals, stages, and models of performance management in healthcare organizations, enabling them to enhance organizational effectiveness.

Course Description:

Performance management is a systematic process through which an organization engages its employees, individually or as part of a team, to achieve organizational goals and improve overall effectiveness. It is a structured system that focuses on improving individual and team performance, thereby enhancing the organization's overall performance. This course aims to familiarize students with the objectives, stages, and models of performance management within healthcare organizations.

Main Topics: (34 hours Theoretical)

- Definition and concept of performance
- Types of performance evaluation and performance management
- Principles of performance management
- Performance planning and design
- Performance management cycle
- Models of performance management
- Strategic performance management
- Applications of performance management
- Evaluation of interventions for performance improvement
- Competency-based performance

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- Performance-based pay
- Job design based on performance
- Ethical and legal considerations in performance management
- Performance improvement and operational methods

References: (Latest edition)

1. Armstrong, Michael. *Performance Management: Key Strategies and Practical Guide*. Translated by Saeed Safari and Amir Vahabian, Jihad Daneshgahi Publications.
2. Bergeron, P. Bryan. *Performance Management in Healthcare: From Key Performance Indicators to Balanced Scorecard*. Taylor & Francis.
3. Walburg, Jan; Bevan, Helen; Wilderspin, John; Lemmens, Karin. *Performance Management in Health Care: Improving Patient Outcomes*. Taylor & Francis.
4. Aguinis, Herman. *Performance Management*. Pearson, Prentice Hall.
5. Smith, Sarah; Sinclair, Don; Raine, Rosalind; Reeves, Barnaby. *Health Care Evaluation*. McGraw-Hill Education.

Student Evaluation Method:

- Active participation in class: 10%
- Mid-term exam: 20%
- Final exam: 50%
- Completion of class assignments: 20%

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Course Name: Human Resource Management in Health System: Advanced

Course Code:21

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

In this course students get familiar with the importance of human resource management, which consumes a significant portion of time and capital in health system organizations and serves as a strategic competitive resource for these organizations

Course Description:

The purpose of this course is to provide students with an understanding of human resource management, including the processes of recruitment, staffing, development, and motivation of human resources within the health system.

Main Topics: (34 hours Theoretical):

- Introduction to human resource management: importance, roles, definitions, and functions
- Principles of human resource management in healthcare organizations
- Workforce planning
- Job analysis, classification, design, enrichment, and development
- Strategic human resource planning and management in the health system
- Human resource development and capacity building: onboarding, socialization, staff training, career advancement
- Principles and approaches for employee performance evaluation
- Employee retention and preservation
- Compensation and payroll management
- Human resource motivation processes
- Performance-based pay systems in the health system

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- Employee health and safety programs
- Labor law, employee rights, and fundamental labor protections

References: (Latest edition)

1. Mirsapasi, Naser. *Strategic Human Resource Management and Labor Relations*. Mir Publications, Tehran.
2. Saadat, Esfandiar. *Human Resource Management*. SAMT Publications, Tehran.
3. Falion, L.; Fleming, McConnel, R. Charles. *Human Resource Management in Health Care: Principles and Practice*. Jones & Bartlett Publishers.
4. Pynes, E. Joan; Lombardi, Donald N. *Human Resources Management for Health Care Organizations: A Strategic Approach*. Jossey-Bass Publishers.
5. Sharma, D. K.; Goyal, R. C. *Hospital Administration and Human Resource Management*. HPI Learning Private Limited.
6. Hernandez, S. Robert. *Strategic Human Resources Management in Health Services Organizations*. Cengage Learning.
7. Fried, Bruce. *Fundamentals of Human Resources in Healthcare*. Health Administration Press, 2018.

Student Evaluation Method:

- Active participation in class: 10%
- Mid-term exam: 20%
- Final exam: 50%
- Completion of class assignments: 20%

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Course Name: Internship 2

Course Code: 22

Prerequisite/ Presented Simultaneously: Internship 1 (Course Code 15)

Course Credits: 2

Course Type: Internship

Overall Course Objective:

To familiarize students with hospital indicators, processes, and policies in order to enhance managerial skills for better hospital administration and to acquire the necessary competencies for executing hospital management tasks

Course Description:

The internship course provides students with the opportunity to experience a clinical environment. This allows them to gain valuable hands-on experience without the responsibilities and consequences of formal employment. Internship 2 is designed to help students observe and understand practical and operational tasks in hospitals, enabling them to apply theoretical knowledge in practice, identify gaps or shortcomings, and contribute to process improvements. During this course, students will become familiar with hospital operations and ongoing processes.

Main Topics: (102 hours Internship)

- Process documentation (theoretical)
- Familiarization with hospital unit processes (theoretical)
- Identification of main processes in each hospital unit
- Modification of two existing processes in each unit
- Familiarization with hospital units and understanding internal and external relationships
- Introduction to key hospital performance indicators
- Understanding performance-based payment systems in hospitals
- Familiarization with operational and strategic planning, quality improvement, and patient safety
- Introduction to hospital committees and their functions
- Understanding how to write policies, guidelines, and standard operating procedures

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- Familiarization with hospital accreditation process

Student Evaluation Method:

- Active and regular participation in the internship: 10%
- Evaluation of student performance during the internship: 10%
- Submission of internship report: 40%
- Final internship exam: 40%

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Course Name: Thesis

Course Code: 23

Prerequisite/ Presented Simultaneously: -

Course Credits: 4

Course Type: –

Overall Course Objective:

To design and implement a research project related to health and medical management.

Course Description:

The course aims to motivate critical thinking for topic selection, followed by research and presentation of appropriate solutions. It focuses on strengthening research-oriented attitudes, developing skills in research design and management, applying various targeted literature search methods, acquiring skills in appropriate data collection and processing techniques, and learning correct scientific writing and effective presentation of research findings.

Main Topics:

- Investigation of a current topic in health system

Student Evaluation Method:

- Presentation of the thesis and its defense according to the regulations of the Master's degree program approved by the Supreme Council for Medical Sciences Planning.

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Course Name: Advanced English Language

Course Code: 24

Prerequisite// Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

To familiarize students with specialized terminology in Health and Hospital Management and to enhance English language skills for translating, reading, and writing scientific articles

Course Description:

This course is designed to improve professional knowledge and enable students to use scientific texts, understand English terminology relevant to Health and Hospital Management, and understanding concepts and using textbooks and scientific journals. It focuses on developing students' abilities in translating, reading, and writing specialized texts in Health and Hospital Management.

Main Topics: (34 hours Theoretical)

- Techniques for translating scientific articles
- Techniques for writing scientific articles
- Techniques for reading scientific articles
- Key terminology and vocabulary in health and medical sector

References: (latest editions):

1. Specialized textbooks in Health and Hospital Management
2. National and international scientific journals in English
3. Reliable databases and tutorial videos in English related to Health and Hospital Management
4. Latest articles in specialized management journals
5. Faramarz Armillary, Ali Kashtkaran, Seyed Samad Sajjadi, Mansureh Tootoonchi. *Special English for the Students of Health Care Management* (1 & 2). Tehran: SAMT Publications

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6. Annie Phillips. *Healthcare Management Dictionary*. Oxon: Radcliffe Medical Press Ltd.
7. Kieran Walshe, Judith Smith. *Healthcare Management*, 2nd Ed. London: Open University Press
8. Stephen Bailey. *Academic Writing: A Handbook for International Students*
9. Trisha Greenhalgh. *How to Read a Paper: The Basics of Evidence-Based Medicine*, 4th Ed. Oxford: John Wiley & Sons

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 50%
- Assignments and in-class tasks: 20%

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Course Name: Research Methods in Health Sciences

Course Code: 25

Prerequisite/ Presented Simultaneously: None

Course Credits: 2 (1 theoretical + 1 practical)

Course Type: Theoretical – Practical

Overall Course Objective:

- To familiarize students with fundamental concepts and methods of research.
- To develop students' ability to write scientific reports and articles.

Course Description:

This course is designed to teach the philosophy and methodology of scientific research to students. The course content focuses on strengthening students' research skills, which will be directly applied in conducting their thesis.

Main Topics: (17 hours Theoretical – 34 hours Practical)

- Overview of research methodology
- Steps in scientific research
- Quantitative and qualitative research approaches
- Types of studies
- Selecting a research topic and its criteria
- Literature review and search strategies
- Writing the problem statement
- Formulating research objectives, questions, and hypotheses
- Variables and methods of measurement
- Data collection and tools, validity, and reliability
- Sampling methods and sample size estimation
- Data analysis techniques

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- Proposal development, including budget tables, materials and equipment, Gantt charts, project supervision, and management
- Ethical considerations in research
- Report writing and structure of a scientific article
- Referencing methods and citation

References: (Latest editions)

1. Abed Saeedi, Zhila; Amir Ali Akbari, Sediqeh. *Research Methods in Medical and Health Sciences*. Salemi Publications.
2. Malek Afzali, Hassan; Majdzadeh, Reza; Fotouhi, Akbar; Tavakoli, Saman. *Applied Research Methodology in Medical Sciences*. Tehran University of Medical Sciences, Deputy of Research.
3. *Research in Health Systems*, World Health Organization, translated by Dr. Ali Zaim, Ministry of Health and Medical Education.
4. Zabli, Rouhollah; Bahadori, Mohammad Karim. *Comprehensive Research Methods in Health Management*. Baqiyatallah University of Medical Sciences, Tehran
5. Malek Afzali, Hossein. *Research in Health Systems*. Daryacheh No Publications.
6. Frances Griffiths. *Research Methods for Health Care Practice*. SAGE Publications Ltd.
7. Hilla Brink, Christa Van der Walt, Gisela Van Rensburg. *Fundamentals of Research: Methodology for Health Care Professionals*. Juta and Company Ltd.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Final exam: 50%
- Submission of a quantitative or qualitative research proposal on a priority topic in health management: 40%

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Course Name: Epidemiology and Biostatistics

Course Code: 26

Prerequisite/Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

- To familiarize students with the definition of epidemiology and the factors affecting disease occurrence in populations
- To provide knowledge of epidemiologic factors and the application of epidemiology in health care and public health programs
- To develop theoretical understanding of principles and applications of epidemiology in analyzing health-related issues in communities

Course Description:

Knowing the causes of diseases, preventing, controlling, eliminating, and eradicating them, is not possible without a proper knowledge of the principles and fundamentals of epidemiology. In this course, students will get familiar with the core concepts, objectives, and applications of epidemiology for analyzing public health issues. Topics include definitions of health and diseases, prevention and its levels, screening, natural history of diseases, and types of epidemiologic studies.

Main Topics: (34 hours Theoretical)

- Definition of epidemiology
- Historical aspects of epidemiology
- Scope of epidemiology
- Epidemiologic models
- Definition of health and disease
- Measurement of health and disease
- Measurement of disease frequency
- Methods for assessing disease burden
- Comparison of disease events

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- Types of epidemiologic studies
- Chain of disease causation
- Epidemiology and prevention
- Definition and levels of prevention
- Screening methods
- Epidemiology of communicable diseases
- Epidemiology of common communicable diseases in Iran
- Investigation and control of epidemics

References: (latest editions)

1. Gordis, Leon. *Epidemiology*. Translated by Dr. Hossein Sabbaghian & Korosh Halakouei Naeini. Tehran: Samt Publications.
2. Mazenner, Judith. *Principles of Epidemiology*. Translated by Dr. Malek Afzali & Dr. Kiomars Naseri.
3. Park, John Ort. *Preventive and Social Medicine*. Translated by Dr. Hossein Shojaei Tehrani. Tehran: Samt Publications.
4. Bonita, R., Beaglehole, R., Kjellström, T. *Foundations of Epidemiology*. Translated by Peyman Salamaty & Farzad Montazer. Tehran: Nasl-e-Farda.
5. Szklo, M.F., Nieto, J. *Epidemiology, Beyond the Basics*. Sudbury, UK: Jones and Bartlett, 2014.
6. Woodward, M. *Epidemiology: Study Design and Data Analysis*. London: Chapman and Hall.

Student Evaluation Method:

- Class attendance and active participation :10%
- Mid-term exam : 20%
- Final exam:70%

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Course Name: Insurance in Health System

Course Code: 27

Prerequisite/ Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

The main objective of this course is to familiarize students with different types of health insurance in Iran, as well as various health insurance systems worldwide and their functions.

Course Description:

Students will learn about insurance systems in Iran and other countries, including models and methods of financing health systems. The course emphasizes understanding social and private health insurance, financing systems based on taxation, and methods for managing financial risk and costs in healthcare delivery.

Main Topics: (34 hours Theoretical):

- Importance of insurance and financing models in health systems
- Features of social health insurance systems
- Private health insurance
- Tax-based health financing systems
- Overview of health insurance systems in Iran
- Moral hazard and issues in health insurance
- Methods for determining relative value of health services
- Hospital deductions and strategies to reduce them

References: (Latest editions)

1. Arab, M., Kavousi, Z., RavanGerd, R., & Ostovar, R. *Health Insurance Systems*. Jihad Daneshgahi Publications.

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2. Gatner. *Health Economics: Principles and Flow of Resources*. Translated by Dr. Mahmoud Nekoui et al., Parsa Publications.
3. Peter R. Kongstvedt. *Health Insurance and Managed Care: What They Are and How They Work*.
4. Michael K. Harrington. *Health Care Finance and the Mechanics of Insurance and Reimbursement*.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Drug and Medical Equipment Management

Course Code: 28

Prerequisite/Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

The main objectives of this course are:

- To familiarize students with the concepts of pharmaceutical economics and the optimal management of drug procurement and distribution at the macro level
- To get familiar with medical devices and equipment and their functions
- To learn about maintenance of medical equipment

Course Description:

This course familiarizes students with management concepts in the pharmaceutical industry, national drug policies, drug market and its management, and the pharmaceutical supply chain. It further familiarizes students with commonly used medical equipment hospitals.

Main Topics: (34 hours Theoretical):

- Management concepts in the pharmaceutical industry
- Health market and the role of drugs
- National drug policies
- Drug market and its management
- Pharmaceutical supply chain management
- Domestic and global drug markets
- Principles of pharmaceutical marketing
- Economic evaluation in the pharmaceutical industry
- Hospital equipment management
- Pharmacy equipment and supplies

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- General and specialized consumables by clinical specialty
- Familiarization with commonly used hospital equipment

References: (Latest editions)

1. Nasiri, N., Nasiri, M., Kiryayi Zadeh, A. *Principles and Techniques of Pharmaceutical Management with Focus on Pharmaceutical Industry*, Fowzan Publications.
2. Babapour, J., Kiryayi Zadeh, A. *Pharmacy Management and Economics*, Jame Negar Publications.
3. Dimitris Douger, Stathis. *Pharmaceutical Marketing: Practical Approach*, Translated by Amin Asadollahi, Javad Ghorbani, Mohammad Aghaei, Termeh Publications.
4. Ministry of Health and Medical Education, Food and Drug Administration. *National Drug Policy of the Islamic Republic of Iran*.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Ethics and Laws in Health System

Course Code: 29

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

The main objective of this course is to familiarize students with the regulations and laws governing the health system and the legal and ethical standards applicable in hospitals.

Course Description:

This course covers the rights and types of laws governing health systems, labor relations among physicians, nurses, and other staff, clinical and medical ethics, obtaining informed consent and waivers, and patient rights charters.

Main Topics: (34 hours Theoretical):

- Definition of law and its types
- Definition of legal systems
- Types of legal systems
- Medical ethics
- History of medical ethics and patient rights in Iran and the world
- Informed consent and waivers
- Confidentiality and patient privacy
- Patient rights charter
- Patient rights charter in Iran
- Legal standards for physicians and nurses in providing patient care
- Types of medical and pharmaceutical offenses
- Medical errors and negligence
- Ethics in e-health

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- Patient rights in e-health

References: (Latest editions)

1. Sadr-Momtaz, N., Dehnavi, H. *Legal Standards in Health Systems*, Berga Publications.
2. Eslami Tabar, Sh. *Medical Law*, Tehran Cultural Institute.
3. Professor George J. Annas, J.D., M.P.H. *The Rights of Patients*, 3rd Edition. Southern Illinois University Press.

Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam: 20%
- Final exam: 70%

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Course Name: Entrepreneurship in Health Systems

Course Code: 30

Prerequisite / Presented Simultaneously: None

Course Credits: 2

Course Type: Theoretical

Overall Course Objective:

The main objective of this course is to familiarize students with entrepreneurship, marketing, and wealth creation within health systems.

Course Description:

Students are expected to gain knowledge of concepts and methods of creativity, innovation, and entrepreneurship in health systems. They will study future research methods, scenario analysis, and marketing principles. The course also covers the roles of public and private sectors, e-commerce, business management, and social marketing strategies in healthcare.

Main Topics: (34 hours Theoretical):

- Concepts and methods of creativity and innovation
- Entrepreneurship processes
- Fundamentals of creativity: techniques and methods
- Elements and processes of entrepreneurship
- Motivations and barriers to entrepreneurship
- Mental models of entrepreneurs and health system managers
- Developing entrepreneurship skills
- Role of entrepreneurship in third-generation universities
- Concept of foresight as a new paradigm in health systems
- Methods of foresight and scenario development
- Approaches to scenario writing
- Concept of marketing in health systems
- Role of public and private sectors in the health market

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- Principles and techniques of marketing
- E-commerce
- Business management
- Social marketing
- Marketing planning: market-driven and non-market-driven approaches
- Marketing Strategy
- Understanding customers, buyer behavior, and market research
- Pricing strategies and market segmentation

References: (Latest editions)

1. Berkowitz, Eric. *Principles of Marketing in Health Care*, translated by Mohammad Arab, Ehsan Zarei, Roghieh Khabiri, Behrouz Pour-Agha, Jihad Daneshgahi, Tehran.
2. Kotler, Philip & Armstrong, Gary. *Principles of Marketing*, translated by Bahman Forouzandeh, Amookhteh Publications.
3. Satgin, Jon. *Entrepreneurship and Building a Successful Business*, translated by Siamak Sadeghi Khiabani, Pelak Publications.
4. Kasso, Hana & Gaster, Robert. *Foresight and Scenario Analysis: Overview, Evaluation, and Selection Criteria*, translated by Mohsen Rostami, Azadeh Katbi, Gholamreza Khoshesteh, Poshteban Publications.
5. Mitchini, Pishro. *Five Lenses of Foresight: Using the ELTVILLE Model to Better Predict and Understand the Future*, translated by Bahareh Edmit, Industrial Management Organization Publications.
6. Wooldridge, Barbara & Camp, Kerr. *Healthcare Marketing Strategies for Creating Value in the Patient Experience*, Cognella Academic Publishing.
7. Hillestad, Steven G., Berkowitz, Eric N. *Health Care Market Strategy*, Jones & Bartlett Learning.
8. Pearson, Glenn E. *Thriving in the Healthcare Market: Strategies from an Industry Insider for Selling Your Product*, Taylor & Francis.
9. Thomas, Richard K. *Marketing Health Services*, Health Administration Press.

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Student Evaluation Method:

- Class attendance and active participation: 10%
- Mid-term exam : 20%
- Assignments and in-class tasks:20%
- Final exam:50%